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BANK FINANCIAL MANAGEMENT

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INDEX

BANK FINANCIAL MANAGEMENT

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INTERNATIONAL BANKING (MODULE - A)

FOREIGN EXCHANGE MARKET

Foreign Exchange as defined in FEMA means foreign currency and includes:

- i) All deposits, credits, balances payable in any foreign currency and any drafts, travelers cheques, letters of credit and bills of exchange expressed or drawn in Indian currency and payable in foreign currency;
- ii) Any instruments payable at the option of the drawee or holder, thereof or any other party thereto, either in Indian currency or in foreign currency or partly in one and partly in the other.

In short, the term 'Foreign Exchange' means the process of converting one national currency into another national currency and transferring money. In such conversions, the foreign currency is always treated as a commodity and the home currency as the medium of purchasing power.

Foreign Exchange Market and its Participants

- a) Banks and Customers who have to buy or sell foreign exchange.
- b) Inter-Bank dealings where sale and purchase business is transacted between the banks themselves within the country.
- c) Dealings between domestic banks and foreign banks.

TYPES OF FOREIGN EXCHANGE TRANSACTIONS

- a) **Inter-Bank Transactions:** Sale or Purchase of FX between Banks and other Financial Institutions (Market Participants).
- b) **Merchant Transactions:** Sale or Purchase transactions with the customers are called merchant transaction.

FACTORS AFFECTING EXCHANGE RATES: Exchange rates in the market are the outcome of the combined effect of a multiple of factors. They can be classified as Fundamental, Technical and Speculative factors. The factors are:

- **BoP:** Surplus BOP in a country strengthens its currency.
- **Economic growth rate:** High growth rate fuels imports and weakens the local currency.
- **Fiscal Policy:** An expansionary policy, normally leads to a higher economic growth which in turn fuels imports.
- **Monetary Policy:** Central banks determine monetary measures to influence and control interest and money supply.
- **Interest Rates:** Domestic interest rates if high, attracts overseas capital (FDI, FII) leading to an excess supply of foreign currencies resulting into appreciation of domestic currency in the short term. However if high interest rates continue for a long term, economy will slow down, weakening the currency.
- **Political Issues:** Without Political stability, there can be no economic stability (detrimental to the value of the currency).
- **Technical reasons in Exchange Rate determination:** Government controls, which determine the inflow and outflow of capital, are considered technical reasons.
- **Speculation - a major factor in Exchange Rate determination:** Speculative trading is a reality in Forex markets. It is estimated that the speculative trade to daily forex turnover is above 90%.

CORRESPONDENT BANKING & TYPES OF ACCOUNTS

Banks dealing in international trade and foreign exchange maintain accounts in various foreign countries for the purposes of settlements. They also enter into drawing arrangements such as overnight or regular overdrafts limits, agency arrangements for international remittances, collection of cheques / bills etc. The international banks involved are termed as foreign correspondents and the concept of providing such services is called as Correspondent Banking. In a Correspondent banking relation, it is not always necessary that an account relationship should exist. Some of the services can be rendered without an account. However, for arrangements like Cheque clearing, OD arrangements, accounts are needed. The accounts when maintained by banks in a Correspondent Relationship are classified as follows:

NOSTRO ACCOUNTS: NOSTRO Account means "OUR ACCOUNT WITH YOU". It is a foreign currency account maintained by a bank in domestic country with a bank in foreign country.

VOSTRO ACCOUNT: VOSTRO Account means, "YOUR ACCOUNT WITH US". It is an account of a foreign bank being maintained in our country and with our bank. When Vostro accounts are opened, KYC norms are compulsory in India. Vostro accounts are to be operated in line with RBI guidelines.

LORO ACCOUNT: LORO Account means "THEIR ACCOUNT WITH THEM" This is an account of a third bank being maintained by another or our bank.

MIRROR ACCOUNTS: These are dummy accounts maintained by banks to know actual position of their accounts with the foreign correspondent banks. We may call it a pass-book of our accounts maintained with the correspondents.

INTERNATIONAL COMMUNICATION & PAYMENT SYSTEMS

A) SOCIETY FOR WORLD WIDE INTER BANK FINANCIAL TELECOMMUNICATIONS (SWIFT):

SWIFT an acronym for Society for world wide inter-bank financial telecommunications is a joint, non-profit co-operative society owned by about 250 banks. Most of these are European and North American banks with headquarter at Brussels.

SWIFT is a world wide, computer based secure net work system and each member has access to all the other members. It operates on a secure network. It is a large network of interconnected banks and financial institutes facilitating secure international dealings. It eliminates the need to maintain multiple coding systems with various correspondents and totally removes the risk of theft of code books, errors creeping as a result of not updating of code books etc. Messages are delivered in uniform perform or formats. This reduces the chances of misinterpretation or confusion. Besides being confidential, safe, self authenticated and swift in real sense, the system reduces the cost of the transaction too.

B) **CHIPS (USA):** CHIPS stand for Clearing House Inter bank Payment System. It is an electronic payment system and is jointly owned by New York house clearing association members. It processes more than a million instruments daily without being exchanged physically. All foreign currency, third country commercial payments are settled electronically.

C) **FEDWIRE (USA):** System of inter bank settlement operated by Federal Reserve Bank of USA. The facility is available to member banks throughout USA. The facility is available for paper instruments like cheques, demand drafts also apart from online transactions. It is therefore available in both on-line and off-line formats. However, it is restricted to US Dollar instruments only. It is not a general Inter-bank System but is restricted to Federal Reserve Bank and Banks having their accounts with Federal Bank. It is meant for domestic settlements within USA.

D) **CHAPS (UK):** Clearing House Automated Payments System (CHAPS) is the British equivalent to CHIPS, handling receipts and payments in LONDON. This system also works on the net settlement system.

E) **TARGET (EURO):** Trans-European Automated Real-Time Gross Settlement Express Transfer system is a EURO payment system comprising 15 national RTGS systems working in EUROPE.

F) **RTGS-PLUS AND EBA (EURO):** These are other Euro clearing system. RTGS plus, is a German hybrid clearing system operating as a European oriented real time gross settlement and payment system with over 60 participants. The EBA-EURO-1, with a membership of over 70 banks, in all EU member countries, works as a netting system with focus on cross border Euro payments. For retail payments, EBA has another system, called STEP1, with over 200 members across EU zone. STEP 2 is also in use in EU zone, which facilitates straight through processing (STP) to member banks, using industry standards.

RBI & EXCHANGE CONTROL IN INDIA

RBI is empowered under statute to control and regulate the Foreign exchange transactions, Forex reserves and policies related to inflows & outflows of Foreign exchange in the country. It maintains the external value of the rupee both through policy measures and active intervention in the markets when felt necessary. All transactions of Foreign exchange are governed by FEMA 1999. As per Sec 41 (1) of FEMA 1999, RBI is empowered to give directions in regard to Foreign Exchange transactions.

Under Sec 11(3) of FEMA 1999, RBI may after giving reasonable opportunities for hearing, impose on the authorized person, a penalty which may extend to Rs.10,000/- (Rs. Ten thousand) for contravention of any direction given under FEMA or failure to file any return under this act. In case of continuing contravention, an additional penalty which may extend up to Rs.2,000/- per day for which such contravention continues may be imposed.

REPORTING TO RBI - STATEMENTS AND RETURNS:

For the purpose of monitoring, RBI calls for certain returns & statements from ADs. Some important statements are:

R Return - Fortnightly data for the purpose of compiling Balance of payments/monitoring transactions. Authorized Dealers should report all transactions made by them through their Nostro Accounts abroad and Vostro Accounts maintained with them in appropriate R Return, i.e. R Return (NOSTRO) and R Return (VOSTRO) respectively, as laid down in the Guide to Authorized Dealers for compilation of R Returns twice a month, at the close of business on 15th and the last day of calendar month so as to reach Reserve Bank within seven calendar days from the close of reporting period to which they relate.

AD Category - I Banks have to submit Bank-wise R-Return now (from the first fortnight of January 2009)

BAL STATEMENT - Statement showing balances in Nostro, Vostro accounts

NRDCSR-Consolidated data on Non-resident deposits

INTERNATIONAL BANKING STATISTICS (IBS)-Quarterly data on all International Assets & Liabilities

XQS-Half yearly statement of Overdue Export bills of US\$ 25,000 and above

BEF-Half yearly Statement showing details of Import transactions where remittances have been effected but evidence of Import not received (USD 100,000 & above).

FEMIS: Daily data on Forex dealing room operations

EBW: Half yearly statement showing Export Bills Written off (30 June & 31 December)

STAT-5: Statement of FCNR deposits (total inflow, outflow and outstanding under FCNR accounts)

STAT-8: Statement showing inflow/outflow of deposits under non-resident (external) rupee (NRE) accounts scheme and NRO accounts scheme for the specified month

LRS- Liberalized Remittance Scheme of USD 2,50,000 for resident individuals: Monthly

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FOREIGN EXCHANGE MANAGEMENT ACT (FEMA)

With the country ushering in the 2nd phase of reforms, the Parliament passed the Foreign Exchange Management Act (FEMA) 1999, on December 02, 1999, replacing FERA 1973. FEMA was implemented in India w.e.f. 1-6-2000.

Details of certain major departure made from FERA are provided hereunder:

- The Govt. assumes the role of facilitator and promoters of the economic developments under FEMA.
- There were 81 Sections in FERA while FEMA has 49 sections.
- FERA has Section 56 to deal with prosecutions stipulating a punishment of not less than 6 months and not more than 7 years in addition to penalty for contravention of its provisions. FEMA holds out no threat of prosecution and violations shall be treated as a civil offence.
- Sec. 13 of FEMA provides for a penalty upto three times the amount involved for contravention and if the amount is not quantifiable, the penalty can go up to Rs. 2 lac. A continuing offence can invite penalty, which may extend upto Rs. 5,000 per day. FERA provided penalty upto 3 times.
- FEMA defines certain terms such as:
 - CAPITAL ACCOUNT TRANSACTION:** One that alters the assets or liabilities outside India of a person resident in India or assets or liability in India, of a person resident outside India.
 - CURRENT ACCOUNT TRANSACTION:** Other than a capital a/c transaction and include payments due in connection with foreign trade, other current business services and short term banking and credit facilities in ordinary course of business.
 - EXPORT:** Taking out of India to a place outside India, goods and services from India to any person outside India.
 - SERVICE:** Service of any description which is made available to potential users and includes the provision of facilities in connection with banking, financing, insurance, medical and legal assistance, real estate etc.

FEMA incorporates an inclusive definition of the term 'person' and takes in it any agency, office or branch owned or controlled by such person. Any person residing in India for more than 182 days during the course of preceding financial year will be taken as resident in India. The definition also excludes persons going outside India for taking up employment or for carrying on business outside India and those who go out with the intention of staying abroad for an uncertain period. A body registered or incorporated in India is deemed resident in India even if a foreigner or non-resident holds its entire share capital.

FEDAI AND ITS ROLE

Foreign Exchange Dealers Association of India (FEDAI) is registered under Companies Act 1956, and was incorporated in the year 1958. The Association has been recognized by Reserve Bank of India, as well as Govt. of India. The main functions of FEDAI are to lay down uniform rules and guidelines to be observed by all authorised dealers in India. Some of its functions are:

- Maintaining a close liaison with RBI and Govt. of India.
- Maintaining a liaison with International Chamber of Commerce and other world bodies related to foreign trade and business.
- To circulate various policies, matters and decisions related to foreign exchange business amongst the members.
- Represents Indian foreign exchange dealers on policy matters related to foreign exchange dealings.
- Maintaining of FEDAI rules regarding Transit period, Crystallization, Forward covers etc, that govern all the members.
- Other functions include approving Foreign Exchange brokers.

IMPORTANT FEDAI RULES:

- All cancellations shall be at bank's opposite TT rates, TT selling rate for purchase contract and TT buying rate for sale contract.
- In the event of delay in payment of Interbank foreign currency funds, interest at 2% above the prime rate of the currency of the specified banks shall be paid by the seller bank.
- In event of delay in payment of rupee settlement funds, interest for delayed period at 2% above NSE MIBOR ruling on each day.
- FEDAI also prescribes code of conduct for Forex dealers, as also guidelines with regard to dealings with Forex brokers.

IMPORTANT FEDAI RULES:

HOURS OF BUSINESS: Left at the discretion of the banks now. Extended business hours for dealers, if any, should be approved by respective management.

RATES: ADs will quote exchange rates in direct terms. All currencies to be quoted as – per unit of foreign currency = INR, while JPY to be quoted as 100 units of JPY = INR.

EXPORT TRANSACTIONS - IMPORTANT TRANSIT PERIODS

All export bills to be allowed standard transit period, as prescribed, for the purpose of allowing concessional interest rates and calculation of notional due dates.

1	For Foreign Currency Bills.	25 days
2	For Rupees Bills under LC – local reimbursement.	3 days
3	For Rupee bills under LC and reimbursed by Ads elsewhere in India.	7 days
4	Rupee bills not under LC.	20 days
5	Foreign Currency Bills to be reimbursed by foreign banks in India.	20 days

Interest rate to be decided by each bank but within the RBI prescribed ceilings. ADs to refund interest in the event of early payment of bills.

EXPORT BILLS FOR COLLECTION: In the event of ADs delay of payment to the exporter, they will pay interest from date of realization to the date of actual payment. ADs may utilize 1 to 3 days to release payment depending upon the distance/location of branch where payment has to be remitted.

CRYSTALLIZATION: Unpaid Export bills should be crystallized at TT selling rate. Earlier FEDAI rule made it mandatory to crystallize unpaid demand bills 30 days after the transit period and Usance bills, 30 days after the due date. However FEDAI has given the authorised dealers the freedom to decide on the period for crystallisation which may be linked to risk factors like credit perception of different types of exporter clients, operational aspects etc. In case the bills are realized after crystallization, TT Buying rate is to be applied.

IMPORTS: Unpaid foreign currency bills drawn under L/C will be crystallized on 10th day from due date at Bills Selling Rates or Contracted rates.

INWARD REMITTANCES: All foreign currency inward remittances equivalent to Rs. one lac should immediately be converted in Indian rupees. Inward remittance for more than Rs. one lac may be converted at the request of the customer but within the permissible period. If the payment of inward remittance is delayed, ADs will pay interest @ 2% over the applicable to SB accounts after a period of 10 days, for remittances up to Rs one lac and for 3 days after remittance for more than Rs one lac.

FOREIGN CURRENCY FORWARD RATE CONTRACTS:

- All Forward contracts should be for a definite period and amount.
- In case delivery date has not been specified, an option period of maximum one month may be given. In case the last date for delivery happens to be non-working day for Forex dealing, preceding working day will be considered for effecting delivery.
- All contracts, which have matured and have not been picked up, shall be automatically cancelled on the 7th day after the maturity date.

EXCHANGE RATES MECHANISM

Consequent to Liberalization, RBI has removed all restrictions on exchange rate quotations. Therefore, Indian currency is on a Floating rate system. Banks are now free to quote their own rates based on market rates. Market rates are determined by forces of Demand and Supply. By convention, exchange rates can be quoted in two ways viz.

DIRECT METHOD: A given number of units of local currency per unit of foreign currency e.g. US\$ 1 = Rs. 60.10

INDIRECT METHOD: A given number of units of foreign currency per given units of local currency e.g. Rs. 100 = US\$ 1.664
In India, it was the practice to use the Indirect method of quotation. The unit in India was Rs. 100. However, with effect from 2nd Aug 1993 direct quotations are being used.

TWO-WAY QUOTATION: The foreign exchange quotation by the Bank has two rates – one at which the quoting Bank is willing to buy and the other at which it is willing to sell. For example: U S \$ 1 = Rs 60.10 / 60.20

Here the Bank will enter into purchase transaction at Rs 60.10 and sell transaction at Rs 60.20. Hence the principle; Buy low & Sell high.

TT RATES: This rate is applied when the transaction does not involve any delay in realisation of the foreign exchange by the bank. In other words, the Nostro account of the bank would already have been credited. TT Buying rate is arrived at each bank by deducting its required margin from the inter-bank buying rate that is being quoted in the market.

For example, if SBI (market) is quoting US\$1 = INR 60.20/25 in the market, IOB which needs to arrive at its TT Buying rate depending on the market rate will quote as follows:

60.20 minus its desired margin of say 0.15% as follows:
60.20 - 0.15% of 60.20 = 60.1097 (may be rounded to 60.1100)

Here it is presumed that IOB will quote 60.1097 to the customer, buy dollars from him and sell it in the market (SBI in this example) at 60.20. The difference goes in to the margin (profit) account of IOB.

BILL BUYING RATES: These rates apply when foreign bills are purchased. Banks build in higher margins in Bill buying to factor in the higher risk and transaction costs. For Usance bills, banks quote rates taking the forward premium or discount on the currency for matching future periods also in to consideration.

FORWARD RATES: When the delivery has to take place at a date farther than the spot date, then it is a forward transaction worked out on Forward rate. A currency could be quoted at a higher ('Premium') or a lower ('Discount') rate for future deliveries. Given the connection between exchange rates and funds cost in a totally free market, the premium / discount on forwards would tend to equal the difference in interest rates in the two currencies.

ARRIVING AT FORWARD RATES: Forward rates are arrived as follows under normal circumstances

- If the currency is quoted at a premium : Forward rate = Spot rate + Premium
- If the currency is being quoted at a discount : Forward rate = Spot rate - Discount

However, Forward rates quoted today in the market are not indicative of the direction in which the currency would move. The dynamic FX market has many factors which would influence currency values. But by and large, forward rates are worked out using:

- a) Spot price.
- b) Interest rate differentials in the currencies involved.
- c) Term or tenor of the quote (One month, two month etc).

INTER-BANK RATES: In Inter-Bank transactions, the delivery under a Forex transaction can be settled in following ways:

READY OR CASH	The transaction to be settled on the same day. Also known as 'Value Today' (TOD).
TOM	The delivery of foreign exchange/currency to be made on the day next to the date of transaction (T+1).
SPOT	Exchange of currencies takes place on the second working day following the date of contract (T+2).
FORWARD	When the delivery has to take place at a date farther than the spot date, then it is a forward transaction.

By default (unless otherwise specifically quoted), all Inter-bank transactions are quoted as Spot rates (delivery within T+2 days) in Inter-bank markets. In the event of a delay in settling the transaction as agreed upon, interest for the delayed period will be collected at **2% above the NSE- MIBOR** (MIBOR: Mumbai Inter-Bank offered rate) for the day from the Seller bank (which had delayed setting) as per FEDAI guidelines.

APPLICATION OF EXCHANGE RATES

SELLING RATES

TT Selling Rate

- Outward remittances in foreign currency - (TT, MT, PO, DD).
- Cancellation of purchase.
- Bill purchased returned unpaid.
- Bill purchased transferred to collection account.
- Earlier inward remittance (converted into Rupees) if refunded to the remitting bank.
- Cancellation of forward purchase contracts

Bills Selling Rate: Transaction involving transfer of proceeds of import bills. Even if proceeds of import bills are remitted in foreign currency by way of DD, MT, TT, PO, the rate to be applied is the Bill Selling Rate (and not TT Selling Rate).

Foreign - TCs / Currency Notes: Applied for sale of Foreign TCs & Currency

BUYING RATES

TT Buying Rate

- Clean inward remittances (PO, MT, TT, DD) for which cover has already been credited to ADs account abroad.
- Conversion of proceeds of instruments sent for collection.
- Cancellation of outward TT, MT, PO etc.
- Cancellation of a forward sale contract.

Bill Buying Rate

- Purchase / Discounting of Bills and other Instruments.
- Where bank has to claim cover after payment. Where drawing bank at one centre remits cover for credit to a different center.

Foreign - TCs / Currency Notes:

Applied for purchase of Foreign TCs & Currency

EXCHANGE ARITHMETIC:

During the course of their business, banks acquire FX from their Exporter/NRI and other customers and sell FX to their Importer /other customers. They purchase and sell FX like any other commodity. They have to cover their transaction costs after adding some profit too. Earlier the **Foreign Exchange Dealers' Association of India (FEDAI)** used to issue guidelines for computing rates and bank charges for FX transactions. However, FEDAI has given freedom to the banks for calculating rates / fixing charges for merchant transactions. Therefore, in India, now FX rates are determined by market forces of Demand and Supply.

BANKS QUOTE BASED ON MARKET RATES: In practice, Exchange rates are quoted based on SPOT rates available in the markets. Banks can choose from various sources and decide the market participant for their deal. Let us say, the Market participant is quoting rates as follows for USD as:

USD 1 = 60.25/35.

This means they will buy dollars at 60.25 and sell at 60.35.

SCENARIO-1: BANK HAS TO PURCHASE AN EXPORT BILL:

An Exporter has approached the bank with a bill denominated in US Dollars. He wants to know at what rate the Bank will buy the bill from him. The dealer knows once he buys the dollar bill from his customer, he has to sell it in the market at Rs 60.25. If he has to make a profit in this transaction, he has to quote a figure lesser than Rs 60.25 to the customer. The difference which is called margin depends upon the Bank's policy. Assuming that the bank wants to make a 0.1% margin, the dealer will do the following calculations.

Rate at which the Market buys from him	: 60.25000
Less 0.1% of 60.25 (60.25 X 0.10/100)	: 0.06025
Rate to be quoted to Customer	: 60.18975 rounded to 60.19

(Hint: Rounding off depends on the rule given in the problem)

Thus, the bank will reduce its required margin from Market Buying rate and quote a suitable rate to the customer.

SCENARIO-2: BANK HAS TO QUOTE A SELLING RATE TO AN IMPORTER:

Let us say an Importer wants to retire a bill in US \$. Bank has to now quote a selling rate to him. Once again the Dealer will turn to the Market rates. This time, he needs to buy the Dollars from the market and sell them to the Importer after making sure that his profits are assured. Assuming that the Bank wants the same 0.1% margin here also, the Dealer would do the following calculations:

Rate at which the Market would sell him dollars	: 60.35
Add Required Margin (60.35 X 0.1/100)	: 0.06035
Rate at which Bank will sell to the customer	: 60.28965 rounded to 60.29

SUMMARY:

- 1) Margins are reduced from Market buying rates to arrive at Bank's buying rates.
- 2) Margins are added to Market selling rates to arrive at Bank's selling rates.
- 3) Banks add different margins to different transactions depending on their policy, risks, transaction costs, status of the customer, current positions in the currency to be quoted under the same formula.
- 4) In a Direct rate scenario, the maxim is always "Buy low and Sell high"

EXAMPLES:

1) If the market is quoting GBP 1=99.60/80, at what rate can your Bank buy GBP from the market?
Answer: GBP1=99.80

2) If you have to quote a TT buying rate for GBP with a 0.20% margin, what will be the quote if the market is quoting GBP 1=99.50/70 round off to two decimals?

Answer:
Market buying rate = 99.500
Less Margin @0.2% = 0.199
Rate to be quoted = 99.301 Rounded to 99.30

3) Inflow of USD 100,000.00 by TT for credit to your exporter's account, being advance payment for exports (credit received in Nostro statement received from New York correspondent). What rate will be applied if the market is quoting 60.40/50 for USD. As the customer is very valuable, you are not collecting any margin in this transaction:

Answer: When we apply rate to the TT received, we are purchasing USD from customer, we have to sell it in the market. Market buys USD at Rs. 60.40. We shall have to quote rate based on 60.40, less our margin. Since we don't intend making any margin here as stated in the sum, the rate quoted will be USD1=60.40.

4) Your foreign correspondent maintaining a Nostro Rupee account with your bank, wants to fund his account by purchase of Rs. 30.00 million, against US dollars. Assuming that the USD / INR interbank market is at 60.2550 / 2650, what rate would be quoted to the correspondent, ignoring exchange margin. Calculate amount of USD you would receive in your USD Nostro account, if the deal is struck.

Answer: The Correspondent wants to credit INR 30 million i.e. INR 300,00,000 (Rs.3 crores). He will be placing corresponding amount of dollars in our Nostro account with a request to convert and credit to his Rupee account with us. In other words, we will be purchasing dollars from him and therefore have to quote a USD buying rate to him.

Market rates (also called Inter-bank rates) are USD 60.2550/2650

Market buys from us at : 60.2550

Less margin (nil here) : -----

Rate to be quoted : 60.2550

Amount of dollars required for INR 30,00,00,00 is 30,00,00,00 = USD 497883.99 or USD 497884

If the deal is struck, the foreign bank would pay USD 497884 to our USD Nostro account.

CROSS RATES

At times, direct quotes are not available for certain pairs of currencies in the market. For example, we may have a quote for INR/USD and another for USD/GBP. However INR/GBP may not be readily quoted. In such situations dealers arrive at INR/GBP rates using the Cross rate mechanism and the Chain rule.

CHAIN RULE:

Rule for arriving at a comparison or ratio between two quantities which are linked together through another quantity and consists of a series of equations, commencing with a statement of the problem in the form of a query and continuing the equation in the form of a chain so that each equation must start in terms of the same quantity as that which concluded the previous equation.

1) You have to quote Cross rate for retirement of Import bill for GBP 100,000 by TT. Your margin is 0.15%. Market rate quotations are GBP / USD 1.6650 /60, USD / INR 60.40/50.

Answer:

- This is an Import bill settlement, we have to sell the required FX i.e. GBP 100,000 to the customer. We have to therefore buy this required sum of GBP 100,000 from the market.
- The market is selling GBP as 1GBP = USD 1.6650/6660. Therefore, first we need USD.
- To buy USD, the rates quoted are 1USD = 60.40/50.

- Since we are buying, the market rate will be USD 1=60.50.
- We need to pay USD 1.6660 to get 1GBP.
- Therefore we need (1.6660 X 45.50) INR i.e. INR 100.793 to buy 1 GBP.
- We have to add our margin which is 0.15%
- Final rate will be (INR 100.793) plus (0.15% of 100.793=0.151) = 100.944(TT selling rate)

2) M/s PQRS wants to remit JPY 10.00 million by TT value spot, as part payment of an Import invoice.

Given that USD / INR is at 60.2500/60.2600 and USD / JPY is 103.15 / 103.25, and a margin of 0.15% is to be loaded to the exchange rate, calculate rate to be quoted and the Rupee amount to be debited to the account of M/s PQRS.

Answer: Since JPY is to be sold against Rupee, and the rate is not directly given, we would use cross rate mechanism to calculate the same. We need to buy USD against INR and use the USD to buy JPY for the deal.

Thus, USD / INR rate would be 60.2600 (market USD selling rate - high) and USD X JPY at 103.15 (market JPY & selling rate - low). The JPY / INR rate would be 60.2600 / 103.15 = 0.584197 per JPY

100 JPY = 58.4197

Add: Margin of 0.15 = 0.0876

= 58.5073

Rounded off to = 58.5070/100 JPY

Total rupee amount to be debited to the account of M/s PQRS would thus be 10,00,000 X 58.5070 = Rs. 58,50,700

(Note: JPY is quoted as per 100 Yen, as per FEDAI guidelines)

FORWARD RATES

As we are aware, banks have to quote forward rates in certain cases such as:

- 1) While entering in to a Forward Sale or Forward Purchase Contract,
- 2) While discounting a Usance Bill.

By definition, Forward rates are rates quoted beyond Spot deliveries i.e. beyond T + two working days. While quoting Forward rates, Banks take cognizance of Forward rates quoted by the markets.

The currency may be trading at a higher price (premium) or a lower price (discount) compared to the Spot price.

The Forward rates are arrived at as follows:

If the Currency is at a Premium:

Forward rate = Spot rate + Premium

If the Currency is at Discount:

Forward rate = Spot rate - Discount

After arriving at rates as above Banks will build in their margins (add or reduce as the case may be) and quote the final Forward rate to the customer.

1) On 5 January, Exporters tenders for discounting, export bill for US 500,000.00, drawn 90 days sight (transit period 25 days) due date 30 April. Compute applicable rate and amount to be credited, presuming:

- Exchange margin of 0.15%
- Spot Rupee 60.40/50 and premium Spot - April 40 paise,
- Rate to be quoted to nearest 0.25 paise, and rupee amount to be rounded off, and
- Interest to be charged at 7.50% for first 90 days and 10.50% thereafter.

Answer:

(i) Calculation of Bill buying rate

Spot Rate	Rs. 60.4000
Less: 0.15% margin	0.0906

	60.3094
Say	60.3100
Add: April Premium	0.4000
Rate of the transaction (Bill Buying Rate)	60.7100

(ii) Calculation of amount payable to the customer:

USD 500,000.00 at 60.71	= 3,03,55,000.00
Interest 90 days @ 7.50%	= 5,61,360.00
25 days @ 10.50	= 2,18,307.00

Amount payable to exporter = **3,11,34,667.00** (Commission and out of pocket expenses ignored)

2) On 15 September, a customer request for booking of a Forward contract for export bill of USD 150,000.00, to be realized in the month of December.

Given that USD / INR spot is 60.40 / 50 and forward premium is as under:

November: 30/32 paise

December: 41/43 paise

Margin to be charged 0.05 paise only

Answer:

For calculating rate for forward purchase contract, we need to take forward premium for November, the one that the market would pay, i. e. 30 paise.

(Convention: For a sale contract premium for the full period, up to end date of the contract shall be charged where as for purchase contract, premium would be passed on only up to the beginning of the contract period, i.e. only up to the start date (therefore we take the premia up to November only in this case).)

Spot rate as 60.40

Premium 0.30

Forward Rate 60.70

Forward Inter-bank rate arrived is 60.70 and deduct 0.05 paise as margin to arrive at 60.65 as customer forward rate for delivery of export proceeds during December, full month at the option of the customer (Forward TT Buying Rate).

3) On 1 January 2014, a customer requests to book Forward contract, for retirement of import bill for USD 100,000.00 due for payment on 15 March 2014. Given rates Spot / INR 61.00/05, forward premium as under:

Spot January: 10/12, Spot February : 21/23, Spot March : 32/34, Feb-15 to March: 5/6

Charge Margin of 0.20%

Answer: Being a merchant sale forward booking transaction, rate would be calculated as under:

USD / INR spot to be taken as 61.05

Premium payable

Spot February 25 paise

Feb - 15th March 6 paise

Add: Total premium 29 paise 0.29

Thus IB forward rate would be: 61.34

Add: Margin 0.20% 0.12

Rate for customer 61.46

4) You are required to book Forward sale contract for USD 1.00 million delivery 3rd month and another forward purchase contract for USD 2.00 million for delivery 2nd month. Given that USD / INR spot is 60.1000/1100, premium quoted as under, calculate rates for merchant transactions, if the exchange margin of 0.15% is to be loaded for the purchase transaction and 0.20% for the sale transaction.

Premium (in paise):

1 m 0450 / 0550

2m 0900 / 1000

3m 1400 / 1450

Answer:

a) Calculation of rate for forward sale of USD 1.00 million:

Spot rate to be taken (higher rate of the market) 60.1100

3 month premium to be charged 0.1450

Add: Margin 0.20% 0.1205

60.3755

Rounded off to: 60.3750

b) Calculation of rate for forward purchase of USD 2.00 million:

Spot rate to be taken (lower rate of the market) 60.1000

1 month premium to be paid / passed on 0.0450

60.1450

Less: Margin 0.15% 0.0902

Rounded off to 60.0548

(Note: For a sale contract premium for the full period, up to end date of the contract shall be charged, i.e. full 3 months, where as for purchase contract, premium would be passed on only up to the beginning of the contract period, i.e. only up to the start date, or for 1 month only).

SPACE FOR NOTES

5) A Forward purchase contract for USD 500,000.00 booked 2 months back at 61.5500 is due for delivery 2 days later (spot date). The customer is informed by the drawee of the bill that the payment will be delayed for one month. Given that the Interbank spot is 60.0675 / 0.750 and one month forward premium is 05/06 paise, and margin on TT buying and TT selling would be 0.15%, calculate rate for cancellation of the existing contract and also give indicative rate for re-booking of one month fixed date or option contract beginning one month from spot date.

Also, calculate the amount to be debited / credited to the customer's account on spot date, upon cancellation of the contract.

Answer: The existing forward contract would have been booked at TT buying rate, and hence it has to be cancelled at opposite TT selling rate, computed as under:

Interbank USD / INR spot (higher of the two)	60.0750
Add: Margin 0.15%	<u>0.0901</u>
	<u>60.1651</u>
The contract would be cancelled at	60.1650

Rupee amount at contracted rate USD 500,000 @ 61.5500 = Rs. 3,07,75,000

Less amount at cancellation rate USD 500,000 @ 60.1650 = Rs. 3,00,82,500

Amount due to the customer Rs. 6,92,500

(To be paid to his account on spot date)

(b) Indicative rate for contract proposed to be re-booked:

If the contract is booked with option of one month beginning spot date:

Interbank rate	60.0675
Less: Margin 0.15%	<u>0.0901</u>
	<u>59.9774</u>
Or say	59.9770

If the contract is booked for delivery fixed date one month forward, or the option is beginning after one month, premium for 1 month would be passed to the customer as under:

Interbank rate	60.0675
Add: Premium for one month	<u>0.0500</u>
	60.1175
Less: Margin 0.15%	<u>0.0902</u>
	<u>60.0273</u>
Or say	60.0270

PER CENT AND PER MILLE:

A percentage (%) is a proportion per hundred, e.g. 1% is one part in every hundred parts such as Rupee 1 per rupees 100, while per mille means per thousand, e.g. 1 per mille is one part in every thousand, such as Rupee 1 per Rupee 1,000.

Percentage or per milleage can also be used to advantage in checking roughly any calculations, such as interest when allowed in a rate of exchange.

VALUE DATE:

This is the term used to define the date on which a payment of funds or an entry to an account becomes actually effective and / or subjected to interest.

ARBITRAGE IN EXCHANGE:

Arbitrages consist in the simultaneous buying and selling of a commodity in two or more markets to take advantage of temporary discrepancies in prices. As applied to dealings in foreign exchange, arbitrage consists of the purchase of one currency for another in one centre, accompanied by an almost immediate resale against the same currency in another centre, or in operations conducted through three or more centres and involving several currencies. A transaction conducted between two centres only is known as simple or direct arbitrage. Where additional centres are involved, the operation is known as compound or three (or more) point arbitrage.

FOREX DEALING ROOM OPERATIONS

A Dealing Room in Bank is the nerve centre of its Foreign Exchange activities. Some of the key functions are:

- Quoting of daily rates for Merchant banking activities.
- Managing the funds in the Nostro accounts.
- Performing cover transactions for the positions resulting from Forex operations of all the branches after aggregating figures.
- Risk Management through limits, Derivatives and best practices.

TYPICAL DIVISIONS IN A DEALING ROOM	
DIVISION	FUNCTIONS
FRONT OFFICE or THE DEALING ROOM (Responsible for actual deals)	Headed by a Chief dealer has several dealers focusing on different markets, Clients, Currencies depending on the size and needs of the Bank. Dealers are to function within set limits or obtain special approvals. Exposure Limits: These caps are put in place to protect the bank from credit risk, against any defaults by the counter party in the dealing room. A dealer normally has to maintain two positions namely Currency position and Funds position. Currency Positions: These are arrived at after aggregating merchant transactions conducted by all branches and Inter-bank dealings and should be managed in such a way as to understand Overbought or Oversold positions (if any) and put through cover transactions to neutralize the over exposures. This would help minimize the Exchange risks. Funds Position: Reflects the net of Inflows & outflows arising out of various operations. Mismatches lead to attendant risks such as Funding risks (a type of liquidity risk, Interest rate risk etc). Internal Controls: The most important of the internal controls are Position and Stop Loss limits. The trading limits are of three kinds: (a) On deal size, (b) On Open positions, and (c) Stop-loss. Thus the Front office is focused on generating deals
MIDDLE OFFICE (Responsible for Risk management)	Exclusively engaged in providing information to top management. Middle office is responsible, independent market risk monitoring, measurement, analysis and reporting for the bank's ALCO. Middle Office normally independently report to ALCO.
BACK OFFICE (responsible for settlements & administration)	A very important department which verifies and confirms all the deals put through by the front office. The critical issue of settlement as per the deal terms rests with this section. It also deals with Nostro account issues.

Note: RBI lays general guidelines to banks for fixation of Open limit for daylight as well as Overnight positions. The actual positions are fixed by Board of Directors now. A Day light limit is the level up to which the dealer can take positions during the dealing operations. For exigencies, the dealer would refer to the Chief dealer and function accordingly. Overnight limits are also fixed currency wise, which would be much lower than the Daylight limits. This is because the dealers would require higher limits during the day to put through the transactions based on merchant transaction by the branches and secondly, it is possible to make quick and remedial transactions in case the market moves adversely. Since both these are not possible / required during the night times, night time limits are lower always.

FEDAI has given Uniform Standard Accounting procedure for valuation of Foreign exchange profits and losses. This valuation exercise is to be taken up once in quarter at least. They also provide guidelines on the notional exchange rates to be used for converting the FX positions to INR for balance sheet purposes

RISK MANAGEMENT & BASICS OF DERIVATIVES

DEFINITION OF RISK:

A risk can be defined as "uncertainties which may result in reduced earnings or outright loss" in the context of financial transactions"

RISKS IN FOREIGN EXCHANGE OPERATIONS:

Foreign exchange is a highly volatile commodity. The volume of foreign exchange transactions undertaken by the banks is also increasing day by day because of liberalization of foreign trade and steps being initiated towards globalization. Therefore, a strict discipline and internal controls emanating from Dealing Room are necessary to avoid loss and to be on the safer side. The different types of Risks that exist in Forex operations are as follows:

EXCHANGE RISK:

Foreign Exchange Risk is the risk which the banks face when they deal in multi-currencies and take positions in these currencies. As is known, foreign market is open 24 hours of the day and the values of the currencies are being determined every second by the markets factoring in all the information that come in to their hands then and there. Demand, supply, balance of payments, trade deficit, government borrowings, inflation, interest rate and political environment are the fundamentals which influence the markets. Using this information, fluctuations in currencies are anticipated to a certain extent, but the element of uncertainty will always be there. This element of uncertainty which may result in the value of the Currency (in which the assets are held) depreciating is called the Exchange risk.

Banks necessarily get in to different positions in foreign currencies due to merchant transactions entered with their constituents. An open position (open to risk) arises when the assets and outstanding contracts to purchase that particular currency (Forward purchase contracts) exceed the liability plus outstanding sale contracts in that currency. Here, the bank has a long (overbought) position. If the value of the currency in terms of other currencies remains same, there is no risk. For example, let us say the bank has an open position in USD at USD 1 million. Today, it would get Rs.45 million against USD. Overnight if the rupee appreciates against the dollar by a rupee (for example), the value of the holdings in USD in terms of the Indian rupee would then go down by one million rupees. Similar risks arise in oversold positions also. Thus exchange risks are inevitable if there are open positions.

TYPES OF EXCHANGE RISK:

1). **TRANSACTION EXPOSURE:** Transaction exposure measures the risk involved due to a change in the foreign exchange rate between the time, the transaction is executed and the time it is settled..

2). **TRANSLATION EXPOSURE:** This relates to valuation of foreign currency assets and liabilities at the end of accounting year realizable values. These losses and gains are also known as accounting losses/gains. For example, if the bank has granted a foreign currency loan (FCL or PCFC) for USD 100,000 to a customer and has accounted for the loan at Rs.45 /USD in its books, The asset value would appear eroded if the rate at the end of the accounting year shows Rs.44/USD. It may be noted that the asset value continues at USD100,000 only but in the books of the bank which is written in INR, there is value erosion. Translation losses affect a bank's accounting profits and consequently valuations of banks in the market will suffer. This is significant for banks which have overseas branches and subsidiaries. It is important to note that Translation exposures will ultimately become transaction exposure when the asset or liability is actually converted / realized.

MANAGING FOREIGN EXCHANGE RISK:

The magnitude of this risk is dependent on the level of exposures. Level of exposure is the only element, which is within one's control. The first step in Forex risk management is therefore fixing its open foreign exchange open position limits.

These open position limits are classified as two types. **Daylight limit & Overnight limits**

Overnight limits are the maximum amounts the bank is willing to put at risk at the time the foreign exchange market is closed in the time-zone in which the bank is operating.

Daylight limits refers to the maximum amount that the bank is willing to put at risk at any point during the dealing day.

The Daylight limit is normally higher because:

- The dealers need a higher limit to accommodate client flows during business hours.
- It is easier to manage exchange risk when the markets are open.
- Overnight position is lower being susceptible to uncertainty during the time when the dealer is not viewing the markets which are active elsewhere in the world.

The overall limits fixed by the top management are further distributed amongst the various dealing rooms (if more than one are present), within each centre, dealer wise limits are allocated such that the aggregates fall within the stipulated limits. During the day real-time monitors are in place and overnight-day end positions are aggregated and checked.

Mismatched Positions and Gap limits: If the maturity spread between foreign currency assets and liabilities are at variance, a mismatched position would arise. Mismatched positions lead to gaps which have to be bridged using various hedge tools. Banks have to be particularly careful if liabilities mature earlier to assets as the risk is higher (It may become difficult to borrow funds at reasonable cost or conclude a deal & ensure that bank has necessary foreign currency funds to meet the liability on due dates)

COUNTRY RISK:

Country Risk may be defined as the risk to operating cash flows, or to the value of investment, resulting from operating in a particular country. At the macro level, Country Risk includes both **sovereign risk and currency risk**. The major elements of Country Risk are:

- Economic Risks
- Political Risks
- Social and Cultural Risks.

Political stability, in itself may not be a sufficient reason for not doing business with or in a country. The Banks need to look at all the dimensions of country before reaching a conclusion on whether or not to do business with a particular country. Banks are required to formulate a Country Risk Management Policy (CRM) for dealing with the country risk problems only in respect of that country, where a bank's net-funded exposure is 2 per cent or more of its total assets.

The CRM policy should stipulate rigorous application of the 'Know Your Customer' (KYC) principle in international activities which should not be compromised by availability of collateral or shortening of maturities. Country risk element should be explicitly recognised while assessing the counter-party risk.

Provisioning / Capital requirement: Banks in India have to make provisions (with effect from the year ending 31 March 2003) on the net funded country exposures on a graded scale ranging from 0.25 to 100 per cent, according to the risk categories

CREDIT RISKS:

Credit Risk arises when a party to a contract is either unable or unwilling to perform his obligation of a contract. The failure to execute may also be due to official regulation. Thus the risk associated with default is the element of credit risk in foreign exchange transactions. The default risk has two elements associated with it. These are termed as "Revaluation Risk" and "Settlement Risk".

Revaluation Risk: It is the cost (in the event of a counter party default) of replacing non-settled contracts. For example, if ABC bank needs USD One million on a particular day and gets in to a contract with XYZ Bank for getting the dollars, it will suffer the revaluation risk being the cost associated with arranging for USD One million at short notice if XYZ Bank defaults in its contractual obligation of selling the required USD One million as per its contractual obligation to ABC Bank.

Settlement Risk: Let us say that a bank buys USD 1 million from Bank B. What if after receiving the INR equivalent, Bank E fails to deliver the foreign currency? This risk of the Counter-party failing to deliver is known as Settlement risk. Famously known as the Herstatt or Temporal Risk, this risk is incurred 'By Chance' where one party honors the contract but the other party fails to do so because it is across border and the business hours on the other end are either over, or have not yet started. Such risks occur when counter parties are located in different time zones. This is called Herstatt risk because in 1974, several banks that had entered in to transactions with Bank Herstatt in Germany faced losses when Herstatt bank was put under liquidation after the transactions were initiated by these banks but before they were settled by the German bank due to the difference in the time-zone. Herstatt risk can be controlled by matching the time zones (notionally) and also by putting counter-party limits in place.

LEGAL RISK: Legal risks are the risk of non-enforceability of a contract.

SYSTEMIC RISK: The risk of the entire system collapsing due to collapse of a major institution. In recent times-Subprime crisis in major banks in U.S.A led to a chain of events but was fortunately halted by the US Fed & other Investors taking prompt action)

OPERATIONAL RISK: Risk arising out of human errors, frauds, technology failures etc. Operational risk arises as a results of human, machine failures, judgmental errors, frauds and so on. The very famous case of judgmental errors and trading by a single individual (a dealer called Nick Leeson) resulting in the collapse of his bank itself (Barings-UK) and recently Jerome Kerviel of Societe Generale resulting in multi billion losses are well known examples of operational risk.

For effective control of such risks, a few measures as follows are commonly taken:

- Segregating Dealing, Accounting (Back-up) and Control (Audit). Each of these functions should be independent of the others such that checks and balances are in place.
- Proper information channels should be in place
- Selection, training and Job rotation of staff in key positions is critical to risk management in these areas.
- Reconciliation of Nostro accounts (with mirror accounts) and control over Nostro transactions, funding.
- Concurrent and on-site audits.
- Review mechanism to analyze losses and investigate reasons
- Proper security systems. Here Security involves both physical security of Hardware and digital security.

DERIVATIVES - ORIGIN & ROLE OF IN RISK MANAGEMENT

Derivatives are hedging instruments derived from the values of the underlying exposures such as commodities, currencies or shares and bonds. Derivatives are financial contracts which derive their value off a spot price time-series, which is called the "underlying". Common derivative instruments are Forward contracts, Options, Swaps, Forward rate agreements, and Futures. Derivatives do not have independent existence without underlying product and market. The underlying assets could be a stock index, a foreign currency, a commodity or an individual stock. The simplest form of derivatives is the forward contract (known as the forefather of the derivatives).

FUNCTIONS OF DERIVATIVES: The primary purpose of the derivative instruments is not to borrow or lend funds but to transfer price risks associated with fluctuation in asset values. The derivatives provide three important economic functions viz.

- | | | |
|---------------------|--------------------|------------------------------|
| a) Risk Management. | b) Price Discovery | c) Transactional Efficiency. |
|---------------------|--------------------|------------------------------|

TYPES OF DERIVATIVES: The commonly used derivatives are as follows:

- | | | | |
|----------------------|------------|------------|----------|
| a) Forward contracts | b) Futures | c) Options | d) Swaps |
|----------------------|------------|------------|----------|

FORWARD CONTRACTS: Authorised dealers (Banks) have been permitted under FEMA to enter in to Forward contracts for sale or purchase of Foreign Currency with their customers who are exposed to foreign currency risks arising out of their normal transactions which are permitted under current regulations.

The mechanism of Forward Contract is very simple. On being approached by a customer for a forward cover, the AD would satisfy himself that there exists a genuine exposure and quote a rate. For example, if an Importer who is required to pay an inward bill maturing after one month may approach his banker for a forward cover. This is because the importer is either risk averse or feels that the rupee / dollar rate would move against him in the intervening month. The bank would then quote a forward rate. If the customer is satisfied with the quotation, he would sign the contract which would bind him to the rate and the date. Contract documents are signed and charges if any are collected.

If the customer fails to perform his part of the contract, the contract is cancelled and Swap charges are recovered where necessary. Similar contracts can be entered in to different customers based on their requirements. In other words-subject to RBI / FEDAI guidelines, banks enter in to contracts to sell or buy specified amount of foreign currency on specified future dates.

- Forward Contracts are either Forward purchase contracts or Forward Sale contracts depending on the nature of the transaction.
- Exporters, NRIs, EEFC holders and so on would enter in to Forward purchase contracts.
- Importers, Constituents who have to make payments under foreign currency loans and so on would enter in to Forward sale contracts.

● It is again emphasized that the word purchase and Sale are used from the point of view of the Bank and not the customer.

Forward Contracts in India are governed by RBI guidelines and FEDAI rules. RBI has permitted all entities having Exchange risk exposures permission to enter in to Forward contracts subject to rules and limits.

FUTURE CONTRACTS: A Future Contract is defined as a "commitment to buy or sell at a specified future settlement date a designated amount of commodity or a financial asset. It is a legally binding contract by two parties to make / take delivery of commodity at certain point of time in the future.

MAIN FEATURES OF FUTURES CONTRACTS	FEATURES OF FUTURES MARKETS
1) Futures are traded on Security Exchanges. 2) Futures contracts have standard contract terms. 3) Futures exchanges are associated with clearing houses. 4) Futures' trading requires margin payments and daily settlement. 5) Futures positions can be exited easily 6) Futures markets are regulated by regulatory authorities (SEBI in India)	1) High level counter trading 2) Physical exchange rare. 3) Very high degree of leverage as margin based trading takes place. 4) Low default levels

DIFFERENCE BETWEEN FUTURES AND FORWARDS:

Futures and forwards contracts are very similar to each other in terms of contractual obligations. However there are certain distinguishing features which are as follows:

FUTURES CONTRACTS	FORWARD CONTRACTS
a) Traded on organized stock exchanges. b) Issued in standard forms and do not have flexibility regarding quantity or quality (of commodity to be delivered) c) Regulated by SEBI, RBI and other agencies.	a) Over the Counter (OTC) products. b) Offer flexibility and are custom made. c) Indian banks entering in to Forward contracts have to follow RBI guidelines.

THE MARGIN PROCESS: Futures are traded on Exchanges which allow margin based trading. Future contracts are marked to market on daily basis. Three types of margins are involved which form the backbone of Exchange traded Future contracts.

i) **Initial Margin:** At the start of every contract initial margin is to be paid to the exchange either in cash or approved / liquid securities. (Treasury bills, bonds, bank guarantees). The leverage allowed is quite high. For example, in London International Financial Futures Exchanges (LIFFE) initial margin for a Euro / Dollar Contract size of USD 1 million is reported to be USD 500 only. Thus any person with only USD 500 can enter into a large value future contract of USD 1.00 million.

ii) **Variable Margin:** This is calculated on daily basis, by marking to market the contract at the end of each day. This margin is normally to be deposited in cash only. The exchange makes the margin call upon erosion in value of the contract which is normally to be deposited and made available in the margin account with the exchange by next morning. In case of appreciation in value of the contract, the difference occurs to the buyer and the same is credited by the exchange to this margin account.

iii) **Maintenance Margin:** This margin is similar to minimum balance stipulation for undertaking and trades in the Exchange and has to be maintained by the buyer / seller in the margin account with the exchange. The exchange is also authorized to debit / credit the variable margin to this amount as such the party needs to constantly fund the account to avoid continuous erosion in the value of contract.

CONCEPT OF OPTIONS: An option is a contract conveying the right but not the obligation to buy or sell a specified financial instrument at a fixed price before or at a certain future date.

THE OPTIONS BUYER	THE OPTION SELLER	EXERCISE PRICE OR STRIKE PRICE
The Option Buyer is also called as Holder/Owner. The Option Buyer pays a premium and purchases the option which confers a right to buy or sell the currency (as the case may be) at an agreed price in exchange for another currency at a future date.	Also called Option Writer, he deals in Options. The Writer will sell an Option (whether it is a Buy option or a Sell option as per the counterparty's requirements) for a fee called Premium. He has to perform his commitment only if the Holder chooses to exercise the option.	The price at which the Option Buyer has the contractual rights to buy or sell the currency is called the exercise price or strike price.

TYPES OF OPTIONS:

1. CLASSIFICATION BASED ON UNDERLYING TRANSACTION:

- CALL OPTION:** The owner / buyer has the right to purchase and the writer / seller has the obligation to sell specified number of shares of the underlying stocks at a specified price prior to the option expiry date.
- PUT OPTION:** The owner or buyer has the right to sell and the writer / seller has obligation to buy specified number of the underlying shares at a specified price prior to the options expiry date.

2). CLASSIFICATION BASED ON EXECUTION:

Options are classified as follows depending on the time of execution permitted:

- a) **American Options:** Option holder can exercise the option any time during the option term.
 b) **European Option:** Option holder can exercise the option only at the end of the Option period.

Thus we can have four types of Options;

- a) American Call Option, b) American Put Option, c) European Call Option, d) European Put Option.
 In India, earlier only European Options were permitted. However, recently, RBI has permitted American options also.

Recollected Question:

In case of a put option, if the strike price is more than the spot price on the date of maturity of option, it is known as:

- a) In the money * b) Out of money c) At the money d) Above the money

IN-THE-MONEY OPTION	AT-THE-MONEY OPTION	OUT-OF-THE-MONEY OPTION
An in-the-money (ITM) option is an option that would lead to a positive cash flow to the holder if it were exercised immediately. A call option on the currency (say USD) is said to be in-the-money when the current value of currency (say USD) stands at a level higher than the strike price (i.e. spot price > strike price). If the value of currency is much higher than the strike price, the call is said to be deep ITM. On the other hand, a put option on currency is said to be ITM if the value of currency is below the strike price.	An at-the-money (ATM) option is an option that would lead to zero cash flow if it were exercised immediately. An option on the currency (say USD) is at-the-money when the current value of currency in the markets equals the strike price (i.e. spot price = strike price).	An out-of-the-money (OTM) option is an option that would lead to a negative cash flow if it was exercised immediately. A call option on the currency (say USD) is said to be out-of-the-money when the current or market value of currency stands at a level which is less than the strike price (i.e. spot price < strike price). If the currency is much lower than the strike price, the call is said to be deep OTM. On the other hand, a put option on currency is OTM if the value of currency is above the strike price.

SWAP & COVER DEALS:

Swap literally means exchange of commodities. In banking, Swap in a foreign exchange market refers to simultaneous sale and purchase of currencies.

CURRENCY SWAPS: Exchange of predetermined streams of payments in different currencies on pre-determined dates, at pre-determined exchange rates. Here there are two simultaneous deals for the same amount as follows

- a) One at the spot and other for future date or
 b) Both for future dates.

In other words, in Swap Deals, there are two different transaction / maturity dates for the same amount. Some examples are as follows:

- a) A transaction where bank buys Rs. 1 lac USD spot (against rupees) and sells 1 lac USD one month forward.
 b) A transaction where bank sells Rs. 1 lac USD spot and buys 1 lac USD one month forward.
 c) A transaction where bank buys Rs. 1 lac USD one month forward and sells 2 months forward.
 d) A transaction where bank sells Rs. 1 lac USD one month forward and buys 2 months forward.

WHY SWAP DEALS?

Banks have to meet obligations arising out of merchant transactions with customers such as Forward contracts and normal Sale / Purchases where there is a time lag. They also have to manage their Foreign Currency holdings (FCNR balances). They may go for swap operations for short-term interest arbitrage. Under such operations, they buy one currency from a place where interest is low and sell at some other market to buy another currency where interest is high. They also cover their cross currency future maturity deals by swap operations. The most compelling reason being avoidance of exchange risk on their open positions. The Swap deals are made for future coverings. Therefore, it is the future points or margins that affect the swap rates. Every swap operation has two legs / aspects:

- a) Buying b) Selling

The difference between the buying rates and selling rates for the Swap operation is known as swap differential. One point that should be kept in mind that the bank undertakes a Swap Deal only on gain. On the other hand, while covering its position by outright sale or purchase, there could be a loss. Banks cover the mismatch between the buying and selling operation is covered by swap deals.

INTEREST RATE SWAPS: Here an exchange of different streams of interest structures occurs. There would be no exchange of principal amounts under interest rate swap, and only the interest streams would be exchanged. Interest rate swaps are further classified as **Coupon Swaps**, where, fixed interest rate are swapped with floating interest rates and **Index or Basis swaps**, where floating rates based on one benchmark is exchanged with floating rates based on another benchmark. Cross currency interest rate swap is a combination of currency swap and an interest rate swap, where streams of currencies as also interest rate structures are swapped.

SODHANI COMMITTEE RECOMMENDATIONS (1992):

The expert group on foreign exchange, headed by Shri O.P. Sodhani, the then Executive Director of the RBI had submitted following recommendations for enabling the market participants to hedge of Forex risks after studying the existing facilities/regulations. These would help develop and deepen the Forex markets in India. Some of the important recommendations are given hereunder:

- 1) Corporates should be permitted to hedge upon declarations of the underlying exposures.
- 2) Banks may be permitted to initiate overseas cross currency positions
- 3) Banks should be allowed to borrow/ lend in the overseas markets.
- 4) To increase number of market participants (allow more entities to participate).
- 5) Corporates must be permitted to cancel and re-book Option contracts.
- 6) Banks to be permitted to use hedging instruments for their own assets / liability management (Proprietary).
- 7) Banks should be allowed to offer hedging products, like caps, collars, etc.
- 8) Banks to be allowed to fix interest rates on FCNR deposits, subjects to caps, as prescribed by RBI.

Most of the recommendations of the expert group have since been implemented by the RBI, giving more freedom to the market participants.

DERIVATIVES - IMPORTANT RBI GUIDELINES

- 1) Resident Indians with underlying exchange exposures can book Forward contracts to the extent of USD 100,000 for a tenor not exceeding one year without any underlying documentary proof.
- 2) SMEs can book Forward contracts for their exposures. Banks need not insist on underlying documentary evidence.
- 3) AD banks may enter into forward contracts with NRIs as per the following guidelines to hedge:
 - a) The amount of dividend due to him on shares held in an Indian company.
 - b) The balances held in the Foreign Currency Non-Resident (FCNR) account or the Non-Resident External Rupee (NRE) account. Forward contract with the rupee as one of the legs may be booked against balances in both the accounts. With regard to balances in FCNR(B) accounts, cross currency (not involving the rupee) forward contracts may also be booked to convert the balances in one foreign currency to another foreign currency in which FCNR(B) deposits are permitted to be maintained.
 - c) Investment made under the portfolio scheme in accordance with the provisions of FEMA / FEMA.
- 4) Exporters / Importers can book Forward covers to hedge their exposures based on Documentary evidence to the extent of exposure. AD banks may also allow Importers and Exporters to book forward contracts on the basis of a declaration of an exposure and based on past performance up to the average of the previous three financial years' (April to March) actual import / export turnover or the previous year's actual import/export turnover, whichever is higher, subject to the following conditions:
 - a) The forward contracts booked in the aggregate during the year and outstanding at any point of time should not exceed the eligible limit i.e. the average of the previous three financial years' (April to March) actual import / export turnover or the previous year's actual import/export turnover, whichever is higher.
 - b) In the case of exporters, the amount of overdue bills o/s should not be in excess of 10 % of the turnover.
 - c) Contracts booked in excess of 75 % of the eligible limit will be on deliverable basis and cannot be cancelled.
 - d) These limits shall be computed separately for import/export transactions. Any forward contract booked without producing documentary evidence will be marked off against this limit.
 - e) Importers and exporters should furnish a declaration to the AD banks regarding amounts booked with other authorised dealer category-I under this facility.
 - f) An undertaking may be taken from the customer to produce supporting documentary evidence before the maturity of the forward contract.

CONTRACTS OTHER THAN FORWARD CONTRACTS:

AD banks may enter into Foreign Currency-Rupee Option contracts with their customers on back-to-back basis. They are also permitted to run an options book subject to prior approval from the Reserve Bank. All guidelines applicable for forward contracts are applicable on rupee option contracts also...

Facilities for Authorised Dealers Category-I Management of Banks' Assets-Liabilities:

AD banks may use the following instruments to hedge their asset-liability portfolio:

- a) Interest Rate Swaps,
- b) Currency Swaps, and
- c) Forward Rate Agreements.

AD banks may also purchase call or put options to hedge their cross currency proprietary trading positions subject to a well formed policy at the Board level and after ensuring that the value and maturity of the hedge should not exceed that of the underlying.

FOREIGN EXCHANGE FACILITIES FOR RESIDENTS

As per Section 5 of FEMA resident Indians are permitted to buy or sell foreign exchange from any ADs/FFMC for any current account transactions (except for those transactions where restrictions have been imposed by Central Govt.). Release of FX beyond these limits will require prior approval from RBI. **ADs can accept payment in cash up to Rs. 50,000 only against sale of foreign exchange as per FEMA.** Wherever the sale of foreign exchange exceeds the amount equivalent to Rs. 50,000, the payment must be received only by a crossed cheque / BC/ Pay Order / DD or Credit / Debit / Prepaid cards subject to conditions (KYC norms to be fulfilled).

A) PRIVATE VISITS: For Private Visits abroad, other than to Nepal and Bhutan, any resident individual can obtain foreign exchange up to an aggregate amount of USD 2,50,000.

B) GIFT/ DONATION: Any Resident Individual / entity (trust; company; partnership firm, etc.), may remit up to USD 2,50,000 in one financial year as gift to a person residing outside India or as donation to an organization outside India.

C) GOING ABROAD ON EMPLOYMENT: A person going abroad for employment can draw foreign exchange up to USD 2,50,000 per financial year.

D) EMIGRATION: A person going abroad on emigration can draw foreign exchange up to the amount prescribed by the country of emigration or USD 250,000.

E) MAINTENANCE OF CLOSE RELATIVES ABROAD: A resident individual can remit up to USD 250,000 per financial year towards maintenance of close relatives abroad.

F) BUSINESS TRIP: For Business trips to foreign countries, resident individuals / individuals having proprietorship firms can avail of foreign exchange up to USD 2,50,000 in a financial year irrespective of the number of visits undertaken during the year.

G) MEDICAL TREATMENT ABROAD: ADs may release foreign exchange up to an amount of USD 2,50,000 or its equivalent, on the basis of self-declaration in Form A2.

H) STUDENTS FOR PURSUING STUDIES ABROAD: ADs may release foreign exchange up to USD 2,50,000 or its equivalent to resident individuals for studies abroad on self-declaration basis in Form A2.

I) SMALL VALUE REMITTANCES: ADs may release foreign exchange not exceeding USD 25,000 or its equivalent, for all permissible current account transactions.

OTHER IMPORTANT ASPECTS:

- The FX purchased should be utilized within 180 days. If not used, it has to be surrendered to an Authorised Person.
- **CURRENCY NOTES/ COINS UP TO US \$ 3000:** Resident Indians going abroad can avail a maximum of US \$ 3000 in currency notes (cash) and balance in the form of traveller cheques or bank DD.

Exceptions:

 - (a) Iraq and Libya - USD 5000 or its equivalent;
 - (b) Iran, Russian Federation and other Republics of CIS - Entire forex in the form of foreign currency notes or coins.
- **INDIAN CURRENCY NOTES:** (a) Indian Residents can carry Indian currency notes up to Rs. 10,000 to any country except Nepal & Bhutan. For Nepal & Bhutan any amount in denomination not exceeding Rs. 100 can be taken.
(b) Incoming Indians can bring INR currency notes up to Rs. 10,000 from any country except Nepal or Bhutan from where the Resident Indian can bring any amount in denomination not exceeding Rs. 100.
- **UNSPENT FOREIGN EXCHANGE:** Foreign exchange up to US \$ 2000 in form of foreign currency notes or TCs can be retained by Resident Indians (Optional). The balance (over and above USD 2000) has to be necessarily surrendered to Authorised dealer within 180 days both in case of currency notes and traveller cheques to be either deposited in a RFC (Domestic) account or converted back into Indian rupees.
- **CURRENCY DECLARATION FORM (CDF):** A person (including a Resident) can bring any amount of Foreign Exchange from abroad, which may be in the form of currency notes or traveller cheques. However, if the amount exceeds US \$ 10,000 or its equivalent in TC/Currency and / or the value of foreign currency notes exceeds US \$ 5,000 or equivalent in any foreign currency, he has to declare his holdings to the Custom authority, at the port/Airport of arrival in Currency Declaration Form (CDF).
- **BORROWINGS BY INDIVIDUAL RESIDENTS:** An Individual resident may borrow a sum not exceeding US \$ 2,50,000 or its equivalent from close relatives residing outside India subject to the condition that the minimum maturity period of loan is one year, the loan is free of interest and the amount of loan is received by way of inward remittances in free foreign exchange through normal banking channels or by debit to the NRE / FCNR (B) account of the non-resident lenders.
- **GIFT OF GOODS:** The limit for export of goods by way of gifts Rs five lacs per annum.

RBI LIBERALISES FOREX NORMS FOR INDIVIDUALS

- a) A person resident in India can now give to a person resident outside India, by way of gift, any security, shares or debentures of value up to \$ 50,000 in value per financial year.
- b) Resident individuals can now make rupee gifts within the overall limit of \$ 2,50,000 per financial year as permitted under the LRS to an NRI / PIO who is a close relative.
- c) Residents can now lend to NRIs to the extent of Rs. 200,000 through electronic transfer & crossed cheques.

RBI LIBERALISES FOREX NORMS FOR INDIVIDUALS

The RBI has liberalised forex facilities for Individuals under the FEMA 1999 as under:

- A) **NRIs can be Joint Holders in Resident's SB/EEFC/RFC Accounts:** Individual residents in India are now permitted to include non-resident close relative(s) as joint holder(s) in their resident bank accounts, namely, Savings(SB), Exporter Earners' Foreign Currency (EEFC) and Residents' Foreign Currency (RFC) accounts, on 'former or survivor' basis.
- B) **Residents can be Joint Holders in NRE/FCNR Accounts:** Non-Resident Indians (NRIs) / Person of Indian Origin (PIO), are now permitted to open Non-Resident (External) (NRE) Rupee Account Scheme / Foreign Currency (Non-Resident) (FCNR) Account (Banks) Scheme with their resident close relative(s) as joint holder(s) on 'former or survivor' basis.
- C) **Residents can gift Shares / Debentures upto USD 50,000 Value:** A person resident in India can now give to a person resident outside India, by way of gift, any security / shares / debentures of value upto USD 50,000 in value per financial year subject to certain conditions. Earlier, a person resident in India could give to a person resident outside India, by way of gift, any security/shares/debentures of value upto USD 25,000 per calendar year.
- D) **Sale Proceeds of FDIs can be credited to NRE/FCNR (B) Account:** Sale proceeds of Foreign Direct Investment (FDI) can be credited to NRE Account Scheme/Foreign Currency (Non-Resident) Account FCNR (Banks) Scheme provided the original acquisition was by way of inward remittance or funds held in their NRE/FCNR (B) accounts.
- E) **Gifts to NRIs can be credited to NRO Accounts in Rupees:** Resident individuals are now permitted to make rupee gifts within the overall limit of USD 2 lac per financial year as permitted under the Liberalised Remittance Scheme to an NRI/PIO who is a close relative by way of crossed cheque / electronic transfer to the NRO Rupee Account (NRO) of the NRI / PIO.
- F) **Loans to NRI Close Relatives can be given in Rupees:** Similarly, Resident individuals are now permitted to lend in Rupees within the overall limit under the Liberalised Remittance Scheme of USD 200,000 per financial year to a Non Resident Indian (NRI) / Person of Indian Origin (PIO) close relative by way of crossed cheque/electronic transfer, subject to certain conditions.
- G) **Residents can repay the loans given to NRI Close Relatives:** Resident individuals are now granted general permission to repay loans availed of in Rupees from banks in India by their NRI close relatives. Earlier, repayment of loans by close relative in respect of Rupee loan availed by NRIs was restricted only to housing loans.
- H) **Residents can bear Medical Expenses of NRIs:** Residents will now be allowed to bear the medical expenses of visiting NRIs / PIOs close relatives. Earlier, residents were allowed to make payment in rupees towards meeting expenses on a/c of boarding, lodging and services related to it or travel to and from and within India of a NRI who is on a visit to India.

NRO ACCOUNTS BY FOREIGN NATIONALS

To facilitate the foreign nationals to collect their pending dues in India, AD Cat-I banks may permit foreign nationals to re-designate their resident a/c maintained in India as NRO a/c as under:

- AD Category-I bank should obtain the full details from the account holder about his legitimate dues expected to be received into his account.
- AD Category-I bank has to satisfy itself as regards the credit of amounts which have to be bonafide dues of the account holder when she / he was a resident in India.
- The funds credited to the NRO account should be repatriated abroad immediately, subject to the AD Category-I bank satisfying itself regarding the payment of the applicable Income tax and other taxes in India.
- The amount repatriated abroad should not exceed USD one million per financial year.
- The debit to the account should be only for the purpose of repatriation to the account holder's account maintained abroad. There should not be any other inflow / credit to this account other than that mentioned above. The a/c should be closed immediately after all the dues have been received and repatriated as per the declaration made by the a/c holder.

LIBERALIZED REMITTANCES SCHEME (LRS)

Resident Indian individuals are permitted to freely remit up to **USD 2,50,000 per financial year** for any current or capital account transactions or a combination of both, (For example to acquire and hold immovable property or shares or any other asset outside India) without prior approval of RBI. Individuals will also be able to open, maintain and hold foreign currency accounts with a bank outside India for making remittances under this scheme. The foreign currency account may be used for putting through all transactions connected with or arising from remittances eligible under this scheme.

- LRS facility is in addition to the Remittances allowed as above except in the case of Gifts / Donations. Gifts/Donations are subsumed under LRS. No sub-limit within the overall limit of USD 2,50,000. Should have been a Customer of the bank for a minimum of one year. PAN number is mandatory. The amount cannot be used for purchase of house.
- For this facility, applicants should designate one branch of one bank.
- Remittances can be consolidated in respect of family members subject to the individual family members complying with the terms & conditions of the Scheme.
- The LRS for Resident Individuals is available to all resident individuals including minors. In case the remitter is a minor, the LRS declaration form should be countersigned by the minor's natural guardian.
- Facility is available only for Resident individuals and is not to corporates, partnership firms, HUFs, trusts, etc. Facility is not available for the following:
 - Prohibited purposes such as purchase of Lottery tickets, Sweepstakes, Proscribed(prohibited)magazines etc
 - Remittances either directly or indirectly to Nepal, Bhutan, Pakistan or Mauritius or Countries identified by Financial Action task force.
 - Remittances directly or indirectly to Individuals /entities identified by RBI as posing significant risk of terrorism.

FX FACILITIES TO RESIDENTS OTHER THAN INDIVIDUALS

ADs have been permitted to make remittances on account of donations by Corporates for some specified purposes subject to a limit of one per cent of the foreign exchange earnings during the previous three financial years or USD 5 million, whichever is less. Other residents like partnership firms, trusts etc., are free to remit up to USD 5,000 per annum per donor / remitter each as gift and donation. Remittances exceeding the limit will require prior permission from the Reserve Bank.

FOREIGN CURRENCY ACCOUNTS FOR RESIDENT INDIANS

PARTICULARS	RESIDENT FOREIGN CURRENCY A/C (RFC)	RESIDENT FOREIGN CURRENCY (DOMESTIC) A/C (RFC-D)	EXCHANGE EARNER'S FOREIGN CURRENCY A/C (EEFC)
Who can open an Account	For returning Indians, i.e. those who were non residents of Indian Nationality or origin, who have been resident outside India for a continuous period of not less than 1 year.	Resident Individuals	A person resident in India which includes individuals, firms, companies etc.
Sources of Funds	<ul style="list-style-type: none"> By foreign inward remittances, transfer of FCNR (B) deposits, NRE deposits. By inward remittances in foreign currency of pensions, superannuation benefits etc., received from erstwhile employers abroad. By surrender of Foreign Currency (FC) / Foreign Currency Travellers' Cheques (FCTC) to the bank by the account holder in person subject to CDF rules (Third party TCs not permissible). By surrender of balance of FCs / FCs availed during visits abroad provided the original amount was paid out of repatriable funds. Foreign exchange acquired as gift or inheritance from person who was NRI. 	Foreign exchange acquired: <ul style="list-style-type: none"> While on a visit to any place outside India by way of payment for services. From any person not resident in India or who is on a visit to India in settlement of any lawful obligation. By way of honorarium or gift while on a visit outside India. From an authorized person for travel abroad and represents unspent forex acquired during travel abroad. 	<ul style="list-style-type: none"> "Status Holder" Exporter. Individual Professionals. 100% Export Oriented Units / Units in Export Processing Zones / Software Technology Parks / Electronic Hardware Technology Parks. Others <p>All can deposit 100% of their earnings in EEFC, subject to the condition that the sum total of the accrual in the a/c during the calendar month should be converted into rupees on or before the last succeeding calendar month after adjusting for utilization of the balance for approved purposes or forward commitments.</p>
Types of account	Savings, Current, Term Deposit	Current Account	Current Account
Currency of Account	Discretion of the Bank.	Discretion of the Bank.	Discretion of the Bank.
Period for fixed deposits	As per FCNR scheme	Not Applicable.	Not Applicable.
Rate of Interest	As per FCNR scheme	No interest is payable	No interest is payable
End Use	<ul style="list-style-type: none"> Balances can be used for local payments as well as for repatriation Funds can be transferred to NRE / FCNR a/c on becoming NRI again. Balance and interest freely repatriable. 	For permissible current and capital account transactions. Balance and interest freely repatriable.	For bonafide purposes. Balance and interest freely repatriable.
Loans & overdrafts in India & Abroad	Not permitted	Not permitted	Not permitted
Nomination Facility	Available	Available	Available

FORWARD CONTRACT FACILITIES FOR RESIDENTS:

In order to enable Small and Medium Enterprises (SMEs as per RBI definition), having direct and / or indirect exposures to foreign exchange risk to manage their exposures effectively, it has been decided to allow them to book / cancel / rebook / roll over Forward Contracts through AD Category - I banks **without production of underlying documents**, subject to the following conditions:

- Such contracts may be booked through AD Category - I banks with whom the SMEs have credit facilities and the total forward contracts booked should be in alignment with the credit facilities availed by them for their foreign exchange requirements or their working capital requirements or capital expenditure.
- AD Category - I bank should carry out due diligence regarding "user appropriateness" and "suitability" of the forward contracts to the SME customers as per RBI's 'Comprehensive Guidelines on Derivatives'.
- The SMEs availing this facility should furnish a declaration to the AD Category - I bank regarding the amounts of forward contracts already booked, if any, with other AD Category - I banks under this facility.
- SMEs are also permitted to use foreign currency rupee options for hedging their exposures after production of underlying documents or under past performance route.

RESIDENT INDIVIDUALS:

In order to enable resident individuals to manage / hedge their foreign exchange exposures arising out of actual or anticipated remittances, both inward and outward, RBI has now permitted them to book forward contracts, without production of underlying documents, up to a limit of USD 100,000, based on self declaration. The contracts booked under this facility would normally be on a deliverable basis. However, in case of mismatches in cash flows or other exigencies, the contracts booked under this facility may be allowed to be cancelled and re-booked. The notional value of the outstanding contracts should not exceed USD 100,000 at any time. Further, the contracts may be permitted to be booked up to tenors of one year only.

SUMMARY OF BANK ACCOUNTS FOR NON - RESIDENT INDIANS

Sr. No	OPERATIONAL PARAMETERS	NON-RESIDENT ORDINARY A/C (NRO)	NON-RESIDENT EXTERNAL A/C (NRE)	FOREIGN CURRENCY NON-RESIDENT A/C
1.	Who can open A/c	NRI / PIO (other than a person resident in Nepal and Bhutan) (Individuals of Bangladesh / Pakistan nationality require approval of RBI).	NRI / PIO (Individuals of Bangladesh / Pakistan nationality require approval of RBI).	NRI / PIO (Individuals of Bangladesh / Pakistan nationality require approval of RBI).
2.	Currency of the A/c	Indian Rupee	Indian Rupee	All convertible currencies
3.	Source of Funds	Local Funds / Funds from abroad	Funds from abroad (TT/DD/ TC/ Currency etc)	Funds from abroad (TT / DD / TC / Currency etc)
4.	Types of Accounts	SB / CA / Recurring / Term Deposits	SB / CA / Recurring / Term Deposits	Only Term Deposits
5.	Min. / Max. period (in case of term deposit)	Minimum 7 days and Maximum 10 years.	Min 1 year and Max no limit.	Minimum - 1 Year Maximum - 5 years
6.	Joint A/c with a) Residents b) Non-Residents	Permitted (E or S; F or S) Permitted	Permitted (F or S) Permitted	Permitted (E or S) Permitted
7.	Nomination	Permitted	Permitted	Permitted
8.	Repatriation : Principal/Interest	Non-repatriable except to the extent of USD One million (ceiling) per financial year including sale proceeds of immoveable property after payment of eligible taxes.	Freely Repatriable	Freely Repatriable
9.	Loans in India To Account holder or Third party	Permitted	No upper limit.	No upper limit.
	Foreign Currency Loans in India i) To A/c holder ii) To Third Parties	i) Not permitted ii) Not permitted	i) Not permitted ii) Not permitted	i) No upper limit. ii) Not permitted
10.	Tax Benefits	No exemptions (Tax @ 30% at source on interest to be deducted)	Exempted from all taxes	Exempted from all taxes
11.	Investment	Amount held in NRO a/c can be used for Non-repatriable investment (NSC, LIC, Equity etc.)	Amount held in NRE accounts can be used for repatriable investment (NSC, LIC, Equity etc.)	Proceeds eligible for repatriable investment (NSC, LIC, Equity etc.)
12.	Interest Rate	a) Banks are free to determine their interest rates on both SB&TD of maturity of one year and above under NRE a/cs. b) Banks are free to determine their interest rates on SR under NRO A/c. c) Interest rates on NRE and NRO deposits cannot be higher than domestic rupee deposits.		Term Deposit - Fixed or Floating within ceiling rate of respective Libor / Swap rate + 200 bps for > 1 year but < 3 years & 300 bps for 3 years and above.

SPACE FOR NOTES

CHIT FUNDS SUBSCRIPTION BY NRI:

RBI has permitted NRIs to subscribe to the chit funds, without limit, on non-repatriation basis subject to the following conditions:

- The Registrar of Chits or an officer authorised by the State Govt. in accordance with the provisions of the Chit Fund Act in consultation with the State Govt. concerned, may permit any chit fund to accept subscription from Non-Resident Indians on non-repatriation basis;
- The subscription to the chit funds shall be brought in through normal banking channel, including through an account maintained with a bank in India

NON - RESIDENT INDIAN (NRI) ACCOUNTS

PERSON RESIDENT IN INDIA: Section 2 of FEMA 1999 defines the term Resident in India as a person residing in India for more than 182 days during the course of financial year.

PERSON RESIDENT OUTSIDE INDIA: Section 2 of FEMA defines person resident outside India as a person who is not resident in India. Non-resident Indian generally fall under one of the following broad categories:

A) **NON-RESIDENT INDIAN (NRI):** An NRI is a person holding Indian Passport:

- Who has gone abroad for a gainful employment or business or vocation, or for any other purpose indicating an indefinite period of his stay outside India.
- Who are working abroad on foreign assignments - persons employed by IMF / IBRD / UNO / UNESCO etc. or who are employed in Central/State Government and Public Sector Undertakings and deputed abroad on temporary assignments or for temporary period.

B) **PERSON OF INDIAN ORIGIN (PIO):** For the purpose of being eligible for the facilities of opening and maintenance of various types of bank accounts and making investments in shares and securities in India, a PIO means a citizen of any country other than Bangladesh or Pakistan, if:

- a) He held Indian passport at any point of time, or
- b) Whose parent/s or grand parent/s was citizens of India (undivided India), or Foreign National Spouse of a non-resident Indian (either NRI or PIO) is also given the status of a PIO.

PURPOSE OF LOANS FOR NRI AGAINST NRE / FCNR IN INDIA:

- i) Personal purposes or for carrying on business activities. The loans cannot be utilized for the purpose of re-lending, or carrying on agriculture or plantation activities or for investment in real estate business.
- ii) Direct investment in India on non-repatriation basis by way of contribution to the capital of Indian firms / companies.
- iii) Acquisition of flat / house in India for his own residential use.

PURPOSE OF LOANS FOR THIRD PARTIES AGAINST NRE / FCNR IN INDIA: Fund based and / or non-fund based facilities for personal purposes or for carrying on business activities. The loans cannot be utilized for the purpose of re-lending, or carrying on agriculture or plantation activities or for investment in real estate business.

PURPOSE OF LOANS ABROAD FOR NRI / THIRD PARTY AGAINST FCNR / NRE: Fund based and / or non-fund based facilities for bonafide purposes.

PURPOSE OF LOANS TO ACCOUNT HOLDERS / THIRD PARTIES AGAINST NRO: Personal requirement and / or business purpose. The loans cannot be utilized for the purpose of re-lending, or carrying on agriculture or plantation activities or for investment in real estate business.

TREATMENT OF LOANS / OVERDRAFTS IN THE EVENT OF CHANGE IN THE RESIDENT STATUS OF THE BORROWER: In case a Resident who had availed of loan / OD facilities subsequently becomes a person resident outside India, banks may at their discretion and commercial judgment allow continuance of the loan/overdraft facilities. Repayment may be made by inward remittance or out of legitimate resources in India of the person concerned.

NEPAL & BHUTAN:

- (a) When a person resident in India leaves India for Nepal and Bhutan for taking up employment or for carrying on business or vocation or for any other purpose indicating his intention to stay in Nepal and Bhutan for an uncertain period, his existing a/c will continue as a resident a/c. Such account should not be designated as Non-resident (Ordinary) Rupee Account (NRO).
- (b) ADs may open and maintain NRE / FCNR (B) Accounts of persons resident in Nepal and Bhutan who are citizens of India or of Indian origin, provided the funds for opening these accounts are remitted in free foreign exchange. Interest earned in NRE / FCNR (B) accounts can be remitted only in Indian rupees to NRIs and PIO resident in Nepal and Bhutan.

OTHER IMPORTANT ASPECTS:

- a) **Remittance / Credit to NRE-SB:** Current income like rent, dividend, pension, interest etc. of NRIs / PIO who do not maintain NRO Account is freely allowed to be remitted abroad or credited to NRE a/c based on appropriate certification by a CA certifying that the amount proposed to be remitted is eligible for remittance and that applicable taxes have been paid / provided for.
- b) **Power of attorney permitted in NRO:** RBI has advised that Authorised Dealers are now permitted to extend the facility of operation of NRO account by PoA granted in favour of a resident by the non-resident individual a/c holder. Accordingly, the banks may allow operations on an NRO account in terms of such a PoA, provided such operations are restricted to:
 - (i) All local payments in rupees including payments for eligible investments subject to compliance with relevant RBI regulations.
 - (ii) Remittance outside India of current income in India of the non-resident individual account holder, net of applicable taxes.
- c) **Power of Attorney holders in NRE a/c:** PoA in NRE accounts are allowed all transactions except the following:
 - Credit foreign currency notes and foreign travelers cheques in NRE a/c cannot be accepted from Power of attorneys.
 - Repatriation except in favour of the Principal i.e. the NRI account holder.
- d) Resident Indians can appoint a Non-Resident Indian as a nominee in his deposit account and vice-a-versa.
- e) **Repatriation of Sale proceeds of Residential property**
 - Allowed through NRO a/c subject to an over-all annual ceiling of USD One million per Financial year (No lock-in any more)
 - The remittances to be allowed on production of an undertaking by the remitter and a Certificate from a Chartered Accountant in the formats prescribed. [cf. A. P. (DIR Series) Circular No.56 dated November 26, 2002].
 - The remittance facility of sale proceeds of immovable property is not available to a citizen of Pakistan, Bangladesh, Sri Lanka, China, Afghanistan, Iran, Nepal and Bhutan.
 - Repatriation of sale proceeds of residential property purchased by NRI / PIO out of foreign exchange is restricted to not more than two such properties.

EXCHANGE CONTROL RELATING TO EXPORTS

Export Import Code Number (IEC): Every person / firm / company engaged in export business has to obtain an Export Import Code Number issued by the Director General of Foreign Trade (DGFT).

Export Declaration Forms: Any export of goods from India should be declared in the prescribed forms to the effect that full value of exports will be realized within the prescribed period in the prescribed manner.

EDF FORM	When exports are made otherwise than by post and custom office is not computerized (i.e where EDI facility is not available).
SDF (Statutory Declaration Forms)	RBI on 18-5-2016 has dispensed with the SDF in case of exports taking place through the EDI ports. The declaration of foreign exchange remittance under the FEMA may be made a part of the Shipping Bill.
POSTAL BILL OF EXPORTS (PBE)	To make export of goods sold through e-commerce from Foreign Post Offices (FPOs) at Chennai, Delhi and Mumbai.
SOFTEX FORM	Exports of software in non-physical form.

Exemptions from Export Declarations: Certain categories of export are exempted from declaration. The important items are:-

- (i) Software exports of value not exceeding US \$ 25,000 or its equivalent.
- (ii) Gift of goods exceeding Rupees Five lakhs in value requires approval of the Reserve Bank.

TIME LIMIT FOR EXPORTERS TO RECEIVE EXPORT PAYMENTS:

- Normal Export of Goods and Software - 9 Months.
- Status holders, 100% EOU, EHTP, Software Technology park (STP) etc permitted to realize and repatriate within a period of 9 months from the date of export.
- Units in SEZ: 9 months.

REPORTING TO RBI: A.D.banks should furnish to the RO concerned of the Reserve Bank, on half-yearly basis, a consolidated statement in Form XOS giving details of all export bills of value USD 25,000 or above, outstanding beyond six months from the date of export as at the end of June and December every year within fifteen days from the close of the relative half-year.

PRESCRIBED METHOD: The payment for export proceeds should be received through the medium of the Authorised Dealers (ADs). However, in exceptional cases where the track record of the exporter is good, ADs can accept the amount received by exporters direct by cheque, DD, etc. Exporters are also permitted to receive payment from International tourists through TC/Currency/International credit cards and to the debit of NRE/FCNR accounts.

SUBMISSION OF EXPORT DOCUMENTS: All exporters have to submit duplicate copy of Statutory declaration form (GR/PP etc) along with the shipping documents to an Authorised Dealer within 21 days of shipment. The ADs will report all export bills (both purchased or accepted for collection) to RBI every fortnight in a statement called 'ENC' along with 'R' returns.

CRYSTALLIZATION OF EXPORT BILLS: Crystallization is a process of conversion of foreign currency liability of the customer into Rupee liability. FEDAI rules for crystallization have been amended and Authorised dealers are now free to fix the period after which crystallization has to take place after taking in to consideration various risk factors such as the Credit risk of the exporter, Operational risk etc. Such rules must be transparent and should be advised to the customer well in advance. Most banks however, follow the earlier procedure of crystallization on 30th day after NTP (Normal Transit period for demand bills and after 30th day after due date / notional due date for usance bills).

SELF WRITE-OFF AND EXTENSION OF TIME: For export proceeds due within the prescribed period during a calendar year, All exporters (including Status Holder exporters) are now allowed to:

- (a) Write off (including reduction in invoice value) outstanding export dues and,
- (b) Extend prescribed period of realisation beyond 180 days or further period as applicable, provided
 - (i) The aggregate value of such export bills written-off (including reduction in invoice value) and bills extended for realisation does not exceed 10 % of the export proceeds due during the calendar year.
 - (ii) Such export bills are not a subject of investigation by Enforcement Directorate / CBI or any other Investigating Agencies.

CONSIGNMENT EXPORTS: (i) When goods have been exported on consignment basis, AD bank, while forwarding shipping documents to Overseas branch / Correspondent, should instruct the latter to deliver them only against trust receipt/undertaking to deliver sale proceeds by a specified date within the period prescribed for realisation of proceeds of the export. This procedure should be followed even if, according to the practice in certain trades, a bill for part of the estimated value is drawn in advance against the exports.

- (ii) The agents/consignees may deduct from sale proceeds expenses normally incurred towards receipt, storage and sale of the goods, such as landing charges, warehouse rent, handling charges etc. & remit the net proceeds.
- (iii) Deductions in Account Sales should be supported by bills/receipts in original except in case of petty items like postage/cable charges, stamp duty etc.

DIRECT DISPATCH OF SHIPPING DOCUMENTS:

AD Category - I banks, are now allowed to regularize cases of dispatch of shipping documents by the exporter direct to the consignee or his agent resident in the country of the final destination of goods, up to USD 1 million or its equivalent, per export shipment, subject to the conditions:

- The export proceeds have been realized in full.
- The exporter is a regular customer of the bank for a period of at least six months.
- The exporter's account is fully compliant with RBI's KYC / AML guidelines and the AD is satisfied about the bona fides of the transaction. In case of doubt, the bank may file Suspicious Transaction Report with FIU-IND.

REDUCTION IN INVOICE VALUE - PREPAYMENT OF USANCE BILLS:

In case of prepayment of Usance bills, A.D. banks may allow cash discount to the extent of amount of proportionate interest on the unexpired period of usance, calculated at the rate of interest stipulated in the export contract or at the prime rate / LIBOR of the currency of invoice if the rate of interest is not stipulated in the contract.

REDUCTION IN VALUE (OTHER CASES): If, after a bill has been negotiated or sent for collection, its amount is to be reduced for any reason, AD bank may approve such reduction, if satisfied about genuineness of the request, provided:

- The reduction does not exceed 25% (earlier 10%) of invoice value.
- If the exporters have been in the export business for more than three years, reduction in invoice value may be allowed, without any percentage ceiling subject to their track record being satisfactory i.e. the export outstanding does not exceed 5% of the average annual export realisation during the preceding three calendar years. (For this purpose outstanding of exports made to countries facing externalisation problems may be ignored provided the payments have been made by the buyers in the local currency AND the request does not relate to commodities subject to floor price stipulations.
- The exporter is not on the exporters' caution list of RBI

The exporter should be advised to surrender proportionate export incentives availed of, if any.

CHANGE OF BUYER / CONSIGNEE: Prior approval of RBI is not required if, after goods have been shipped, they are to be transferred to a buyer other than the original buyer in the event of default by the latter, provided the reduction in value, if any, involved does not exceed 10% and the realization of export proceeds is not delayed beyond the period of six months from the date of export. Where the reduction in value exceeds 10%, all other relevant conditions as above for sanctioning a higher deduction have to be followed.

PAYMENT OF CLAIMS BY ECGC: Where ECGC pays the claims, A.D. Banks can write off the relative export bills and delete them from the XOS statement. Such write-off will not be restricted to the limit of 10 per cent (see below). Surrender of incentives, if any, in such cases will be as provided in the Foreign Trade Policy. The claims settled in rupees by ECGC should not be construed as export realisation in foreign exchange.

"WRITE OFF" OF UNREALISED EXPORT BILLS:

(i) Exporters can approach the A.D. Bank, who had handled the relevant shipping documents, with a request for write off of the unrealised portion. A.D. banks may accede to such requests subject to the under noted conditions:

- The relevant amount has remained outstanding for a period of one year or more;
 - The aggregate amount of write off allowed by the A.D. bank during a calendar year does not exceed 10% of the total export proceeds realised by the concerned exporter through the concerned Authorised Dealer bank during the previous calendar year;
 - Satisfactory documentary evidence is furnished in support of the exporter having made all efforts to realise the dues;
 - The case is not the subject matter of any pending civil or criminal suit.
 - The exporter has not come to the adverse notice of the Enforcement Directorate or the Central Bureau of Investigation or any such other law enforcement agency.
 - The exporter has surrendered proportionate export incentives, if any, availed of in respect of the relative shipments. The AD bank should obtain documents evidencing surrender of export incentives availed of before permitting the relevant bills to be written off.
 - AD banks are required to put in place a system under which internal inspectors or auditors carry out random sample check / percentage check of outstanding export bills written off.
- iii) Status Holder exporters may now write-off outstanding export dues to the extent of:
- 5% of their average annual realisation during the preceding three financial years or
 - 10% of the export proceeds due during the financial year, whichever is higher.

EXEMPTIONS FOR "WRITE OFF" FACILITY: Exports made to countries with externalisation problem i.e. where the overseas buyer has deposited the value of export in local currency but the amount has not been allowed to be repatriated by the central banking authorities of the country.

- GR/SDF forms which are under investigation by agencies like, Enforcement Directorate, Directorate of Revenue Intelligence, Central Bureau of Investigation, etc. as also the outstanding bills which are subject matter of civil / criminal suit.
- A Ds have to forward a statement of all Writing Offs in form EBW to RBI every half year ended 30th June & 31st December

EXPORTERS' CAUTION LIST: RBI advises the details of exporters who are cautioned in terms of provisions contained in Regulation 17 of "Export Regulations" from time to time. AD banks may approve GR/SDF/PP forms of exporters who have been placed on caution list only if the exporters concerned produce evidence of having received an advance payment or an irrevocable letter of credit in their favour covering the full value of the proposed exports. Approval may also be given in cases where usance bills are to be drawn for the shipment provided the relative letter of credit covers the full export value and also permits such drawings and the usance bill mature within six months from the date of shipment.

INTEREST EQUALISATION SCHEME

In a bid to arrest the decline in exports, the Central government has announced an interest equalisation scheme on pre and post shipment rupee export credit with effect from 1st April, 2015 for five years. The rate of interest equalisation would be 3 per cent. The scheme would be available to all exports made by small and medium scale enterprises across 416 tariff lines. Merchant exporters will not be eligible for the sop.

GOLD CARD FOR EXPORTERS

ELIGIBILITY: Exporters of good track record whose accounts have been classified as 'Standard' continuously for a period of 3 years and there are no irregularities / adverse features. The scheme may not be applicable to those exporters who are blacklisted by ECGC or included in RBI's defaulter's list / caution list or making losses for the past 3 years or having overdue export bills in excess of 10 per cent of the previous year's turnover.

FIXATION OF CREDIT LIMIT:

- Need-based finance on annual turnover basis with a liberal approach. 'In-principle' limits will be sanctioned for a period of 3 years with a provision for automatic renewal.
- Banks will consider granting term loans in foreign currency in deserving cases out of their FCNR (B), RFC, etc. funds.
- A stand-by limit of not less than 20% of the assessed limit may be additionally made available to facilitate urgent credit needs.

FORFAITING

Export-Import Bank of India (EXIM Bank) and AD Category - I banks have been permitted to undertake forfaiting, for financing of export receivables. Remittance of commitment fee / service charges, etc., payable by the exporter as approved by the EXIM Bank / AD Category - I banks concerned may be done through an AD bank. Such remittances may be made in advance in one lump sum or at monthly intervals as approved by the authority concerned.

Export Factoring on Non-Recourse Basis:

Taking into account the recommendation made by the Technical Committee on Facilities and Services to the Exporters (Chairman: Shri G. Padmanabhan), RBI has decided to permit AD banks to factor the export receivables on a non-recourse basis, so as to enable the exporters to improve their cash flow and meet their working capital requirements subject to following:

- a) AD banks may take their own business decision to enter into export factoring arrangement on non-recourse basis. They should ensure that their client is not over financed. Accordingly, they may determine the working capital requirement of their clients taking into account the value of the invoices purchased for factoring. The invoices purchased should represent genuine trade invoices.
- b) In case the export financing has not been done by the Export Factor, the Export Factor may pass on the net value to the financing bank/ Institution after realising the export proceeds.
- c) AD bank, being the Export Factor, should have an arrangement with the Import Factor for credit evaluation and collection of payment.
- d) Notation should be made on the invoice that importer has to make payment to the Import Factor.
- e) After factoring, the Export Factor may close the export bills and report the same in the Export Data Processing and Monitoring System (EDPMS) of the RBI.
- f) In case of single factor, not involving Import Factor overseas, the Export Factor may obtain credit evaluation details from the correspondent bank abroad.

DIAMOND DOLLAR ACCOUNT SCHEME

The Diamond Dollar Account scheme has been introduced to facilitate growth in exports and achieve the target to double India's exports in goods and services from \$465 billion to \$900 billion and upping the Indian share of the world exports from the current 2% to 3.5% over the next five years.

ELIGIBILITY:

- a) Firms and companies dealing in purchase / sale of rough or cut and polished diamonds / precious metal jewellery plain, minakari and / or studded with / without diamond and / or other stones, with a track record of at least 2 years in import / export of diamonds / colored gemstones / diamond and colored gemstones studded jewellery / plain gold jewellery.
- b) Having an average annual turnover of Rs. 3 crores or above during the preceding 3 licensing years (from April to March).
- c) They may be allowed to open not more than five Diamond Dollar Accounts with their banks.
- d) AD Category-I banks are required to submit quarterly reports to the Foreign Exchange Department, Reserve Bank of India, giving details of name and address of the firm / company in whose name the DDA is opened, along with the date of opening / closing the DDA, by the 10th of the month following the quarter to which it relates.
- e) AD Category - I banks are required to submit a statement giving the data on the DDA balances maintained by them on a fortnightly basis within seven days of close of the fortnight to which it relates, to RBI.

Permissible Credits:

- > Amount of pre-shipment and post-shipment finance availed in US Dollars.
 - > Realisation of export proceeds from shipments of rough, cut, polished diamonds and diamond studded jewellery.
 - > Realisation in US Dollars from local sale of rough, cut & polished diamonds.
- Permissible Debit:** Payment for import / purchase of rough diamonds from overseas / local sources.
- > Payment for purchase of cut and polished diamonds, coloured gemstones and plain gold jewellery from local sources.
 - > Payment for import/purchase of gold from overseas / nominated agencies and repayment of USD loans availed from the bank. Transfer to rupee account of the exporter.

EXPORT FINANCE AND ITS TYPES

EXPORT FINANCE IS MAINLY OF TWO TYPES:

- a) PRE-SHIPMENT ADVANCE
- b) POST-SHIPMENT ADVANCE

PRE - SHIPMENT ADVANCE (PACKING CREDIT)

	PARTICULARS	PACKING CREDIT - EPC (RUPEE)	PACKING CREDIT-PCFC (FOREIGN CURRENCY)
1	Definition	Any loan, advance or any other credit granted to an exporter for financing the purchase, processing, manufacturing or packing of goods prior to shipment.	Any loan, advance or any other credit granted to an exporter for financing the purchase, processing, manufacturing or packing of goods prior to shipment.
2	Basis for grant of credit	LC or Confirmed order in favour of exporter or some other person by an overseas buyer, unless its lodgement has been waived.	LC or confirmed order in favour of exporter or some other person by an overseas buyer unless its lodgement has been waived.
3	Allowed for	Export of goods, services, Construction contracts, Consultancy	Export of goods, services, Construction contracts, Consultancy. Banks can extend PCFC for export to ACU countries also.
4	Type of Account	Order to order basis, or Running a/c facility in genuine cases to exporters having very good past record. Export Oriented Units / Units in Free Trade Zones / EPZs and SEZs.	Order to order basis or Running account facility in genuine cases to exporters having very good past record
5	Extent	<ul style="list-style-type: none"> • For FOB value • Only for exportable portion in case of Agri products. 	<ul style="list-style-type: none"> • For FOB value • Only for exportable portion in case of Agri products.
6	Disbursement	Stage to stage or in lump sum, depending upon the needs and circumstances.	Stage to stage or in lump sum, depending upon the needs and circumstances
7	Choice of Currency	Indian Rupees	Any convertible currency such as US\$, Pound Sterling, Yen, Euro etc. To enable exporters to have operational flexibility, they are allowed to draw PCFC in one currency and draw the bill in any other convertible currency. The risk and the cost of the cross currency transaction will be on the exporter.
8	Period of credit	<p>(i) Period will depend upon the circumstances of the individual case. It is primarily for the banks to decide the period for which a packing credit advance may be given having regard to the various relevant factors so that the period is sufficient to enable exporter to ship the goods / render the services. As per RBI guidelines, the concessional rate is for 270 days.</p> <p>(ii) If pre-shipment advances are not adjusted by submission of export documents within 360 days from the date of advance, the advances will cease to qualify for concessive rate of interest to the exporter <i>ab initio</i>.</p> <p>RBI provides Export Refinance: Limit is 50% (effective fortnight beginning June 30, 2012) of the outstanding export credit eligible for refinance for 180 days as at the end of second proceeding fortnight. Interest rate is Repo Rate.</p>	<p>Initially for 180 days.</p> <p>No Export refinance is provided by RBI</p>
9	Forward Contracts	Allowed	Allowed in any of the four convertible currencies
10	Liquidation of credit	<ul style="list-style-type: none"> • From the proceeds of export bills of main item /s by products • EPC advance to be converted into Post shipment advance. • Subject to mutual agreement between the exporter and the banker. It can also be repaid/prepaid out of balances in EEFC A/c) as also from rupee resources of the exporter to the extent exports have actually taken place. • Excess EPC involving non-exportable goods to be recovered otherwise without concession in Rate of Interest • *In case of exporters having good track record from proceeds of other export bills where no EPC has been allowed. • First in first out basis in case of running account 	<ul style="list-style-type: none"> • Self liquidation from export proceeds • Export Bills to be discounted, negotiated or to be purchased. • It can also be repaid /prepaid out of balances in EEFC A/c as also from rupee resources of the exporter to extent exports have actually taken place. <p>The PCFC extended to the supplier EOU/EPZ/SEZ unit will have to be liquidated by receipt of foreign exchange from receiver not by negotiation of export documents but by transfer of foreign exchange from the banker of the receiver EOU/EPZ/SEZ unit to the banker of supplier unit.</p>

POST - SHIPMENT ADVANCE - DIFFERENT TYPES

SR	TYPE OF ADVANCE	ALLOWED AGAINST	AMOUNT LIMIT	MAXIMUM PERIOD	OTHER INFORMATION
1	Negotiation of Bills after Shipment	<ul style="list-style-type: none"> Bills drawn under Irrevocable Letter of Credit. Shipping documents evidencing that actual shipment has been made. 	No Limit-100% of Invoice Value or value declared in GR/PP / Softex forms	<ul style="list-style-type: none"> Initially allowed for 6 months from the date of shipment. Period to be extended upto 1 year for genuine reasons. 	<ul style="list-style-type: none"> Short Term Finance. Pre-shipment advance, if any, to be liquidated by way of negotiation of bills. Allowed in Rupees, as well as in foreign currencies, USD, Euro, Yen & GBP
2	Purchase / Discounting of Bills after shipment	Shipping documents evidencing export against confirmed order/expired LC / discrepant documents under LC	No Limit-100% of Invoice Value or value declared in GR/PP / Softex forms	<ul style="list-style-type: none"> Initially allowed for 6 months from the date of shipment. Period to be extended upto 1 year for genuine reasons 	<ul style="list-style-type: none"> Short Term Finance. Pre-shipment advance, if any, to be liquidated from the bills purchased or discounted. Allowed in Rupees, as well as in foreign currencies. If bills are not payable at sight, ECGC cover should be preferred.
3	Advance against bills sent on collection	Bills, which have already been sent on collection basis, drawn either under LC/discrepant documents or under confirmed order.	No Limit-100% of Invoice Value or value declared in GR/PP / Softex forms	<ul style="list-style-type: none"> Initially for 6 months from the date of shipment. Period to be extended upto 1 year for genuine reasons 	<ul style="list-style-type: none"> Short Term Finance. Pre-shipment advance, if any, to be liquidated from the bills purchased. If bills are not payable at sight, ECGC cover issued prior to shipment should be preferred.
4	Advance against consignment exports	Shipments already made on consignment basis. Instructions should be given for delivery of documents against Trust Receipt or undertaking.	Within the market value of the goods because actual sale amount or amount to be realised is not certain.	<ul style="list-style-type: none"> Normally upto a period of 180 days. In deserving cases, for exports in CIS and East European countries, upto a maximum of one year. 	In case of Advance against Consignment Exports against Gems / precious stones, packing credit advances be adjusted as soon as export takes place, by transfer of the outstanding balance to a special (post-shipment) account which in turn, should be adjusted as soon as the relative proceeds are received from abroad but not later than 180 days.
5	Advance against Govt Receivables	Outstanding Duty Draw Back entitlements supported by certificate from C.A	100%	Normally Upto period of 90 days under concessional rate of interest.	To be covered by ECGC Guarantee
6	Advance against Un-drawn Balances and Retention Money	Balance of unraised invoices and Retention Money	100%. Because there are chances of deductions by the buyers, a margin should be maintained.	Such advances are eligible for concessional rate of interest for a maximum period of 90 days only.	Export proceeds must be received within 180 days after the expiry of NTP, in case of demand bills and due date in case of usance bills. For the period beyond 90 days, the rate of interest specified for the category 'ECNOS' at post-shipment stage may be charged
7	Forfaiting	By way of rediscounting of Receivables (EBR)	Minimum amount is USD 1,00,000	6 months and prior permission of RBI or EXIM Bank required for deferred payment bills.	Forfaiting allowed through EXIM Bank only. Prior involvement of EXIM bank required for each bill. It is 'Without Recourse'.
8	Factoring	By way of rediscounting of Receivables (EBR)	100%	6 months and prior permission of RBI required for deferred payment bills.	It is with or without recourse- Bill to Bill rediscounting on an ongoing arrangements.
9	Export Bill Rediscounted Abroad (EBR)	By way of banks financing Export bills in foreign currency.	100%	6 months and prior permission of RBI required for deferred payment bills.	Just as normal bill discounting but in foreign currency.

IMPORT MANAGEMENT

Import trade is regulated by the Directorate General of Foreign Trade (DGFT) under Ministry of Commerce & Industry, Department of Commerce. Authorised dealers, while undertaking import transactions, have to ensure that the imports into India are in conformity with:

- a) Foreign Trade Policy, 2009-14 and Foreign Exchange Management (Current Account Transactions) Rules, 2000.
- b) Provisions of Uniform Customs and Practices for Documentary Credits (UCP - 600), etc. while opening letters of credit for imports into India on behalf of their constituents.
- c) Directions issued by Reserve Bank under Foreign Exchange Management Act (FEMA) from time to time.

I/E CODE NUMBER: All Importers have to register themselves with DGFT, under Ministry of Commerce & Industry and obtain a I/E code. I/E codes have life time validity

Approved Commodity / Capital goods: Only permitted imports can be undertaken. For this, Importers and Banks have to ensure that either the item is not in the negative list or a specific import license is available.

IMPORT LICENCE: Authorized dealers may freely open letters of credit and allow remittances for import of goods unless they are included in the negative list requiring license under the Foreign Trade Policy in force.

ADVANCE REMITTANCE: Authorised dealers may allow advance remittance for import of goods without any ceiling subject to the following conditions:

- a) The Cut off for making advance remittances without the backing of LG / SBLC increased to USD 5,00,000 for Services and US\$ 2,00,000 for Goods.
- b) For advance remittances exceeding USD 5,00,000 or its equivalent, Banks require an unconditional, irrevocable standby Letter of Credit or a Bank Guarantee from an international bank / AD Category - I bank in India.
- c) Advance remittance without any limit and without bank guarantee or standby letter of credit is permitted to an importer (other than a Public Sector Company or a Department / Undertaking of the Government of India / State Government/s), for import of rough diamonds into India from the under noted mining companies, viz. a) Diamond Trading Company Pvt. Ltd., UK, b) RIO TINTO, UK and so on as per RBI guidelines (six companies are listed)
- d) In cases where the importer (other than a public sector company or a depts. / undertaking of govt. of India / state govt.) is unable to obtain bank guarantee from overseas supplier and authorised dealers is satisfied about the track record and bonafides of the importer, the requirement of the bank guarantee / stand by letter of credit may not be insisted upon for advance remittance up to US \$ 10,00,000 (US \$ one million).
- e) A Public Sector Company or a Department / Undertaking of the Government of India / State Government/s which is not in a position to obtain a guarantee is required to obtain a specific waiver for the bank guarantee from the Ministry of Finance, Government of India before making advance remittance exceeding USD 300,000.
- f) Physical import of goods into India is made within six months (three years in case of capital goods) from the date of remittance and the importer gives an undertaking to furnish documentary evidence of import within fifteen days from the close of the relevant period.
- g) In the event of non-import of goods, authorised dealer should ensure that the amount of advance remittance is repatriated to India or is utilized for any other purposes for which release of exchange is permissible under the Act Rules / Regulations.

RECEIPT OF IMPORT BILLS / DOCUMENTS:

Normally, Import documents should be received through banking channels. Import bills and documents should be received from the banker of the supplier by the banker of the importer in India. AD bank should not, therefore, make remittances where import bills have been received directly by the importers from the overseas supplier, except in the following cases:

- i) Where the value of import bill does not exceed USD 3,00,000 (earlier it was USD 1,00,000) and US \$ 5,00,000 for rough diamonds (USD 3,00,000 earlier).
- ii) Import bills received by wholly-owned Indian subsidiaries of foreign companies from their principals.
- iii) Import bills received by Status Holder Exporters as defined in the Foreign Trade Policy, 100% Export Oriented Units / Units in Free Trade Zones, Public Sector Undertakings and Limited Companies.
- iv) Import bills received by all limited companies viz. public limited, deemed public limited and private limited companies.

Receipt of Import documents by the AD Bank directly from overseas suppliers:

- (i) At the request of importer clients, AD bank may receive bills directly from the overseas supplier as above, provided the AD bank is fully satisfied about the financial standing/status and track record of the importer customer.
- (ii) Before extending the facility, the AD bank should obtain a report on each individual overseas supplier from the overseas banker or a reputed credit agency. However, such a credit report on the overseas supplier need not be obtained in cases where the invoice value does not exceed USD 3,00,000 provided the AD bank is satisfied about the bonafides of the transaction and track record of the importer constituent.

TIME LIMIT FOR SETTLEMENT OF IMPORT PAYMENTS:

Normal imports: Remittances against imports should be completed within six months from the date of shipment, except in cases where amounts are withheld towards guarantee of performance, etc. AD banks may permit settlement of import dues delayed due to disputes, financial difficulties, etc. Interest in respect of such delayed payments may be permitted

Deferred payment arrangements: Deferred payment arrangements, including suppliers and buyers credit, providing for payments beyond a period of six months from date of shipment up to a period of less than three years, are treated as trade credits for which the procedural guidelines are laid down separately by RBI.

IMPORT OF INDIAN CURRENCY AND CURRENCY NOTES:

(i) Any person resident in India who had gone out of India on a temporary visit, may bring into India at the time of his return from any place outside India (other than from Nepal and Bhutan), currency notes of Government of India and Reserve Bank notes up to an amount not exceeding Rs.25,000/- per person.

(ii) A person may bring into India from Nepal or Bhutan, currency notes of Government of India and Reserve Bank notes other than notes of denominations of above Rs.100 in either case. For currency notes of denomination of above Rs. 100/- the limit is Rs. 25,000/-.

Import of Foreign Exchange into India: Reserve Bank may allow a person to bring into India currency notes of Government of India and / or of Reserve Bank subject to such terms and conditions as the Reserve Bank may stipulate.

A person may:

(i) Send into India without limit foreign exchange in any form other than currency notes, bank notes and travelers cheques;

(ii) bring into India from any place outside India, without limit foreign exchange (other than unissued notes), subject to the condition that such person makes, on arrival in India, a declaration to the Custom authorities in Currency Declaration Form (CDF) ; provided further that it should not be necessary to make such declaration where the aggregate value of the foreign exchange in the form of currency notes, bank notes or travelers cheques brought in by such person at any one time does not exceed USD10,000 (US Dollars ten thousands) or its equivalent and/or the aggregate value of foreign currency notes brought in by such person at any one time does not exceed USD 5,000 (US Dollars five thousands) or its equivalent.

INTEREST ON IMPORT BILLS:

(i) AD bank may allow payment of interest on usance bills or overdue interest for a period of less than three years from the date of shipment at the prescribed rates. The current all-in-cost ceilings are as under:

- Maturity period up to one year: All-in-cost ceilings 50 basis points over 6 months LIBOR for the respective currency of credit or applicable benchmark.
- Maturity period more than one year but less than three years: All-in-cost ceilings 125 basis points over 6 months LIBOR for the respective currency of credit or applicable benchmark.

(ii) In case of pre-payment of usance import bills, remittances may be made only after reducing the proportionate interest for the unexpired portion of usance at the rate at which interest has been claimed or LIBOR of the currency in which the goods have been invoiced, whichever is applicable. Where interest is not separately claimed or indicated, remittances may be allowed after deducting the proportionate interest for the unexpired portion of usance bills at the prevailing LIBOR of the currency of invoice.

EVIDENCE OF IMPORT- MANDATORY AUDIT IN BANKS:**A. Physical Imports**

In case of all imports, where value of foreign exchange remitted/paid for import into India exceeds USD 100,000 or its equivalent, it is obligatory on the part of the ADs through whom the remittance was made, to ensure that the importer submits:

- a) The Exchange Control copy of the Bill of Entry for home consumption, or
 - b) The Exchange Control copy of the Bill of Entry for warehousing, in case of 100% Export Oriented Units. Or
 - c) Customs Assessment Certificate or Postal Appraisal Form, as declared to the Customs Authorities, where import has been made by post, as evidence that the goods for which the payment was made have actually been imported into India.
 - d) Where imports are made in non-physical form, i.e., software or data through internet/data channels and drawings and designs through e-mail/fax, a certificate from a C.A. that the same has been received by the importer, may be obtained.
1. In respect of imports on DA basis, AD banks should insist on production of evidence of import at the time of effecting remittance of import bill. However, if importers fail to produce documentary evidence due to genuine reasons, AD banks may allow reasonable time, not exceeding three months from the date of remittance, to submit the evidence of import.
 2. AD banks should issue containing all relevant particulars relating to the import transactions to importers.
 3. Internal inspectors or auditors (including external auditors appointed by AD banks) should carry out verification of the documents evidencing import.
 4. Documents evidencing import into India should be preserved by AD banks for a period of one year from the date of its verification. However, in respect of cases which are under investigation by investigating agencies, the documents may be destroyed only after obtaining clearance from the investigating agency concerned.

AD banks may accept either Exchange Control copy of Bill of Entry for home consumption or a certificate from the Chief Executive Officer (CEO) or auditor of the company that the goods for which remittance was made have actually been imported into India provided:

- a) The amount of foreign exchange remitted is less than USD 1,000,000 (USD one million) or its equivalent,
- b) The importer is a company listed on a stock exchange in India and with a net worth is not less than Rs.100 crores
- c) The importer is a public sector company or an undertaking of the Government of India or its departments.
- d) Importer is an autonomous bodies (Institute of Science / Indian Institute of Technology) audited by the Comptroller and Auditor General of India (CAG).

In case an importer does not furnish any documentary evidence of import, as required under paragraphs A.10.1 & 2 above, within 3 months from the date of remittance involving foreign exchange exceeding USD100, 000, the AD bank should rigorously follow-up for the next 3 months, including issuing registered letters to the importer.

BEF STATEMENT (Half yearly Statement to RBI): BEF is the statement showing the details of remittances effected towards import in respect of which documentary evidence has not been received despite reminders. The statement should be submitted in duplicate, to the Regional Office of Reserve Bank under whose jurisdiction the AD branch is functioning.

- Details of transactions where the amount of remittance exceeds USD 100,000 or its equivalent should only be included in the statement. The statement should include details of all remittances, exceeding USD 100,000 from India or payments from abroad in connection with imports, including advance payments, delayed payments, etc. irrespective of the source of funding (i.e. EEFC accounts / foreign currency accounts maintained in India and abroad, payments out of external commercial borrowings, foreign investments in the shares of Importers etc.)
- Statement should be submitted within 15 days from the close of the half-year to which it relates.

CRYSTALLIZATION OF IMPORT BILLS: As per FEDAI guidelines, all foreign currency import bills drawn Letters of credit, in the event of non-retirement are to be crystallized into Rupee liability on the 10th day after the date of receipt of documents at the LC opening branch of the bank, in case of demand bills and on due date in case of Usance bills, at Bills Selling Rate / contracted rate as the case may be. In case the 10th day or the due date falls on a holiday or Saturday, the importer's liability shall be crystallized into Rupee liability on the next working day.

EXTERNAL COMMERCIAL BORROWINGS (ECBs)

At present, Indian companies are allowed to access funds from abroad in the following methods:

- EXTERNAL COMMERCIAL BORROWINGS (ECB):** ECB refer to commercial loans in the form of bank loans, buyers' credit, suppliers' credit, securitized instruments (e.g. floating rate notes & fixed rate bonds, non-convertible, optionally convertible or partially convertible preference shares) availed of from non-resident lenders with a minimum average maturity of 3 years.
- FOREIGN CURRENCY CONVERTIBLE BONDS (FCCBs):** FCCBs mean a bond issued by an Indian company expressed in foreign currency, and the principal and interest in respect of which is payable in foreign currency.
- PREFERENCE SHARES:** Preference shares (i.e. non-convertible, optionally convertible or partially convertible) and should conform to the ECB policy. Since these instruments would be denominated in Rupees, the rupee interest rate will be based on the swap equivalent of LIBOR plus the spread as permissible for ECBs of corresponding maturity.
- FOREIGN CURRENCY EXCHANGEABLE BOND (FCEB):** FCEB means a bond expressed in foreign currency, the principal and interest in respect of which is payable in foreign currency, issued by an Issuing Company and subscribed to by a person who is a resident outside India, in foreign currency and exchangeable into equity share of another company, to be called the Offered Co, in any manner, either wholly, or partly or on the basis of any equity related warrants attached to debt instruments.

ECB CAN BE ACCESSED UNDER TWO ROUTES:

- Automatic Route
- Approval Route

A) AUTOMATIC ROUTE

i) Eligible Borrowers

- Corporates, including those in the hotel, hospital, software sectors (registered under the Companies Act, 1956) and Infrastructure Finance Companies (IFCs) except financial intermediaries, such as banks, financial institutions (FIs), Housing Finance Companies (HFCs) and Non-Banking Financial Companies (NBFCs) are eligible to raise ECB. Individuals, Trusts and Non-Profit making organizations are not eligible to raise ECB.
 - Units in Special Economic Zones (SEZ) are allowed to raise ECB for their own requirement. However, they cannot transfer or on-lend ECB funds to sister concerns or any unit in the Domestic Tariff Area.
 - Non-Government Organizations (NGOs) engaged in micro finance activities registered as societies, trusts and co-operatives and engaged in micro finance should have a satisfactory borrowing relationship for at least 3 years with a scheduled commercial bank authorized to deal in foreign exchange in India and would require a certificate of due diligence on 'fit and proper' status.
 - Micro Finance Institutions (MFIs) engaged in micro finance activities are eligible to avail of ECBs.
- ii) **Recognised Lenders:** Borrowers can raise ECB from internationally recognized sources, such as:
- International banks,
 - International capital markets,
 - Export credit agencies,
 - Suppliers of equipments,
 - Multilateral financial institutions (such as IFC, ADB, CDC, etc.) / regional financial institutions and Government owned development financial institutions,
 - Foreign collaborators and
 - Foreign equity holders (other than erstwhile OCB's)

iii) Amount and Maturity

- The maximum amount of ECB which can be raised by a corporate other than those in the hotel, hospital and software sectors is USD 750 million (mn) or its equivalent during a financial year.
 - Corporates in the services sector viz. hotels, hospitals and software sector are allowed to avail of ECB up to USD 200 million or its equivalent in a financial year for meeting foreign currency and / or Rupee capital expenditure for permissible end-uses. The proceeds of the ECBs should not be used for acquisition of land.
 - ECB up to USD 20 mn or its equivalent in a financial year with minimum average maturity of three years.
 - ECB above USD 20 mn or equivalent and up to USD 750 mn or its equivalent with a minimum average maturity of 5 years.
 - NGOs engaged in Micro finance activities and Micro Finance Institutions (MFIs) can raise ECB up to USD 10 million or its equivalent during a financial year. At the time of drawdown, the forex exposure of the borrower has to be fully hedged.
 - ECB up to USD 20 million or equivalent can have call/put option provided the minimum average maturity of three years is complied with before exercising call/put option.
- All eligible borrowers can avail of ECBs designated in INR from 'foreign equity holders'.
 - NGOs engaged in micro finance activities can avail of ECBs designated in INR, from overseas organizations.

iv) End-use

- a) ECB can be raised for investment such as import of capital goods, new projects, modernization / expansion of existing production units in real sector - industrial sector including small and medium enterprises (SME), infrastructure sector and specified service sectors, namely, hotel, hospital, software in India. Infrastructure sector is defined as (i) power, (ii) telecommunication, (iii) railways, (iv) roads including bridges, (v) sea port and airport, (vi) industrial parks, (vii) urban infrastructure (water supply, sanitation and sewage projects), (viii) mining, exploration and refining and (ix) cold storage or cold room facility, including for farm level pre-cooling, for preservation or storage of agricultural and allied produce, marine products and meat.
- b) Overseas Direct Investment in Joint Ventures (JV)/ Wholly Owned Subsidiaries (WOS) subject to the existing guidelines on Indian Direct Investment in JV/ WOS abroad.
- c) Utilization of ECB proceeds is permitted for first stage acquisition of shares in the disinvestment process and also in the mandatory second stage offer to the public under the Government's disinvestment programme of PSU shares.
- d) Interest During Construction (IDC) for Indian companies which are in the infrastructure sector, where "infrastructure" is defined as per the extant ECB guidelines, subject to IDC being capitalized and forming part of the project cost.

vi) Guarantees: Issuance of guarantee, standby letter of credit, letter of undertaking or letter of comfort by banks, Financial Institutions and Non-Banking Financial Companies (NBFCs) from India relating to ECB is not permitted.

vii) Security: The choice of security to be provided to the lender/supplier is left to the borrower. AD Category - I banks have been delegated powers to convey 'no objection' under the Foreign Exchange Management Act (FEMA), 1999 for creation of charge on immovable assets, financial securities and issue of corporate or personal guarantees in favour of overseas lender / security trustee, to secure the ECB to be raised by the borrower.

viii) Parking of ECB proceeds: Borrowers are permitted to either keep ECB proceeds abroad or to remit these funds to India, pending utilization for permissible end-uses. The proceeds of the ECB raised abroad meant for Rupee expenditure in India, such as, local sourcing of capital goods, on-lending to Self-Help Groups or for micro credit, payment for spectrum allocation, etc. should be repatriated immediately for credit to the borrowers' Rupee accounts with AD Category I banks in India. In other words, ECB proceeds meant only for foreign currency expenditure can be retained abroad pending utilization. The rupee funds, however, will not be permitted to be used for investment in capital markets, real estate or for inter-corporate lending.

ix) Prepayment: Prepayment of ECB up to USD 500 million may be allowed by AD banks without prior approval of Reserve Bank subject to compliance with the stipulated minimum average maturity period as applicable to the loan.

x) Refinancing of an existing ECB: The existing ECB may be refinanced by raising a fresh ECB subject to the condition that the fresh ECB is raised at a lower all-in-cost and the outstanding maturity of the original ECB is maintained.

xi) Debt Servicing: The designated AD bank has the general permission to make remittances of installments of principal, interest and other charges in conformity with the ECB guidelines.

B) APPROVAL ROUTE:i) Eligible Borrowers:

The following types of proposals for ECB are covered under the Approval Route:

- On lending by the EXIM Bank for specific purposes will be considered on a case by case basis.
- Banks and financial institutions which had participated in the textile or steel sector restructuring package as approved by the Government are also permitted to the extent of their investment in the package and assessment by the Reserve Bank based on prudential norms. Any ECB availed for this purpose so far will be deducted from their entitlement.
- ECB with minimum average maturity of 5 years by Non-Banking Financial Companies (NBFCs) from multilateral financial institutions, reputable regional financial institutions, official export credit agencies and international banks to finance import of infrastructure equipment for leasing to infrastructure projects.
- Infrastructure Finance Companies (IFCs) i.e. Non-Banking Financial Companies (NBFCs), categorized as IFCs, by the Reserve Bank, are permitted to avail of ECBs, including the outstanding ECBs, beyond 50 per cent of their owned funds, for on-lending to the infrastructure sector.
- Foreign Currency Convertible Bonds (FCCBs) by Housing Finance Companies satisfying the following minimum criteria: (i) The minimum net worth of the financial intermediary during the previous three years shall not be less than Rs. 500 crore, (ii) A listing on the BSE or NSE, (iii) Minimum size of FCCB is USD 100 million and (iv) The applicant should submit the purpose / plan of utilization of funds.
- Special Purpose Vehicles, or any other entity notified by the Reserve Bank.
- Multi-State Co-operative Societies engaged in manufacturing activity.
- SEZ developers can avail of ECBs for providing infrastructure facilities within SEZ.
- Eligible borrowers under the automatic route other than corporates in the services sector viz. hotel, hospital and software can avail of ECB beyond USD 750 or equivalent per financial year
- Corporates in the services sector viz. hotels, hospitals and software sector can avail of ECB beyond USD 200 million or equivalent per financial year.
- Service sector units, other than those in hotels, hospitals and software, subject to the condition that the loan is obtained from foreign equity holders. This would facilitate borrowing by training institutions, R &D, miscellaneous service Co's etc.
- ECB from indirect equity holders provided the indirect equity holding by the lender in the Indian company is at least 51%.

ii) **Recognised Lenders:**

Borrowers can raise ECB from internationally recognised sources, such as international banks, international capital markets, multilateral financial institutions (such as IFC, ADB, CDC, etc.), export credit agencies, suppliers of equipment, foreign collaborators and foreign equity holders (other than erstwhile OCBs).

The total outstanding stock of ECBs (including the proposed ECBs) from a foreign equity lender should not exceed seven times the equity holding, either directly or indirectly of the lender.

iii) **Amount and Maturity:**

- Eligible borrowers under the automatic route other than corporates in the services sector viz. hotel, hospital and software can avail of ECB beyond USD 750 or equivalent per financial year.
- Corporates in the services sector viz. hotels, hospitals and software sector are allowed to avail of ECB beyond USD 200 million or its equivalent in a financial year for meeting foreign currency and/ or Rupee capital expenditure for permissible end-uses. The proceeds of the ECBs should not be used for acquisition of land.
- Indian companies which are in the infrastructure sector, as defined under the extant ECB guidelines, can avail of ECBs in Renminbi (RMB), subject to an annual cap of USD one billion pending further review.

iv) **End-Use**

- a) ECB can be raised only for investment (such as import of capital goods), implementation of new projects, modernization / expansion of existing production units] in real sector - industrial sector including SME and infrastructure sector in India.
- b) Overseas Direct Investment in Joint Ventures (JV)/Wholly Owned Subsidiaries (WOS).
- c) Interest During Construction (IDC) for Indian companies which are in the infrastructure sector subject to IDC being capitalized and forming part of the project cost.
- d) The payment by eligible borrowers in the Telecom sector, for spectrum allocation may, initially, be met out of Rupee resources by the successful bidders, to be refinanced with a long-term ECB.
- e) Repayment of Rupee loans availed from domestic banking system.
- v) **Guarantee:** Issuance of guarantee, standby letter of credit, letter of undertaking or letter of comfort by banks, financial institutions and NBFCs relating to ECB is not normally permitted.
- vi) **Security:** The choice of security to be provided to the lender / supplier is left to the borrower.
- vii) **Parking of ECB Proceeds:** Borrowers are permitted to either keep ECB proceeds abroad or to remit these funds to India, pending utilization for permissible end-uses. The proceeds of the ECB raised abroad meant for Rupee expenditure in India, such as, local sourcing of capital goods, on-lending to Self-Help Groups or for micro credit, payment for spectrum allocation, etc. should be repatriated immediately for credit to their Rupee accounts with AD Category I banks in India. ECB proceeds parked overseas can be invested in the following liquid assets
 - a) Deposits or Certificate of Deposit or other products offered by banks rated not less than AA (-) by Standard and Poor/ Fitch IBCA or Aa3 by Moody's;
 - b) Treasury bills and other monetary instruments of one year maturity having minimum rating as indicated above and
 - c) Deposits with overseas branches / subsidiaries of Indian banks abroad.
 - d) The funds should be invested in such a way that the investments can be liquidated as and when funds are required by the borrower in India.
- viii) **Prepayment**
 - a) Prepayment of ECB up to USD 500 million may be allowed by the AD bank without prior approval of the Reserve Bank subject to compliance with the stipulated minimum average maturity period as applicable to the loan.
 - b) Pre-payment of ECB for amounts exceeding USD 500 million would be considered by the RBI under the Approval Route.

● **CAPITAL ACCOUNT - LIBERALISATION**

The Reserve Bank of India, in consultation with the Government of India has decided to introduce the following liberalization measures w.r.t. capital account transactions with immediate effect:

- a) To allow Indian companies in manufacturing and infrastructure sector and having foreign exchange earnings to avail of external commercial borrowing (ECB) for repayment of outstanding Rupee loans towards capital expenditure and/or fresh Rupee capital expenditure under the approval route. The overall ceiling for such ECBs would be USD 10 billion.
- b) The existing limit for investment by Securities and Exchange Board of India (SEBI) registered foreign institutional investors (FIIs) in Government securities (G-Secs) has been enhanced by a further amount of USD 5 billion. This would take the overall limit for FII investment in G-Secs from USD 15 billion to USD 20 billion.
- c) In order to broad base the non-resident investor base for G-Secs, RBI has allowed long term investors like Sovereign Wealth Funds (SWFs), multilateral agencies, endowment funds, insurance/pension funds, funds and foreign central banks to be registered with SEBI, to also invest in G-Secs for the entire limit of USD 20 billion. The sub-limit of USD 10 bn (existing USD 5 billion with residual maturity of 5 years and additional limit of USD 5 billion) would have the residual maturity of three years.
- d) The terms and conditions for the scheme for FII investment in infrastructure debt and the scheme for non-resident investment in Infrastructure Development Funds (IDFs) have been further rationalised in terms of lock-in period and residual maturity.
- e) Further, Qualified Foreign Investors (QFIs) can now invest in those mutual fund (MF) schemes that hold at least 25 per cent of their assets (either in debt or in equity or both) in infrastructure sector under the current USD 3 billion sub-limit for investment in mutual funds related to infrastructure.

● ECB – REPAYMENT OF RUPEE LOANS

On a review, of ECB norms for Infrastructure and Power sector, RBI has decided as follows:

To allow Indian companies to avail of ECBs for repayment of Rupee loans availed of from the domestic banking system and / or for fresh Rupee capital expenditure, under the approval route., subject to them satisfying the following conditions:

The overall ceiling for such ECBs as given above shall be USD 10 billion. The maximum permissible ECB that can be availed of by an individual company will be limited to 50% of the average annual export earnings realized during the past three financial years.

● **FOREIGN INVESTMENT IN INDIA:** On a review, RBI has decided as under:

GOVERNMENT SECURITIES

i) The limit of USD 15 billion for FII investment in Government securities stands enhanced with immediate effect by USD 5 billion to USD 20 billion. It has also been decided to rationalize the conditions governing the investments under this scheme by making the residual maturity of the instrument at the time of first purchase by FIIs and SFI registered eligible non-resident investors in IOFs and foreign Central Banks to be at least three years for a sub-limit of USD 10 billion.

TRADE CREDITS FOR IMPORTS INTO INDIA

'Trade Credits' (TC) refer to credits extended for imports directly by the overseas supplier, bank and financial institution. Depending on the source of finance, such trade credits include suppliers' credit or buyers' credit.

SUPPLIERS' CREDIT: Supplier's credit relates to credit for imports in to India extended by the overseas supplier.

BUYERS' CREDIT: Buyer's credit refers to loans for payment of imports in to India arranged by the importer from a bank or financial institution outside India for maturity of less than three years.

RBI issued a circular on 10 Sep 2015, revising the policy on Trade Credit (Buyers Credit & Suppliers Credit). As per revised guidelines, RBI has allowed resident importer to raise trade credit in Rupees (INR) within below framework after entering into a loan agreement with the overseas lender:

- Trade credit can be raised for import of all items (except gold) permissible under the extant Foreign Trade Policy.
- Trade credit period for import of non-capital goods can be upto one year from the date of shipment or upto the operating cycle whichever is lower.
- Trade credit period for import of capital goods can be upto five years from the date of shipment.
- No roll-over / extension can be permitted by bank beyond the permissible period.
- Banks can permit trade credit upto USD 20 million equivalent per import transaction.
- Banks are permitted to give guarantee, Letter of Undertaking or Letter of Comfort in respect of trade credit for a maximum period of three years from the date of shipment.
- The all-in-cost of such Rupee (INR) denominated trade credit should be commensurate with prevailing market conditions.
- All other guidelines for trade credit will be applicable for such Rupee (INR) denominated trade credits

GUARANTEES: AD banks are permitted to issue Letters of Credit /Guarantees/ Letter of Undertaking /Letter of Comfort, in favor of overseas supplier, Bank or Financial institution, up to USD 20 million per transaction for a period up to one year for import of all Non-capital goods permissible under Foreign Trade Policy (except gold) and up to three years for import of capital goods, subject to prudential guidelines issued by Reserve Bank from time to time. The period of such Letters of credit / guarantees / LoU / LoC has to be co-terminus with the period of credit, reckoned from the date of shipment.

LETTERS OF CREDIT

All Letters of Credit are governed by a set of rules known as Uniform Customs and Practices for Documentary Credits (UCPDC) – Publication 600 (UCP – 600) evolved by the International Chamber of Commerce (ICC). UCP 600 has come in to effect from 1st July 2007.

DEFINITION: Letter of Credit is an undertaking given by the Issuing Bank on behalf of Importer in favour of the Exporter, undertaking to make the payment on presentation of the documents, subject to the conditions that the documents are as per the terms and conditions of LC.

ADVANTAGES OF LETTERS OF CREDIT: Under bill of exchange system, the exporter faces risk of repudiation of contract or non-payment. To overcome this problem, a superior method of settlement has been devised namely Letter of Credit, under which the issuing bank through LC assures the exporter that if the goods exported are as per terms and conditions of contract with importer and produces evidence to that effect by way of submission of documents in accordance to the terms of the LC, it would make the payment to the exporter without default.

MAIN PARTIES TO LC

Applicant or Opener	Buyer or Importer on whose request the LC is opened.
Opening Bank	The LC Issuing or Opening Bank, which opens the LC on behalf of buyer / importer.
Beneficiary	The party in whose favour LC is opened i.e. Supplier of goods or Exporter.
Advising Bank	The bank authorised by the opening bank, which on receipt of LC, forward the same to the Beneficiary. Advising bank is liable for ensuring the genuineness of LC by verifying the specimen signature of Issuing Bank.
Confirming Bank	Bank authorised by the Issuing Bank to confirm the LC. By confirmation, it means that the Confirming Bank adds its guarantee and undertakes to negotiate and to pay the documents subject to the condition that the documents are as per the terms and conditions of LC.
Negotiating Bank	The Bank, which negotiates the documents. It may be Confirming Bank or any other Bank.

IMPORTANT TYPES OF LCs

Sr.	TYPES OF LCs	SHORT DESCRIPTION	REMARKS
1	Revocable Letter of Credit	An LC which can be amended or cancelled by the issuing bank without prior notice to the beneficiary, but not once the documents have been negotiated by the Negotiating Banks. UCP 600 does not recognize Revocable Letters of Credit	This type of LC does not give complete sense of security to the beneficiary as the terms and conditions can be cancelled / amended without his consent. Not a good letter of credit from the point of view of the seller / exporter.
2	Irrevocable Letter of Credit	An LC in which issuing bank gives a definite, absolute and irrevocable undertaking to honour its obligations provided the beneficiary complies with all the terms and conditions of LC. Once an irrevocable letter of credit is issued, it can neither be revoked nor amended, without the consent of the beneficiary.	A good instrument provided the Bank, which issues and the country from where it originates are reliable and stable.
3	Irrevocable Confirmed Letter of Credit	An LC where another bank adds its confirmation at the request of the issuing Bank. In such a credit, Confirming Bank undertakes to pay / accept / negotiate if the terms and conditions of the credit are complied with i.e. documents submitted are as per the terms and conditions of LC.	An irrevocable credit constitutes a definite undertaking on the part of the issuing bank but when such credit is confirmed by other bank, it also constitutes a definite undertaking on Confirming Bank also.
4	Transferable Letter of Credit	An LC in which the beneficiary has the right to request the bank (where the credit is available for negotiation / acceptance / payment) to make the credit available in whole or in parts to one or more beneficiaries. A letter of credit is a transferable letter of credit only if it contains a specific provision that the letter of credit is transferable.	Provides flexibility to operations. Original suppliers in the credit can transfer the credit in favour of another supplier. Transferable LC can be transferred in-part or full, but it can be transferred only once.
5	Red-Clause Letter of credit	An LC in which a provision is provided by the issuing bank for allowing pre-shipment credit to the beneficiary for the purpose of procurement / manufacturing of goods to be exported. Such credit provides payment of a portion prior to shipment of goods.	Such provision is either typed or underlined in red ink. However, after the start of an electronic media, for advising such LCs, the use of red ink is practically not feasible and simply provision is provided in black ink.
6	Green Clause LC	An LC in which apart from provision of allowing pre-shipment credit to the beneficiary, the issuing bank has also to arrange for storage / warehouse facility prior to shipment on board.	Such LCs are common in Australia, New Zealand for wool trade.
7	Back-to-back Letter of Credit	Back to Back LC involves two irrevocable credits. Firstly, the inward credit (original LC) and the second called as outward credit (back-to-back), which is opened on the basis and security of the original LC.	Normally back-to-back letters of credit are opened in favour of supplier, requiring them to supply the goods covered by prime letter of credit and obtain payment thereof.
8	Stand-By LC	An LC very similar to bank guarantee by the issuing bank, guaranteeing payment and / or performance. In Stand-By letter of credit, the performance is to be made by applicant and in case of non-performance the beneficiary makes use of the Stand-By letter of credit.	A substitute for guarantee of payment. A Stand-by LC assures payment to the beneficiary in case of non-performance by opener of LC.
9	Revolving LC	Under these LCs, the part amount, which has been utilized, is automatically restored and is available for further use. However, the total amount to be used is not to be exceeded i.e., amount which is mentioned in the LC.	Where business dealings are on ongoing basis, such LCs are opened. These are meant for more than one dealing. In such LC, the roll-over of transactions take place.
10	Clean or Open LC	An LC in which shipping document are not required by the applicant.	Such LCs are opened only in exceptional cases and for customers of very high standing.
11	Restricted LC	LC in which negotiation is restricted to a particular bank.	When the name of the bank is specified for negotiation, it becomes a Restricted LC.
12	Circular LC	It is a LC issued by the issuing bank authorizing its branches or correspondent banks to pay to the beneficiary against clean sight drafts drawn by the beneficiary on the issuing bank.	LC essentially for the beneficiary who travels abroad often and / or for long periods of time.
13	Deferred Payment LC	An LC in which full payment to the beneficiary is not made by the negotiating / issuing bank immediately upon presentation of documents but only after a specified period of time (instalments / intervals) as stipulated in the letter of credit.	The advantage under this LC to the buyer is that, it allows him some period of time to make the payment for the goods / services and at the same time gives a definite assurance of the bank to the seller that the payment will be made to him on a determinable date as per the terms of the deferred payment letter of credit.

UNIFORM CUSTOMS & PRACTICE FOR DOCUMENTARY CREDITS : (UCP - 600)

International Chamber of Commerce, Paris have now finalized the 2007 revision of UCP (ICC Publication No 600) which came into force from 1st July 2007. With due approval of Reserve bank of India, the authorized dealers in India are now subscribing to UCP- 600 with effect from 1st July, 2007. This includes and revises the clauses of UCPDC 500 as well as the 12 clauses of E-UCP. It also addresses Standby Letters of Credit and therefore is a comprehensive document. It has to be clearly mentioned in the Letter of Credit that it is subject to UCPDC by inserting a clause generally worded as follows:

"Except as otherwise expressly stated this Documentary Credit is subject to The Uniform Customs and Practice for Documentary Credits 2007 revision, International Chamber of Commerce Publication No.600."

Main features of UCP - 600 are contained in articles as follows,

Article 1: Applicability

- UCP 600 applies only when referred to
- "they are binding on all parties thereto unless expressly modified or excluded by the credit"
- UCP 600 can still be used for Standbys

Article 2: Definitions- Contains "definitions" - A new concept for the UCP. Previous UCP revisions did contain common trade words / phrases but did not expressly define the terms.

Article 3: Interpretations- "Interpretations" were collected and put into this single article.

Major change, i.e. that all credits are irrevocable even if there is no indication to that effect. Revocable LC's are no longer discussed.

Word "between" has been added to shipment period (includes dates mentioned)

Added "from" and "after" to define maturity dates (excludes the date mentioned)

Please notice that the word "from" is defined differently 1) for SHIPMENT (includes date mentioned) and 2) for Maturity (excludes the date mentioned).

Article 5: Documents vs Goods, Services, Performance- It is now ensuring that banks are limited to only dealing with documents. Banks do not become responsible for the goods, services &/or performances to which any document relates.

Article 6: Availability, Expiry date and Place of presentation - Availability, expiry date and place for presentation. Credits must not be made available against drafts drawn on the applicant. "Freely negotiable" no longer used. Now credit is "available with any bank". Expiration date for Negotiation or Honour will be deemed to be an expiration date for "PRESENTATION".

Article 13: Bank to Bank Reimbursement Arrangements - Now defines that the ICC rules for bank-to-bank reimbursements, URR 525, must be stated in the LC, for them to apply. Otherwise, default reimbursement rules are those stated in Article 13. Reimbursing Bank charges now for the Issuing Bank unless otherwise stated.

New Article 14: How long is too long : A nominated bank acting on its nomination, a confirming bank, if any and the issuing bank shall each have a maximum of **five banking days** following the day of the presentation to determine if a presentation is complying. The period is not curtailed or otherwise affected by the occurrence on or after the date of presentation of any expiry date or last day for presentation.

A presentation that includes one or more original transport documents subject to Articles 19, 20, 21, 22, 23 and 24 or 25 must be made by or on behalf of the beneficiary not later than 21 calendar days after the date of shipment as described in these rules, but in any event, not later than the expiry date of the Credit.

Article 16: Discrepant Documents Waiver and Notice- Contains refusal message wording and respective delivery options (contains parts of former Article 14). There is no longer a need to reference: "payment under reserve".

Article 29: Extension of Expiry date or last day of Presentation- Deals with extension of presentation periods and expiry date when such dates fall on a day on which the bank to which presentation is to be made is closed. Former Article 44 of UCP 500. This does not effect the latest date for shipment.

- If the expiry date of a credit or the last day for presentation falls on a day when the bank to which presentation is to be made is closed for reasons other than those referred to in Article 36, the expiry date or the last day for presentation, as the case may be, will be extended to the first following banking day.
- If presentation is made on the first following banking day, nominated bank must provide the issuing bank / confirming bank with a statement on its covering schedule that the presentation was made within the time limits extended in accordance with sub-Article 29 (a).

Article 36 - Force Majeure- This article deals with disclaimer on "force majeure" and is consistent with former Article 17 of UCP 500. Now added "acts of terrorism".

UNIFORM RULES FOR BANK - BANK REIMBURSEMENTS (UR-525)

Banks are to insert clauses regarding the method of reimbursing the negotiating banks. This issue is between the two banks (i.e. Issuing bank & Negotiating banks). However, to bring uniformity and infuse confidence, International Chamber of Commerce has brought out their Publication number 525 called –Uniform rules for Bank-bank reimbursements or UR-525.

STANDBY LETTER OF CREDIT (GUARANTEES)

Another popular instrument for international trade is a **Standby letter of credit**. It is very similar in nature to a bank guarantee. Standby Letters of Credit differ from the traditional letters of credit in a very fundamental manner. In a normal or traditional L/C, the beneficiary gets payment upon performing his part of the contract as per the terms of the credit and providing evidence thereof as stipulated. In a Standby Letter of credit, the beneficiary is eligible for payment from the L/C issuing bank if the applicant **fails to pay or perform** his part of the obligation. Thus, the Standby Letter of Credit is actually a back-up system.

In a Standby L/C-the following parties/steps are involved:

- (1) Applicant, (2) The issuing Bank (3) Advising Branch / Bank (4) Beneficiary
The issuing bank agrees to pay the L/C value to the beneficiary before the expiry of the Credit upon a:

- Demand by the beneficiary along with,
- Documents that evidence that the beneficiary has fulfilled his obligation, &
- Document evidencing the applicant's non-performance

If the Beneficiary is not comfortable with the issuing bank being a bank in the applicant's country, he can insist on the L/C being confirmed by a local bank just as in traditional L/Cs. Authorised dealers can issue stand by LCs, either under International Standby Practices (ISP-98), ISP-98 or UCP-600, as agreed upon mutually by the parties concerned.

Usage of Standby LC by Authorised Dealers: Banks can establish stand by LCs for the following transactions:

l) As a document of promise in respect of "non-performance" situation especially as a substitution to guarantees which A.D.s are permitted to issue under FEMA, 1999, such as a guarantee in respect of any debt, obligation or other liability incurred by:

- a) An exporter on account of exports into India.
- b) Owed to a person resident in India by a person resident outside India for a bona fide trade transaction, duly covered by a counter guarantee of a bank of international repute resident abroad.
- c) Exporters may also opt to receive stand by LC in respect of exports from India.

Commercial Standby LC for Import of Goods

A D Banks can issue standby LCs towards import of goods into India subject to the following safeguards:

The facility of commercial standby should be extended on a selective basis and to the following categories of importers only:

- Independent power producers / importers of crude oil and petroleum products.
- Export / Trading Houses, Star Trading House / Super Star Trading Houses / 100% EOUs.
- Public Sector Units / Public Limited Companies with good trade record.
- Satisfactory credit report on the overseas supplier should be obtained by the issuing bank, prior to issue of standby LC.
- Invocation by the beneficiary should be supported by proper evidence.
- The applicant of a commercial stand by L/C (Indian importer) should undertake to provide evidence of imports as provided under FEMA in all cases of payments made under the Standby L/C covering imports in to India. (Bill of Entry and so on). A Ds should follow up evidence of import in all cases of payments under such stand by L/Cs.

Implications of some of the Articles of ISP-98

Before issuing stand by LC, the bank as the opener / applicant must understand the implications of the clauses of the ISP-98. A few articles which merit special mention are as follows:

- a) **Article 1.02:** ISP-98 Rule supplements the applicable law to the extent not prohibited by that law. Hence, if there is any provision in the rules which conflict with Indian law, such provision would not be applicable.
- b) **Article 1.09:** Business Day – Business day means a day on which the place of business at which the relevant act is to be performed is regularly open, and banking day means a day on which the relevant bank is regularly open at the place at which the relevant act is to be performed. Therefore, while issuing the Stand by L/C, care needs to be taken to ensure that the terms are used after proper understanding of the same.
- c) **Article 3.13:** Expiration Date on Non Business Day.
- d) **Article 3.14:** Closure on a Business Day and authorisation of another reasonable place for presentation. This provides for automatic extension to the day after 30 calendar days after the place of presentation re-opens for business if in the event that on the last business day for presentation, the place of business is closed for any reason unless the Standby otherwise provides. Thus, the openers have to be careful. It also provides for authorizing an alternate reasonable place for presentation subject to conditions.
- e) **Article 5.01:** Timely Notice of Dishonour – The article provides for timely notice of dishonour as per the provisions contained therein.
- f) **Articles 10.0 and 10.02:** Relates to syndication / participation under the standby LC may be taken note of by the banks issuing such standbys under syndication / consortium loan arrangements among authorised dealers.

INCOTERMS - 2000 (INTERNATIONAL COMMERCIAL TERMS)

With a view to minimize different interpretations and to facilitate international trade quotes and transactions in a transparent (avoiding inclusion of hidden costs and risks), International Chamber of Commerce evolved a set of commercial terms in 1936 called as 'International commercial terms or INCOTERMS. Given below are the most used INCOTERMS (out of total 13).

	CONTRACT TERMS	EXPLANATION
FOB*	Free on Board (named port of shipment)	The seller delivers when the goods pass the railings of the ship at the named port of shipment. The buyer will bear the costs and risks thereafter.
CFR*	Cost & freight (named port of destination)	The seller delivers when the goods pass the railing of the ship in the port of shipment. However, the seller has to pay the freight charges up to place of destination. The risk of damage or loss subsequent to loading is on the buyer.
CIF*	Cost, insurance & freight (named port of destination)	The seller delivers when the goods pass the ship's rails in the named port of shipment. However the seller must pay the freight charges. He also has to procure a marine insurance policy against the buyer's risk (which begins once the goods are delivered at the port of shipment).

FOREIGN TRADE POLICY (2015-20)

OBJECTIVES:

- **Short Term:** To arrest and reverse the declining trend of exports and to provide additional support especially to those sectors which have been hit badly by recession in the developed world.
- **Long Term:** To double India's share in global trade by 2020.

TARGET:

The policy has set a target to double India's exports in goods and services from \$465 billion to \$900 billion and upping the Indian share of the world exports from the current 2 percent to 3.5 percent over the over the next five years. The policy is a framework for increasing export of goods and services as well as generation of employment in keeping with the vision of Make in India. The Policy clubs a series of export promotion schemes under two schemes namely a) Merchandise Exports from India Scheme (MEIS) & b) Services Exports From India Scheme (SEIS).

STATUS CATEGORY	EXPORT PERFORMANCE FOB / FOR Value (in US \$ mn) during current & previous 2 yrs.
One Star Export House	3
Two Star Export House	25
Three Star Export House	100
Four Star Export House	500
Five Star Export House	2000

DEEMED EXPORTS:

Deemed exports refer to those transactions in which the goods supplied do not leave the country. Supply by the main / sub-contractor against Advance Licensing / DFRC under the Duty Exemption / Remission Scheme, supply of goods to EOUs, units located EPZs, SEZs, STPs, EHTPs, Projects financed by multi-lateral bilateral agencies and projects funded by UN agencies etc. are regarded as deemed exports.

FULLER CAPITAL ACCOUNT CONVERTIBILITY

Capital Account Convertibility (CAC) implies freedom to convert local financial assets into foreign financial assets and vice versa, at market determined rates of exchange. It is associated with changes of ownership in foreign / domestic financial assets / liabilities and embodies the creation and liquidation of claims on, or by, the rest of the world. CAC can be, and is, coexistent with restrictions other than on external payments. To revisit the subject and arrive at a roadmap towards fuller Capital Account Convertibility based on current realities, a Committee to set out the framework for Fuller Capital Account Convertibility (FCAC) was set up by RBI. The committee was chaired by Shri. S.S.Tarapore, erstwhile Deputy Governor of RBI. Shri Tarapore had headed an earlier committee on CAC in 1997, which had put out a road map for full convertibility.

The Committee on FCAC has submitted its report to RBI on 31st July 2006. They have recommended a Road map for Fuller convertibility within a broad frame work of Five years in three phases, 2006-07 (Phase I), 2007-08 and 2008-09 (Phase II) and 2009-10 and 2010-11 (Phase III).

EXPORT CREDIT GUARANTEE CORPORATION OF INDIA LIMITED

Export Credit Guarantee Corporation of India Limited was established in the year 1957 by Government of India to strengthen the export promotion drive by covering the risk of exporting on credit.

FUNCTIONS OF ECGC

- a) Provides a range of credit risk insurance covers to exporters against loss in export of goods and services
- b) Offers guarantees to banks and financial institutions to enable exporters to obtain better facilities from them
- c) Provides Overseas Investment Insurance to companies investing in joint ventures abroad in the form of equity or loan

STANDARD POLICY: Standard Policy is a whole turn over policy which has been formulated by the ECGC with a motive to provide Insurance Cover to Export Shipments on going or continuing basis. The maximum period of the credit, as has been fixed by RBI, is 180 days on DA, DP or on Open Sale terms.

Standard Policy is of two sub types namely:

- a) Comprehensive Risks Standard Policy for Exporters having anticipated Export Turn Over above Rs 50 lakhs in the year,
- b) Small Exporters' Policy for Exporters having anticipated export turnover of less than 50 lakhs during the year. The year is reckoned of 2 months from the issue of policy.

Comprehensive Risks Standard Policy: Main features of the Comprehensive Risks Standard Policy are as listed below:

- The policy is issued to exporters with future or existing exports over Rupees 50 lakhs.
- It covers shipment with maturity period of 180 days.
- Policy covers political, as well as commercial risks listed already
- Shipments to various Govt. departments of foreign countries are covered for only political risks.

Small Exporter's policy:

These Policies are designed for exporters who have an anticipated export turnover of Rs.50 lakh during next 12 months.

- a) Minimum premium to be charged is less than the Standard policy, which is notified by the corporation from time to time.
- b) The Policy is issued for a period of 12 months
- c) It covers, Political and Commercial Risks both.
- d) All overdue payments are to be reported after 30 days from due date. Claims up to 95% of the defaulted amount are settled.

SPECIFIC POLICIES: Contracts for export of capital goods turn key basis projects, construction projects are generally carried on contract to contract basis rather than on ongoing basis. The payment period involved is also generally long term or medium term credit. Such type of Export Projects is covered under Specific Policy issued by the corporation for carrying out single project as per contract. Such types of projects require approval from EXIM Bank, as the payment is on Deferred Payment Terms. Therefore, insurance cover is issued by corporation only after the projects have been cleared by EXIM Bank or Special Working Group appointed by RBI.

BUYER'S CREDIT AND LINE OF CREDIT POLICY: Corporation provides this type of policy to foreign buyers where imports have been financed by Indian Banks, or they have been getting finance facility from their banks under line of credit facility given by Indian Banks. In this way, ECGC actually safeguards financial interests of Indian Banks who have financed the foreign buyers. Such policies are issued on buyer to buyer basis and not on continuing basis.

SERVICE POLICIES: These policies are issued for performance of technical and professional service contracts in foreign countries. Four types of Service Policies are issued.

- a) Specific Service Contract (Comprehensive Risks) Policy
- b) Specific Service Contract (Political Risks) Policy
- c) Whole Turn Over Service (Comprehensive Risks) Policy
- d) Whole Turn Over Service (Political Risks) Policy

Risks Covered: Political and Comprehensive Risks as mentioned above are covered under these policies as well.

CONSTRUCTION CONTRACT POLICY:

These policies are exclusively for civil construction contracts undertaken abroad. These policies are different from Specific Contract Policy on account of Payment terms.

- a) Under this category, contractors receive payment as per progress of contract.
- b) The Contractors raise the bills in between the contract depending upon the progress

GUARANTEES BEING ISSUED TO BANKS:

In order to provide timely and need based pre-shipment or post-shipment credit facilities to exporters, banks too need some assurance that there will not be any financial loss to their institution in case of default on part of the importer. With the motive that banks may not deny financial assistance to the exporters for want of repayment assurance, the ECGC has formulated a set of different types of guarantees for suiting different needs of the exporters and protecting banks dues. A major part of the finance is covered by way of these guarantees.

TYPES OF GUARANTEES:

ECGC issues following 6 types of guarantees to the Bank

- 1) Packing Credit Guarantee: (a) Normal, (b) Whole Turn Over
- 2) Export Production Finance Guarantee
- 3) Post Shipment Export Credit Guarantee
- 4) Export Finance Guarantee
- 5) Export Performance guarantee
- 6) Export Finance-Over Seas Lending Guarantee

PACKING CREDIT GUARANTEE (NORMAL):

All credit facilities given to exports by the bank at Branch level are covered under Packing Credit Guarantee:

Important Terms of Packing Credit Guarantee:

- Guarantee is issued for a period of 12 months.
- Guarantee covers all the pre shipment advance made by the banks at Branch level to the exporters within the approved limit of the bank
- The bank is to submit a declaration in respect of all pre shipment advances every month.
- The bank is to pay a premium of 10 paise per Rs.100 per month on the highest outstanding during the month (subject to change).
- All packing credit advance will be covered with maturity date up to 360 days from the date of advance. Separate approval from ECGC is required for advance with maturity beyond 360 days.
- ECGC will cover 66% of the loss by way of claim to the bank.
- ECGC will entertain the claim after a period of 4 months from the due date of the bill. h. All recoveries made from the exporters after payment of the claim to the bank, will be shared between ECGC and Bank in the ratio of 3 : 2
- It is necessary that the bank should have conducted the business with due care and without negligence as per rules and policies of RBI / Govt. of India.

PACKING CREDIT GUARANTEE (WHOLE TURN OVER): All types of packing credit advance given by the bank at all India level are covered under the Whole Turn over Packing Credit Guarantee.

- Bank will inform ECGC of all the Packing Credit Advance made to exporters by all its branches in consolidated figures.
- ECGC will cover a 75 % of the loss under the policy by way of claims.
- Bank will have to obtain separate guarantees for Bills on Deferred Payment Terms.

EXPORT PRODUCTION FINANCE GUARANTEE: All export pre shipment advance which constitutes FOB value, plus Export Incentives are covered under this scheme.

Terms & conditions:

- Full cost of production is covered under the guarantee.
- The guarantee is available both at branch level and whole turnover guarantees at bank level.
- All Other terms, including premium rates are as 6.27 above.

POST SHIPMENT EXPORT CREDIT GUARANTEE:

This Guarantee is issued by the Corporation to the banks for amount outstanding against negotiation of export bills, export bills purchased and export bills discounted (Other than on deferred payment terms).

- The guarantee is issued at branch level funding and for whole turn over on all India basis.
- Premium is payable monthly on the highest outstanding last day balance as the case may be.
- Prior approval of the ECGC is required for covering shipments made to restricted countries.

EXPORT FINANCE GUARANTEE: This guarantee is for advances against export incentives.

EXPORT PERFORMANCE GUARANTEE:

Big Importers and Foreign Governments require exporters to furnish guarantees issued by Indian Banks that export projects or exports will be completed on time and in case of their failure to do so, a certain percentage of amounts, usually up to 2% of the order, tender or higher, will be paid by the guarantee issuing bank. Such types of guarantees are very common in Bid Bonds. These types of Counter guarantees issued by banks are called Export Performance Guarantees and ECGC provide them a cover under this policy.

EXPORT FINANCE (OVERSEAS LENDING) GUARANTEE:

This type of guarantee covers Foreign Currency Finance to Exporters by banks and for the projects to be carried outside India.

- Short Term Finance is provided a risk cover of 75% to 90% as agreed by the ECGC.
- All the Claims are settled in Indian rupees.

SPECIAL GUARANTEES / POLICIES:

Transfer Guarantee: Such guarantees are issued to the banks against loss arising out of their adding confirmation to foreign LC. The losses covered are as under Comprehensive Policy. Loss under Political Risk is covered to an extent of 90% Losses to an extent of 75% is covered under commercial risks. Premium is also charged as per Standard or Small Exporters Policy.

Overseas Investment, Insurance: This policy covers investments made by Indian Exporters in Foreign Countries. Such investments are long term investments involving Capital Projects, Joint Ventures or loans etc.

Exchange Risk Cover Policy: There is always an exchange fluctuation risk in payments involving long term civil construction projects, turn key projects, supply of capital goods on deferred payment. The cover is available for payment schedules in select currencies beyond 12 months and up to 15 years. Here, ECGC makes good the losses for fluctuations between 2% to 35%. In other words, losses below 2% or beyond 35% due to fluctuations in the reference rates are not covered.

RISK MANAGEMENT (MODULE -B)**RISK MANAGEMENT**

The process of liberalization and globalization is gradually integrating the Indian economy with the rest of the world. The presence of foreign bank with more sophisticated products and superior technology has intensified the competition and has also put a severe pressure on the profitability. With the opening up of the economy, the Indian banking system has become vulnerable to the spillover and contagion effects. The increasing competition and survival compulsions have made Indian banks reorient their attitudes and approach towards risk management.

DEFINITION: Risk is the potential loss an asset or a portfolio is likely to suffer due to variety of reasons. Risk is inherent in all business but the risk exposure is much more in the financial activity. Banks are basically financial intermediaries. They mobilize deposits from the surplus sector and channelize it in the investment sector through lending. Bank assumes or restructures risk for its clients. As such the risk exposure of the banks is increased. Banks are trustees of public money, and as such management of public money calls for sound and efficient Risk Management techniques.

Risk arises due to various reasons. It may be due to impact of past activity or performance, instability of present or uncertainty of future. However, the word uncertainty is not to be confused with the term risk. Uncertainty arises due to lack of information while risk has known probability. Prudent banking lies in identifying, assessing and minimizing these risks. In a competitive market environment, a banks rate of return will be greatly influenced by its risk management skills.

OBJECTIVES OF RISK MANAGEMENT:

The ultimate objective of Risk Management System is profit maximization and capital optimization i.e., capital preservation and optimization. Broadly, the same can be summed up as follows:

- a) Survival of the Organization.
- b) Efficiency in Operations.
- c) Uninterrupted Operations.
- d) Identifying and achieving acceptable level of risk.
- e) Earning Stability.
- f) Continued and sustained Growth.

"Financial Risks" are uncertainties resulting in adverse variation of profitability or outright losses. Uncertainties associated with risk elements impact the net cash flow of any business or investment. Under the impact of uncertainties, variations in net cash flow take place. This could be favorable as well as unfavorable. The possible unfavorable impact is the "Risk" of the business.

Lower risk implies lower variability in net cash flow with lower upside and downside potential. Higher risk would imply higher upside and downside potential.

Zero Risk would imply no variation in net cash flow. Return on zero risk investment would be low as compared to other opportunities available in the market.

RISK, CAPITAL AND RETURN:

A business with large variation in net cash flow would be a business with higher risk. The profit potential and loss possibilities would be higher in such businesses due to higher variability of net cash flow. Capital requirements would be higher because of possibilities of higher losses. Similarly, a business with lower variation in net cash flow would be a business with low risk. The profit potential as well as low possibilities would be lower in such businesses due to low variability of net cash flow. Capital requirements would also be lower because of possibilities of lower losses. This is the basic linkage between risk and capital.

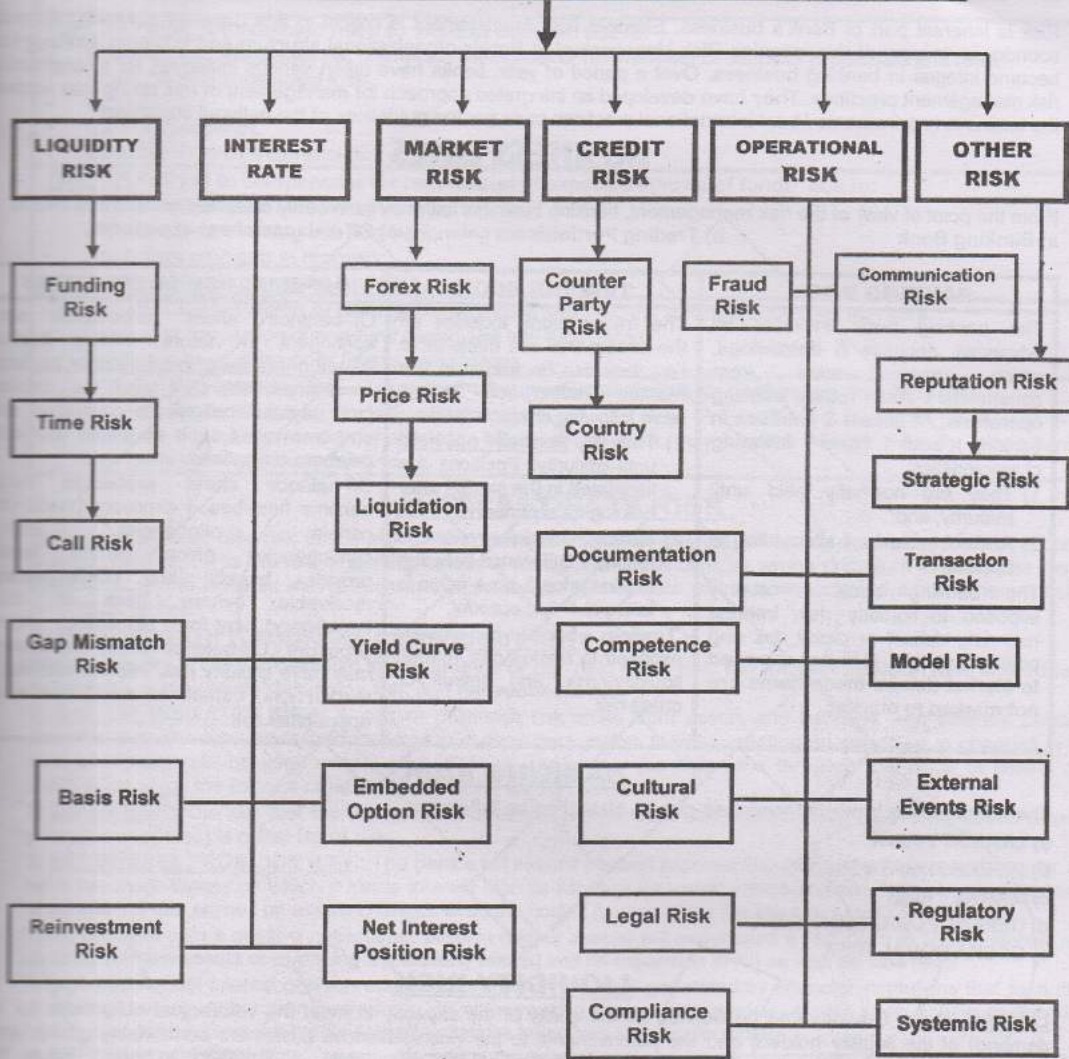
Rs. In '000s

Cash flow from	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Investment 1	6	6	6	6	6	30
Investment 2	3	9	5	-2	15	30

If we ignore the time value of the money, both these investments yield Rs. 30,000 over five-year period or @12% p.a. simple, assuming initial investment at Rs. 50,000. From return on investment point of view both are equal, but intuitively, without going into the arithmetic, one is more likely to prefer investment 1. This is because of steady stream of cash flow associated with it. Investment 2 would have a chance to become equally acceptable provided return on it is higher than what it is now, say @ 14% p.a. simple. This 2% additional return is the risk premium or cost of risk. Higher the risk is higher would be this premium.

It would be desirable to account for risks as well. Returns net of risk would be the proper basis of comparing investments. In other words, risk in a business or investment is netted against the return from it. This is called **Risk Adjusted Return on Investment**. This is the key driver in managing a business seeking enhancement in risk adjusted return on capital (RAROC). Higher the RAROC, higher may be the reward to investors / shareholders. From the risk management point of view banking business lines are grouped under the following major heads:

RISK IN BANKING AND FINANCIAL SERVICES



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RISK IN BANKING BUSINESS

Risk is inherent part of Bank's business. Effective Risk Management is critical to any Bank for achieving financial soundness. In view of this, aligning Risk Management to Bank's organizational structure and business strategy has become integral in banking business. Over a period of year, banks have taken various initiatives for strengthening risk management practices. They have developed an integrated approach for management of risk taking into account the business requirements / best international practices or as per the guidelines of the national supervisor.

BUSINESS LINES

From the point of view of the risk management, banking business line may be broadly classified under three heads:
a) Banking Book b) Trading Portfolio c) Off-balance sheet exposures

BANKING BOOK	TRADING BOOK	OFF-BALANCE SHEET ITEMS
<p>The banking book includes all advances, deposits & borrowings, which usually arise from commercial and retail banking operations. All assets & liabilities in banking book have following characteristics:</p> <p>1) They are normally held until maturity, and 2) Accrual system of accounting is applied</p> <p>The banking book is mainly exposed to liquidity risk, interest rate risk, default or credit risk and operational risks. It is not exposed to Market risk as these items are not marked to market.</p>	<p>The trading book includes all the assets that are marketable i.e., they can be traded in the market. Trading book assets have following characteristics.</p> <p>1) They are normally not held until maturity. Positions are liquidated in the market after holding for a period. 2) Mark to market system is followed Difference between market price & book value is taken to P & L account.</p> <p>Trading book is mainly exposed to market risk, market liquidity risk, and default or credit risk</p>	<p>Off-balance sheet exposures are contingent in nature. Where banks issues guarantees, committed or backup credit lines, letters of credit etc., banks face payment obligations contingent up on some event such as failure to meet payment obligations.</p> <p>Off-balance sheet exposures may become fund-based exposure based on certain contingencies. Both, contingencies given (where bank provides benefit) and contingencies receivable (where bank is the beneficiary) may form off-balance sheet exposure. Off-balance sheet exposures may have liquidity risk, interest rate risk, market risk, default or credit risk and operational risk.</p>

BANKING RISK

The major risk in banking business can be classified as follows:

- a) LIQUIDITY RISK
- b) INTEREST RATE RISK
- c) MARKET RISK
- d) DEFAULT OR CREDIT RISK
- e) OPERATIONAL RISK

LIQUIDITY RISK

Liquidity Risk: Liquidity can be defined as the ability or the capacity to meet the contractual obligations (or the demand) of the liability holders and the commitments to the loan/advances customers comfortably all the while ensuring that the Statutory obligations such as CRR & SLR are met adequately without having to borrow unduly. The variability of loan demand and variability of deposit determine a bank's liquidity needs. It is the Risk of inability of bank to meet its contractual obligations due to mismatch in inflows/outflows from assets and liabilities.

Factors affecting Liquidity: A decline in earnings, deterioration of asset quality (NPA increase), Slow down of fresh deposit accretion, major fraud, a down grading by rating agencies, new business demanding huge funds outlay Commitments, Acquisitions, New tax initiatives by Government, sudden withdrawal pressure due to market concern (either specific to the Bank or to the industry / country). All these factors affect the liquidity of a bank.

Increasing Liquidity: Disposing liquid assets, increasing short term borrowings (call money, notice money, Rep etc), increasing long term liabilities and capital are some of methods in which liquidity can be augmented.

Liquidity Risks Factors: Liquidity risk can arise due to either internal (institution specific) or external factors.

- External Liquidity risks can be geographic, systemic or instrument specific.
- Internal liquidity risk relates largely to perceptions of an institution in its various markets, local, regional, national or international. Other categories of liquidity risk are:

TYPES OF LIQUIDITY RISK**1. FUNDING RISK****2. TIME RISK****3. CALL RISK****FUNDING RISK: Unexpected need to replace outflows due to:**

- Unanticipated withdrawal i.e. premature withdrawal or Non-renewal of deposits (wholesale and retail).
- Fraud causing substantial loss.
- Systemic risk.
- Loss of confidence.
- Liabilities in foreign currencies.

TIME RISK: Need to compensate for non-receipt of expected inflows of funds due to:

- Severe deterioration in the asset quality.
- Standard assets turning into non-performing assets.
- Temporary problems in recovery.
- Time involved in managing liquidity.

CALL RISK: Crystallization of contingent liabilities and inability to understand the markets.

- Leading to conversion of non-fund based limit into fund based.
- Leading to payments under Swaps and Options.

SYSTEMIC RISK: Liquidity may disappear in the markets as the whole banking system may fail.

- Normally due to the failure of a major Bank.
- Since all the banks have inter-relations, failure of one bank may lead to liquidity risks for other banks eventually leading to their collapse.

INTEREST RATE RISK

Definition: Interest rate risk is the risk where changes in market interest rates might adversely affect a bank's financial condition. It is the risk of getting locked in wrong pricing positions by wrong pricing. It exposes the bank's financial assets to adverse movements in interest rates. Interest rate risk is now accepted as an inherent risk in banking business.

CLASSIFICATION & SOURCES OF INTEREST RATE RISK:

Interest rate risk is broadly classified into mismatch or gap risk, basis risk, net interest position risk, embedded option risk; yields curve risk, price risk and reinvestment risk.

1) **GAP OR MISMATCH RISK:** A gap or mismatch risk arises from assets and liabilities with different principal amounts, maturity dates or re-pricing dates in a given time period, thereby creating an exposure to changes in the level of interest rate between assets and liabilities. The gap is the difference between the value of assets and liabilities on which the interest rates are reset during a given period.

2) **BASIS RISK:** The risk that the interest rate of assets and liabilities can change in different magnitudes (Over a given period of time) is called Basis risk.

3) **NET INTEREST POSITION RISK:** The bank's net interest position exposes it to an additional interest rate risk. If a bank has more assets on which it earns interest than its liabilities on which it pays interest. Interest rate risk arises when interest rate earned on assets changes while the cost of funding of the liabilities remains the same.

Thus, the bank with a positive net interest position (higher assets) will experience a reduction in NII as interest rate declines (on new assets or re-pricing the existing assets) and an expansion in NII as interest rate rises.

A large positive net interest position accounts for most of the profit generated by financial institutions that fund their assets from equity rather than borrowings. In an increasing interest rate market, assets keep getting re-priced at higher rates but liabilities are hardly prone to changes being long term equity mostly.

4) **EMBEDDED OPTION RISK:** Large changes in the level of market interest rates create another source of risk to banks profit by prepayment of loans and bonds (with put or call options) and/or premature withdrawal of deposits before their stated maturity dates. In cases where there is no penalty for prepayment of loans, the borrowers have a natural tendency to pay-off their loans when a decline in interest rate occurs. In such cases, the bank will receive only a lower NII. Many banks stipulate a Pre-closure penalty to cover the embedded option risk.

5) **YIELD CURVE RISK:** A Yield curve is a line on a graph plotting the yield of all maturities of a particular instrument. Yield curve changes its slope and shape from time to time depending upon re-pricing and other such factors. As the economy moves through business cycle, the yield curve changes rather frequently. At the intervention of Reserve Bank of India, the yield curve can be twisted in desired direction by altering the yields on Government stocks or different maturities.

6) **PRICE RISK:** Price risk occurs when assets are sold before their maturity dates. For example, if a T-bill with 10% yield with 10 year maturity is held until maturity, it will give the holder full value. However, its value comes down if the market interest rates are above 10% as no one would pay a premium on an instrument which would give them 10% return when they can earn higher interest by deploying elsewhere in the market. If the holder has to sell before maturity, he may have to sell it at discount (loss). This phenomenon where the "Price" of an instrument or the realizable value of the instrument is at risk is called "Price risk".

7) **REINVESTMENT RISK:** Uncertainty with regard to interest rate at which assets and future cash flows can be reinvested is called reinvestment risk. For example, in a rising interest scene, a bank has to keep paying higher rate of interest to the same depositors each time he renews his deposit. This is called "Reinvestment" risk.

EFFECTS OF INTEREST RATE RISK:

Changes in interest rates can have adverse effects both on a bank's earnings and its economic value. Therefore effects of Interest rate risks can be assessed in three ways.

- Earnings Perspective
- Economic Perspective
- Embedded Losses

1) **EARNINGS PERSPECTIVE:** In the earning perspective, the focus is on the impact of changes in the interest rates on actual or reported earnings. Variations in earnings represented by Net Interest Income is the focal point for interest rate risk analysis as reduced earnings or outright losses (for example - where a bank is paying more interest on its liabilities than it is earning on its assets because it is locked in to contractual positions) can harm the financial stability. The losses can reduce the market confidence it enjoys. Banks have now moved into other activities that generate fee-based and other non-interest income and a broader focus on overall net income, incorporating both interest and non-interest income and expenses, has become more common.

2) **ECONOMIC VALUE PERSPECTIVE:** Variation in market interest rates affects the economic value of a bank. The sensitivity of a bank's economic value to movements in interest rates is relevant from an investor's point of view. The economic value of a bank is the Present value of the bank's expected future cash flows.

Economic Value of an Enterprise(Bank) = Present value of future cash flows on assets + Expected net cash flows on off-balance sheet items - present value expected cash flows on liabilities.
Economic value perspective of measuring interest rate risk actually measures the sensitivity of the net worth of the bank to changes in interest rates.

3) **EMBEDDED LOSSES:** The impact that past interest rates on future performance is called embedded risk. Investments that are not marked to market may already contain embedded gains or losses due to past rate movements. These gains or losses may be reflected over time in the bank's earnings. For example, say a bank has invested in its subsidiary and hold its shares at par value (Rs.10). The subsidiary's shares are trading in the market at Rs2/- but the bank continues to show the shares at par value in its balance sheet as the shares are not marked to market. There is an embedded loss in the balance sheet which can affect the bank in a future date.

Note: Due to diligent accounting principles, bank balance sheets have become fairly transparent. Most of the holdings are marked to market these days.

CREDIT RISK

Credit Risk arises out of several situations in the banking field. Some of the important areas are:

- Lending activities of the banks: Where there is a default
- Non-fund based commitments such as Letters of credit / Letters of Guarantee issued when devolved
- Treasury activities: When the Counter-party fails to honor the commitment (settlement etc), when investments in Fixed income securities of Corporates fail.
- Other financial activities involving a Counter-party.

Credit Risk has two components: Default Risk and Credit Spread Risk.

A) **DEFAULT RISK:** Default risk is nothing but potential failure of the counter-party (borrower) to make promised repayments. This default can occur in loan repayment or interest repayment (on loans & corporate bonds etc).

B) **CREDIT SPREAD RISK OR DOWNGRADE RISK:** Capital market portfolios are marked to market. In view of this they have an additional risk called Credit Spread risk. For example, in a corporate bond, which gives semi-annual interest, there is no default and half yearly interest obligations are being met. Yet, this is not a risk free investment as still risk due to worsening in credit quality exists. If the company is having problems and may default in future (not done so far), the credit Rating agencies announce that they have downgraded the rating of the Company. Immediately, the market reacts and the corporate bond issued by the Company already trading in the market will see an adverse price movement. This results in the possible widening of the credit-spread. This is credit-spread-risk. Normally this spread is firm specific.

PORTFOLIO RISK: Normally fund managers both in Banks and in other agencies have to deal with "Portfolio risks". These are the risks which can bring down a whole portfolio. For example- Fund managers are to take positions or quote based on Country or sovereign ratings. Let us say a fund manager has taken position in bonds issued by several emerging Economy nations. Then, "Standard & Poor" or "Moody's" or any international rating agency makes a negative revision of the emerging markets. Immediately international markets react to changes in the Ratings of a Sovereign and all the assets generated out of the emerging markets will suffer deterioration irrespective of whether some of the instruments trading in the market belong to the very best Companies in those Countries. Such risks associated with the entire portfolio as a whole are termed portfolio risk.

Portfolio Risk has two Components.

- 1) Systematic or Intrinsic Risk
- 2) Concentration Risk

1) **Systematic or Intrinsic Risk:** Portfolio risk as discussed above can be reduced due to diversification. In other words, the banks & the Fund managers should not focus only on one type of assets but have a portfolio which is diversified equitably across geographies, Sectors, borrowers, markets and so on. This ensures that the portfolio risk is reduced to a minimum level. This minimum level corresponds to the risks in the economy in which it is operating. This intrinsic risk which is closely knit with the economy of the country where the bank or the Fund is situated will never go away. Such a risk is called systematic or intrinsic risk. If economy as a whole does not perform well, all portfolios will be affected.

2) **Concentration Risk:** If the portfolio is not diversified Concentration risk occurs. Concentration risks can arise out of focusing on large borrowers, borrowing groups, instruments, Sectors, markets etc. In India, RBI has stipulated prudential limits for Individual and Group loan exposures to minimize Concentration risks.

3) **Counter Party Risk:** Counter - party risk arises from non-performance from counter party either by his refusal / inability to perform. The counter party risk is normally financial risk associated with trading rather than standard credit risk.

4) **Country Risk:** 'Country Risk' is also a type of credit risk where non-performance by a borrower or counter party arises because of restrictions imposed by a sovereign. Country Risk may be defined as the risk to operating cash flows, or to the value of investment, resulting from operating in a particular country. At the macro level, Country Risk includes both sovereign risk and currency risk. The Banks need to look at all the dimensions of country before reaching a conclusion on whether or not to do business with a country.

RBI has advised that banks should formulate appropriate, well documented and clearly defined 'Country Risk Management' (CRM) policies which should focus on the issues of identifying, measuring, monitoring and controlling country exposure risks. Banks should design contingency plans and clear exit strategies, which would be activated at times of crisis.

CREDIT DERIVATIVES:

A credit derivative refers to any one of "various instruments and techniques designed to separate and then transfer the credit risk" of the underlying loan. It is a securitized derivative whereby the credit risk is transferred to an entity other than the lender.

Where credit protection is bought and sold between bilateral counterparties, this is known as an unfunded credit derivative. If the credit derivative is entered into by a financial institution or a special purpose vehicle (SPV) and payments under the credit derivative are funded using securitization techniques, such that a debt obligation is issued by the financial institution or SPV to support these obligations, this is known as a funded credit derivative.

Credit derivatives are fundamentally divided into two categories:

- a) Funded credit derivatives and
- b) Unfunded credit derivatives.

A credit rating evaluates the credit worthiness of a debtor, especially a business or a government. It is an evaluation made by a credit rating agency of the debtor's ability to pay back the debt and the likelihood of default.

Credit ratings are determined by credit ratings agencies. The credit rating represents the credit rating agency's evaluation of qualitative and quantitative information for a company or government; including non-public information obtained by the credit rating agencies analysts.

- CRISIL Limited
- Fitch Ratings India Private Ltd.
- ICRA Limited
- Credit Analysis & Research Ltd. (CARE)
- Brickwork Ratings India Private Limited
- SME Rating Agency of India Ltd. (SMERA)

COUNTRY RISK-RBI GUIDELINES:

Exposure: Banks are required to formulate the CRM policy for dealing with the country risk problems only in respect of that country, where a bank's net funded exposure is 1 per cent or more of its total assets.

Application of KYC: The CRM policy should stipulate rigorous application of the 'Know Your Customer' (KYC) principle in international activities which should not be compromised by availability of collateral or shortening of maturities. Country risk element should be explicitly recognized while assessing the counter-party risk.

Funded & Non Funded Exposures: Banks should consider both funded and non-funded exposures from their domestic as well as foreign branches while identifying, measuring, monitoring and controlling country risks.

Indirect Country Risk: Banks should take into account indirect country risk. For example, exposures to a domestic commercial borrower with a large economic dependence on a certain country may be considered as subject to indirect country risk, which may be reckoned at 50 % of the exposure.

Ratings: Banks should use a variety of internal and external sources as a means to measure country risk. However, the rating accorded by a bank to any country should not be better than the rating of that country by an international rating agency. Till the time banks move over to internal rating systems, banks may use the seven category classification followed by Export Credit Guarantee Corporation of India Ltd. (ECGC) for the purpose of classification and making provisions for country risk exposures.

Exposure Limits: Bank Boards may set country exposure limits in relation to the bank's regulatory capital (Tier I + Tier II) with sub-limits, if considered necessary, for products, branches, maturity etc. In respect of foreign banks, the regulatory capital would be the capital (Tier I + Tier II) held in their Indian books.

MARKET RISK

Risk of adverse deviations due to marking to market value of Investment portfolio is called Market risk. Banks are exposed to market risks just as all other investors. Their trading books are particularly exposed to Market risks. Normally a bank's Proprietary trading book (where the bank trades on its own account) consists of investments in securities such as, Debt Securities (T bills, bonds etc), Equity, Foreign Exchange (held in Nostro accounts or invested abroad), and Commodities (Gold, Silver, Platinum).

COUNTER PARTY RISK: Counterparty or Credit risk can arise out of two situations:

- Default of the issuer of the Security or
- Due to the rate migration of the instrument on hand. Debt instruments in the market are normally rated instruments. If the rating agency lowers the rating on the CP, the spread over the risk free return increases and Price decreases as Price is an inverse function of yield.

SETTLEMENT RISK (HERSTATT RISK): Let us say that a bank buys some treasury bills from Bank B. What if after receiving the amounts, Bank B fails to deliver the treasury bills? This risk of the Counter-party failing to deliver is known as Settlement risk or Herstatt Risk. The failure may or may not be intentional. This risk is also called Herstatt Risk due an incident which took place earlier which actually compelled the G-8 countries to come together to form Basel norms. A German bank called Herstatt Bank was put under liquidation by the authorities after it had entered into transactions with various American banks, received the dollars but had not yet delivered due to the time-zone differences. In case of Stock & Commodity markets, respective exchanges such as BSE, NSE and NCX, MCDX take the role of the counter-party and mitigate this risk. But in other cases, especially the OTC items, the risk continues to exist. RBI has taken the initiative to make Real Time Gross settlement possible in our country to obviate settlement risk. As the monetary authorities want to ensure that the settlement problems between two banks or parties should not start a chain reaction and become endemic (System risk), they normally take care regarding Settlement issues. This is a risk may lead to systematic risk and therefore monetary authorities usually take steps to put in place a risk free settlement system to obviate the risk. In India Reserve Bank of India has put in place 'Real Time Settlement System' for the purpose.

MARKET RISK MEASUREMENT MODELS BASED ON INTERNATIONAL STANDARDS

<p>1) VALUE-AT-RISK AND RISK METRICS:</p> <p>a) The value at risk (VaR) is a downside risk measure.</p> <p>b) Risk measures are forward looking and estimate possible future losses that may arise within certain confidence level based on historical data.</p> <p>c) VaR is defined as an estimate of potential loss in a position or asset or portfolio of assets over a given holding period at a given level of certainty.</p> <p>d) VaR is an estimate of the loss likely to occur and not actual loss. It measures potential loss. With the help of VaR potential loss can be assessed with varying degree of certainty.</p>	<p>2) RIGOROUS STRESS TESTING:</p> <p>Stress testing is an important tool that is used by banks as part of their internal risk management that alerts Bank Management to adverse unexpected outcomes and provides an indication to banks of how much capital might be needed to absorb losses should large shocks occur.</p> <p>Stress Testing addresses the large movements in key market variables that lie beyond the day-to-day monitoring but that could potentially occur. Stress Testing evaluates the short-term impact on a given portfolio of a series of predefined moves, in particular market variables.</p> <p>In Stress Testing the Risk Manager selects a set of moves for certain major market parameters and then subjects the current portfolio to those moves, measuring the simulated change in portfolio value.</p>
<p>3) BACK TESTING PROGRAMMES:</p> <p>Back-testing is the process of comparing actual P&L with internally generated risk measures in order to test the efficacy of the internal models. Back-testing seeks to link extant risk profiles with actual ex-post P&L. Back-testing is not a one-time evaluation of a model but an on-going process in which at regular interval the number of exceptions over a particular period is noted.</p>	<p>4) SCENARIO ANALYSIS:</p> <p>Scenario Analysis is a strategic technique, which enables a firm to evaluate the potential impact on its earnings stream of various different eventualities. Scenario Analysis uses multiple projections and helps the firm to assess its longer-term strategic vulnerabilities. Scenario Analysis seeks to assess the broader impact on the firm of complex and interrelated developments.</p>

MARKET RISK MEASUREMENT: Market risk measurements rely heavily on quantitative methods. Some of them are as follows:

- 1) **SENSITIVITY:** Captures the deviations in the market price of an investment or asset due to variations of a unit of one another parameter.
- 2) **BASIS POINT VALUE (BPV):** BPV is the change in value due to 1 basis point (0.01%) change in market yield. This is used as a measure of risk. In other words let us say a bond with face value Rs100 with coupon rate of 10% with a 10 year term is trading at say Rs. 102.50. The market discount rate is say 9%. Assume that the market rate goes up by 0.01% to 9.01%. The bond price quickly changes to say Rs. 102.10.

$$BPV = 102.50 - 102.10 = 0.40$$

The higher the basis point value, the higher is the risk associated with this instrument. BPV changes with remaining maturity. It will decline with time and on the day of maturity it will be zero.

- 3) **DURATION:** McCauley's Duration was first proposed by Frederick McCauley in 1938 as means of describing a bond's price sensitivity to yields change with a single number. This is equivalent to time, on average, that the holder of the bond must wait to receive the present value of the cash flows. In other words this represents cash flow 'Centre of Gravity' or fulcrum'. Let us take a Bond with the following features. Annual payment / 9 % Coupon / 8 year maturity.

This bond trading at 10% YTM has a Macaulay's duration of 5.97 years. This means at the point of 5.97 years, receiving the balance cash flows (Rs 90 per year x 5 balance installments of interest + face value of Rs1000=Rs1450) is equivalent to receiving the amount in a bullet repayment.

Maculae's Duration Formula ----- $D = \sum_{t=1}^T W_t$

Where D = Duration (Maculae's), T=No of periods to maturity.

Period= No of terms where interest is due

$CF_t (1+y)^t$

$W_t = \frac{\text{Bond Price}}{\text{Bond Price}}$

Bond Price

Further, Duration or Modified duration is McCauley's duration discounted by 1 period yield to maturity. The longer the duration of a security, the greater will be the price sensitivity to yield changes & higher is the risk associated with the bond. Bond price changes can be estimated using modified duration as follows:

Approx % change in price = modified duration x yield change

4. **DOWNSIDE POTENTIAL:** Downside risk is the most comprehensive measure of risk as it integrates sensitivity and volatility with the adverse effect of uncertainty. This is the measure that is most relied upon by banking and financial service industry as also the regulators.

5. **VALUE AT RISK (VaR):** A fair measure of what can be the maximum loss can be ascertained by the concept of VaR. Here we attempt to create a more useful answer and arrive at Value at Risk which would tell us that we can lose a maximum of Rs X (the VaR) over the next week (time horizon) and may expect that with 99% confidence (i.e., it would be so 99 times out of 100).

VALUE AT RISK is defined as the predicted worst-case loss at a specific confidence level over a certain period of time assuming 'Normal Trading Conditions'

VaR measures the potential loss in market value under normal circumstances of a portfolio. It is not a measure under abnormal market conditions

In Economic Value perspective-the focus is on the potential loss of Capital funds invested.

A portfolio or security with 1 day VaR of Rs 1 crore with 99% confidence interval means that there is only one chance in 100 (or 2.5 days per year based on 250 working days in a year) that daily loss will be more than 1 crore under normal trading conditions. **Conversely**, there is 1% chance that the daily loss may exceed Rs 1 crore under normal trading conditions in a given time frame of 100 days.

Yield Vs Price Volatility: Yield volatility is degree of variance in yield. It increases as yields fall and is not affected by time & duration. Price volatility is degree of variance in price. This is unaffected by yield and substantially affected by time and duration.

Price Volatility = (Yield volatility x BPV x Yield) / Price

There are three main approaches to calculating value-at-risk:

- Correlation method, also known as the variance/covariance matrix method
- Historical simulation
- Monte Carlo simulation

In all the methods three basic parameters – holding period (balance time to maturity/ first Call), confidence interval and the historical time horizon over which prices are tabulated or observed.

CORRELATION METHOD: Here the change in the value of the position is calculated by combining the sensitivity of each component to price changes in the underlying asset(s), with a variance/covariance matrix of the various components' volatilities and correlation. It is a deterministic approach.

HISTORICAL SIMULATION METHOD: This calculates the change in the value of a position using the actual historical movements of the underlying assets starting from the current value of the asset. It is critical that the length of the period chosen is neither too long nor too short as either of them can distort the observation.

MONTE CARLO SIMULATION METHOD: Here the change in the value of a portfolio is measured using a sample of randomly generated price scenarios.

Limitations of VaR: VaR is not worst case scenario. It does not measure losses under any particular market conditions. VaR by itself – is not sufficient for risk measurement. Measures to get over the limitation include back testing and model calibration and Scenario analysis and stress testing.

Estimating Volatility: VaR uses past data to compute volatility. Volatility is estimated by several methods.

- Arithmetic moving average from historical time series data.
- Exponential moving average method.

As already explained, the User has to determine the length of the past data he/she wishes to consider. Each treasury (in the Bank) may have its own views on this aspect. Volatility also does not capture unexpected events or "event risk". Therefore VaR can not be the only measure (of Risk). It should be used in combination with "Stress tests" to take care of event risks. Stress test takes into account the worst-case scenario.

VOLATILITY: The volatility is a measure of the stability or instability of any random variable. It is a statistical measure of dispersion around the average of any random variable (under study). These variables can be earnings, losses or Value erosions etc.

Volatility is the standard deviation of the values of a chosen variable. Standard deviation is the square root of the variance of the random variable.

HISTORICAL VOLATILITY: If we need the Volatility of a given Company's share prices, we need to observe its behaviour for say) previous six months or previous one year. The computation can be on "daily", "weekly" or "monthly" basis. The frequency of observation (or noting the day-end stock price) has to be changed as per requirement. It is Possible to convert daily volatility in to or monthly volatility using 'Square root of time rule'. The equation is given below:

Square root of time rule for converting daily volatility in to monthly / yearly volatility
Volatility over a time horizon "t" = Daily Volatility X Square Root of T

**TABLE SHOWING THE MOVEMENTS IN THE STOCK PRICE OF XYZ BANK
OBSERVED OVER A TIME PERIOD OF 18 DAYS**

Day	Closing Stock Prices	Mean	Deviation from Mean	Squared Deviation
1	75	75.77	-0.77	0.5929
2	76	75.77	0.23	0.0529
3	77	75.77	1.23	1.5129
4	76	75.77	0.23	0.0529
5	75	75.77	-0.77	0.5929
6	76	75.77	0.23	0.0529
7	78	75.77	2.23	4.9729
8	77	75.77	1.23	1.5129
9	74	75.77	-1.77	3.1329
10	73	75.77	-2.77	7.6729
11	76	75.77	0.23	0.0529
12	78	75.77	2.23	4.9729
13	77	75.77	1.23	1.5129
14	73	75.77	-2.77	7.6729
15	74	75.77	-1.77	3.1329
16	75	75.77	-0.77	0.5929
17	76	75.77	0.23	0.0529
18	78	75.77	2.23	4.9729
Total	1364			43.1122

Number of observations = 18

Sum of observed values = 1364

Mean = $\frac{\text{Sum of observed values}}{\text{Number of Observations}} = \frac{1364}{18} = 75.77$

Deviation = Observed figure +/- mean
For example - On day 3
Observed figure = 77
Mean = 75.77
Deviation = $77 - 75.77 = 1.23$

Variance = $\frac{\text{Sum of Squared Deviations}}{\text{No. of Observations}} = \frac{43.1122}{18} = 2.395$

Volatility = Square Root of Variance = Square Root of 2.395 = 1.547

SQUARE ROOT OF TIME FORMULA

Volatility over a time horizon "t" = daily volatility x square root of t

Note: In this example, Volatility Vd is calculated based on daily observations. This can be converted to monthly volatility using the above formula and treating Time(T) as 30 days and also to weekly volatility taking time (T) as 7 (seven).

Why is Volatility Estimated?

Volatility gives us the range in which the prices (or any other variable) are likely to move and helps us to understand how much the stock or bond price may go up and what can be the downward movement.

Downside Potential: Downside Potential is another measure which is used to assess risk. While volatility gives us both up-swings and down-swings, Downside potential measures only the negative potential or the adverse potential (of loss). Downside Risk or the potential of value erosion / loss can have two dimensions.

- 1) What can be the maximum downside?
- 2) How often can this occur?

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To illustrate, if it is possible to estimate that a bond is likely to lose 1% in value during market fluctuations, it is also possible to estimate how often this can occur. Market fluctuates continuously and hence it is important to note this frequency and build the bank's exit (from a security) plans accordingly. Estimating probabilities requires prior modeling of the probability distribution of potential losses. "Worst-case scenarios" are used to quantify extreme losses but have these have low probability of occurrence. 'Downside risk' is the most comprehensive and widely used measure of risk as it integrates sensitivity and volatility with the adverse effect of uncertainty.

RISK PRICING

Risk Pricing of a Product: To understand this, first let us understand Pricing. Let us say a borrower approaches the bank for a big term loan. How does the bank arrive at the interest rate?

The bank takes in the following factors into consideration:

- 1) What is the cost that the bank has to pay on the funds (Cost of Capital) that will be used to issue this loan?
- 2) What are the transaction / operation costs incurred? (Operating expenses such as salaries, stationery etc).
- 3) What is the Capital charge to be made on this asset?

These are the basic costs that a bank would incur on any transaction. Over and above these, a bank has to analyze the costs associated with the risk involved in the transaction or the probability of loss. This becomes the fourth parameter in arriving at the cost of the transaction. The process of pricing a product which takes the risk factor in to account apart from all other normal cost factors is called "Risk Pricing".

It is now recognized that arriving at the costs involved in a transaction is one of the most important activities of bank. This has to be done accurately as the banks have to aim at making a profit on every transaction. If the basic costing is goes amiss, the Pricing of the Product will be wrong and the bank can end up taking particular business at a loss.

- 4) What is the concept of probability of Loss?

Every banking transaction has certain risks associated with it. Risk means that there is a possible loss that is associated with that transaction. This possibility of risk is measured mathematically and Probability of loss arrived at and factored in to the Pricing. Risk pricing is arriving at the price of a product after factoring the probability of loss associated with the transaction in addition to other normal costs.

Risk Price = Cost of Funds + Transactional Costs + Capital Charge + Loss Probability

RISK MITIGATION: The term "Risk Mitigation" refers to the process of minimizing the risks or containing the risks. There are many tools available in the financial markets for Risk mitigation. For example, a large Indian software service Company recently announced on a business news channel recently that they have entered in to Forward contracts with their bankers for 100% their next three quarters earnings. They have, therefore no concern about the movement of the rupee against the dollar. Balance invoicing will be in Euro/Jap Yens hence risk diversification is also achieved. The point to be noted here is while getting in to Forwards Contracts helps them to avoid risk, it also caps the profits. To illustrate:

Let us say that the Company expects cash inflows of USD 10, 00,000 per quarter. They have contracted to sell these dollars (bank will purchase) at forward rates as follows

January	- USD 250,000 @Rs 44.25/USD	February	- USD 250,000 @Rs.44.35/USD
March	- USD 250,000 @Rs 44.45/USD	Current market rates	Rs 44.20 / USD

Having covered 100% of their exposure, Company can now be confident that they are insulated from the exchange risk. There can be three scenarios in this quarter

Average Rupee rate per USD < Average rupees earned as per the three forward contracts	Company 's profits are protected & the Company therefore has benefited from the Forward cover
Average Rupee rate per USD = Average rupees earned as per the three forward contracts	No loss / no profit situation
Average Rupee rate per USD > Average rupees earned as per the three forward contracts	Company has lost the opportunity of earning higher i.e. Forward cover has actually capped the profits

Banks deal in various financial instruments and also have diverse asset portfolios. The risk mitigation techniques vary according to the nature of the assets / investments. Some examples are:

RISK MITIGATION TECHNIQUES	
CREDIT RISK	Primary and Collateral securities, Cash margins, Third party guarantees, ECGC / CGFT covers, Insurance, Credit derivatives
INTEREST RATE RISK	Gap or Mismatch management, Interest rate swaps, Forward rate agreements, Futures
FOREIGN EXCHANGE RISKS	Limits, Forex derivatives such as Forwards contracts, Futures / Options / Swaps and so on
MARKET RISKS (FOR INVESTMENTS IN EQUITY)	Equity futures / options

Additional issues in Risk Mitigation Techniques: While risk mitigation reduces the risk considerably, it also caps the potential profits. (See example of the Software Company) some Risk mitigation techniques involve a counter party & therefore carry Counter-party risk. However, in exchange traded instruments used for hedging such as options and futures, the Stock exchanges are taking up the role of the counter-party, thus reducing or eliminating the counter-party risk.

Market Risk Monitoring and Control: Risk monitoring and control calls for implementation of risk and business policies simultaneously. It consists of setting market risk limits or controlling market risk, based on economic measures of risk while ensuring best risk adjusted return. Organizational set Up, Training systems, setting up of Limits at all levels of functionaries (staff), Proper Reward/Punishment systems are important for managing Market risk. Of these, the following is very important.

Setting up of Limits at all levels of functionaries (staff)

Limits and triggers: The Risk policy committee should allocate market risk limits.

- Sensitivity and value at risk limits.
- Stop losses mandatory for all Mark to market risk taking activities.
- Exposure limits should ensure unduly large exposures are not taken for any one type of asset
- The Portfolio designer should avoid infrequently traded instruments
- When new securities enter the market, with either fixed or implied Lock-in conditions, they tend to create one-sided markets. They do not have liquidity. They should be avoided till the market deepens if possible.

Risk Mitigation in Market Risks:

Risk Mitigation Strategies: A diversified portfolio will disperse or spread the risk. However, each of the assets in the portfolio has their own volatility measures. The portfolio should be built in a balanced way.

Sensitivity Measures: If a portfolio has bonds X with BPV of 500, we can add another bond Y with BPV of 220 such that the portfolio's weighted average of BPV $(500+220) = 720/2 = 360$. We can this way manage to have a portfolio with the desired level of BPV. Similar strategies can be applied for all other measures also.

Correlation Measures: Here the theory of Correlation is used. If we can identify two financial instruments that have negative correlation then their prices would in exactly opposite direction. The extent of the movement can be estimated. In this case price volatility of the portfolio will be reduced.

Strategies using Market Instruments: Options are normally used for hedging Market risk purposes. An Option gives us the right to Buy (or Sell) at an agreed upon rate (Strike rate) without the obligation that we must necessarily do so. If a trader takes a long position in cash or future markets and enters into a put option (sell Option) at a particular rate, he has the right to exercise the option and will do so only if the market turns adverse to him.

OPERATIONAL RISK

The risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events is called - Operational Risk. Operational risk has a bearing on the very capital of the bank. Recognizing this, Basel II has stipulated a Capital charge on the operation risk now when the Basel II accord is adopted

OPERATIONAL RISK - CLASSIFICATION

Three types (mutually independent) classifications were suggested as follows for Operational risk. However, of the three types, the Third consultative paper of Basel Committee has recommended adopting "Event based" classification.

	People oriented causes	Process oriented causes (Transaction based)	Process oriented causes (Operational control based)	Technology oriented causes	External causes
1) Cause based	Negligence, Key man loss, Incompetence, insufficient training, integrity issues	Business volume fluctuation, organizational complexity, product complexity	Inadequate segregation of duties, lack of Supervision, inadequate procedures.	Poor technology & telecom connectivity, obsolete applications, lack of automation, information system complexity, poor design, development / testing.	Natural disasters, operational failures of a third party, deteriorated social or political context
2) Effect based	<ul style="list-style-type: none"> • Legal liability • Loss or damage to assets • Loss of recourse 		<ul style="list-style-type: none"> • Regulatory compliance and taxation penalties • Restitution • Write-downs 		
3) Event based (recommended by Basel -Third consultative paper)	<ul style="list-style-type: none"> • Internal Fraud • External Fraud • Employment practices and workplace safety • Clients, product and business practices • Damage to physical assets • Business disruption and system failures • Execution, delivery and process management 				

RISK REGULATIONS IN BANKING INDUSTRY

- Bankers have traditionally been managing the various risks in their business through collateralizing their exposures in various ways (property / financial security / third party guarantee/insurances and so on).
- The inadequacy of existing measures was felt after a notorious incident named as "Herstatt incident".
- The "Herstatt" incident led Central Bankers from major countries to formulating and ensuring minimum standards for participants in International financial markets.

HERSTATT INCIDENT:

- In 1974, an incident took place which shook the complacent bankers in to action which finally led to international best practices in risk identification and management.
- Bankhaus Herstatt was a small bank in Cologne, Germany active in the foreign exchange market.
- On 26th June 1974, Herstatt Bank was suddenly closed at the end of the business day in Germany by its banking supervisor. This was at 10.30 a.m. at New York time.
- Prior to the announcement of closure, several counterparties had entered in to contracts with Herstatt and given it Deutsche (German) marks in exchange for US dollars to be delivered to the debit of its account with a Correspondent bank in New York.
- Once the news of the closure was out, Herstatt's New York correspondent stopped all out going dollar payments from its account.

CONSEQUENCES OF HERSTATT INCIDENT:

- The action of the Central bank in Germany left all the counterparties exposed to "Settlement" and "Liquidity" risks up to the amount of deliveries made by them.
- Other parties to lose were Banks that had deposits with Herstatt and those who had entered in to Forward contracts with the collapsed bank. This incident brought the settlement risk that is inherent in transactions with the legs in different time zones.
- This incident led to an awareness that it is needed to ensure that all parties in financial transactions, especially cross border transactions, working in different time zones under different central bankers need certain basic standards to make the markets safe places for all counter parties.
- Thus began the process of identifying major risks and minimum standards for international market participants

G-10 COUNTRIES RESPONDED TO HERSTATT INCIDENT BY FORMING BASEL COMMITTEE:

- In response to the Herstatt incident, Group Ten (G10) central banks began working towards common supervisory issues including the issue of the "Foreign exchange settlement risk" (also called Herstatt risk).
- A committee named as "The Basel Committee" was established in 1974.
- The Basel Committee as well as its four main working groups meet regularly four times a year.
- With its current expanded membership, the Committee is now comprised of representatives from 27 countries including India

THE BASEL COMMITTEE ON BANKING SUPERVISION (BCBS):

- The Basel Committee (BCBS) does not possess any formal supranational supervisory authority, and its conclusions do not, have legal force. However, it reports to the Central bank Governors or Heads of Supervisory authorities of G-10 countries and seeks their endorsement for its major initiatives.
- BCBS formulates broad supervisory standards / guidelines and recommends best practice in the expectation that individual national authorities will take steps to implement them.
- Each national supervisor is expected to make arrangements that are best suited to its own national systems leading to convergence towards common approaches and common standards
- An important objective of the Committee's work is to close gaps in international supervisory coverage in pursuit of two basic principles: that no foreign banking establishment should escape supervision; and that supervision should be adequate. To achieve this, the Committee has issued a long series of documents since 1975.

BASEL CAPITAL ACCORDS: Two important Basel accords called as Basel-I and Basel-II accords have emerged over the past two decades.

BASEL-I ACCORD:

- 1988- The Basel Committee introduced a capital measurement system commonly referred to as the Basel Capital Accord. The 1988 system provided for the implementation of a Credit risk measurement framework with a minimum capital standard of 8% by end-1992.
- 1996- Basel-I accord was modified to include the issues related to Market Risk
- Thus the Basel-I accord addressed two major risks faced by banks- the Credit risk and the Market risk.

BASEL-II ACCORD & THE THREE PILLARS:

- In 2004, BCBS issued another comprehensive framework that seeks to arrive at significantly more risk sensitive approaches to capital requirements.
- Essentially it identified "operational Risk" as a source of threat and included this risk for calculating the "risk weighted assets" for which a minimum capital is prescribed.

- Thus, the Basel-II accord captured three of the five major risks in banking which are the Credit, Market and Operational risks
- The new capital framework consisted of three pillars:
 - Pillar-01: Minimum capital requirements
 - Pillar-02: Supervisory review process
 - Pillar-03: Market discipline

OBJECTIVES OF BASEL ACCORDS: Basel II objectives, which are central to sustained economic development in long run include:

- a) Promotion of safety and soundness in the financial system by stronger risk management practices in banks.
- b) Designing approaches for credit and operational risk that are based on increasing risk sensitivity and allow banks to select an approach that is most appropriate to the stage of development of bank's operation.
- c) The ultimate objective of Basel accords is to encourage the International players in the financial sector (namely Banks) to converge towards a minimum standard both in Capital adequacy and processes, such that there is adequate confidence built up. This is especially applicable to cross border transactions (international transactions)

THREE TIERED CAPITAL FUNDS: A minimum standard for Capital adequacy is the most important objective of the Basel accords. Here, the concern is about the quality of the capital also. The Basel Capital Accord 1988 classifies capital under three tiers. Tier I Capital & Tier II Capital are as follows:

TIER I CAPITAL	TIER II CAPITAL	TIER III CAPITAL (not allowed by RBI in India)
<ul style="list-style-type: none"> ● Permanent Shareholders' Equity. ● Perpetual Non-cumulative Preference shares. ● Disclosed Reserves ● Innovative Capital instruments. 	<ul style="list-style-type: none"> ● Undisclosed Reserves. ● Revaluation Reserves (As per Basel III, it is in Tier I) ● General provisions / general loan-loss reserves. ● Hybrid Debt Capital instruments (an instrument with mix of equity capital and debt characteristics), and ● Subordinated Term Debt 	<ul style="list-style-type: none"> ● As per BCBS each national authority (Example-RBI in India) at its discretion may employ a third tier of capital (Tier -III), consisting of short-term subordinated debt for the sole purpose of meeting a proportion of the capital requirements for market risks.

RBI GUIDELINES

MIGRATING TO NEW CAPITAL ADEQUACY FRAMEWORK (BASEL - II STANDARDS)

- The Basel committee had bestowed discretion to each Country's supervisor to make detailed arrangements and give a time frame within which the Banks in that country should migrate to the new Basel-II standards.
- The Committee has prescribed the "minimum standard of 8% capital adequacy under the first pillar and left it to each country to prescribe more stringent norms where felt necessary.
- RBI has prescribed 9% as required minimum CRAR under Basel pillar -01.
- RBI issued Prudential Guidelines on Capital Adequacy and Market Discipline – Implementation of the New Capital Adequacy Framework (NCAF) which gave detailed guidelines and directed as follows:

TIME FRAME TO COMMERCIAL BANKS IN INDIA TO MIGRATE TO NCAF:

- Foreign banks operating in India and Indian banks having operational presence outside India were directed to migrate to NCAF with effect from March 31, 2008.
- All other commercial banks (except Local Area Banks & Regional Rural Banks) were encouraged to migrate to the Revised Framework not later than March 31, 2009.
- Thus all eligible banks in India are now Basel-II compliant

BASEL ACCORDS - AN OVERVIEW

1988	Basel-I accord by G-8 countries.	Addressed Minimum Capital Adequacy and Credit Risk. Capital charge for Credit risk introduced, to avoid situations like Herstatt Bank incident.
1996	Basel-I modified	Market Risk to be identified, quantified and capital charge provided for
2004	Basel-II norms defined: Banks to provided capital charge for Operational risk also.	Three pillars defined as a) Minimum Capital b) Supervisory Processes c) Market Disclosures

RBI GUIDE LINES	Basel-II-Time frame Indian Banks with Overseas Presence and Foreign banks in India migrated to Basel-II by 31-03-2008. All other banks (except RRBs, UCB) migrated by 31-03-2009 as per RBI directives	BASEL NORMS Pillar-I: Minimum Capital Adequacy Basel-II norm -8%, RBI-9%(stronger) Pillar II: Supervisory Process RBI supervises through On-site & Off-site methods Pillar III: Market Disclosure	
July 2009	Basel-II Enhancements & RBI guidelines	In July 2009, the newly expanded Basel Committee on Banking Supervision approved a final package of measures to strengthen the 1996 rules governing trading book capital and to enhance the three pillars of the Basel II framework. In India, RBI has advised banks that the Enhancement to Basel II Framework will be <u>effective from March 31, 2010</u>	
CAPITAL CHARGE / CAPITAL CALCULATIONS			
<p>Credit Risk: Indian Banks have to adopt Standardized method for calculations as per Basel / RBI guidelines. Here, Risk weights are assigned as per RBI guidelines / Approved external rating agencies and 9% of the RWA is arrived at as the Minimum Capital requirement for Credit Risk.</p> <p>Market Risk: Indian Banks have to adopt Standardized (Duration) method as per RBI guidelines Capital charge arrived at using Duration method and Capital requirement arrived at by multiplying the Capital charge by 12.5.</p> <p>Operational Risk: Indian Banks have to adopt Basic indicator approach as per RBI guidelines Capital charge arrived at using basic indicator method of applying 15% (alpha) on the average Gross Income of past three positive years. Once the Capital charge is arrived, Capital requirement is arrived by multiplying Capital charge by 12.5.</p>			
PILLAR - I		PILLAR - 2	PILLAR 3
MINIMUM CAPITAL REQUIREMENT		SUPERVISORY REVIEW	MARKET DISCIPLINE
<ol style="list-style-type: none"> 1) Capital for Credit Risk <ol style="list-style-type: none"> a) Standardized approach b) Internal rating based (IRB) approaches <ol style="list-style-type: none"> (i) Foundation approach (ii) Advanced approach 2) Capital for Market Risk <ol style="list-style-type: none"> a) Standardized method <ol style="list-style-type: none"> (i) Maturity method (ii) Duration method 3) Capital for Operational Risk <ol style="list-style-type: none"> a) Basic Indicator Approach (BIA) b) Standardized Approach c) Advanced Measurement Approach 		<ol style="list-style-type: none"> 1) Evaluate Risk assessment 2) Ensure soundness and integrity of bank's internal processes to assess the adequacy of capital. 3) Ensure maintenance of minimum capital with PCA for shortfall. 4) Prescribe differential capital, where necessary i.e. where the internal processes are slack. <p>In India, RBI has prescribed "ICAAP" or Internal Capital Assessment Adequacy Process" which should be followed by each Bank.</p>	<ol style="list-style-type: none"> 1) Enhance disclosures 2) Core disclosures and supplementary disclosures 3) Timely at least semiannual disclosures.
BASEL ENHANCEMENTS - SUMMARY			
<p>Pillar 1: The changes are mainly aimed at increasing the capital requirements for specific risk and liquidity facility for securitisation exposures.</p> <p>Pillar 2: The revised guidance is intended to assist banks in better identifying and appropriately capturing risks in their internal assessments of capital adequacy and managing risks. Apart from other things, it requires Banks to address reputation risks, have stress testing practices and sound compensation policies.</p> <p>Pillar 3: Include more granular disclosure requirements for credit risk mitigations and securitized exposures.</p> <p>Banks operating in India should make additional disclosures in the following areas:</p> <ol style="list-style-type: none"> (i) Securitisation exposures in the trading book; (ii) Sponsorship of off-balance sheet vehicles; (iii) Valuation with regard to securitisation exposures; and (iv) Pipeline and warehousing risks with regard to securitisation exposures <p>PROVISION COVERAGE RATIO (LOAN - LOSS COVERAGE RATIO):</p> <ul style="list-style-type: none"> • RBI has mandated that Banks should maintain a Loan-Loss coverage ratio of 70%. • Banks have to comply with the new norms by the end of September 2010. 			

PILLAR I - MINIMUM CAPITAL REQUIREMENTS

Basic approach of capital adequacy framework is that a bank should have sufficient capital to provide a stable resource to absorb any losses arising from the three main risks in its business. Under this pillar, banks have to ensure that they have a CRAR of at least 8% (minimum standards) after taking in to account all the three major risks.

PROCESS OF ARRIVING AT CRAR

CAR: Capital adequacy is the ratio of capital funds available in the Bank to the assets (Loans plus investments) acquired and reflected in the Balance sheets.

CRAR: Capital to Risk weighted assets is the ratio of Capital funds available to the Risk weighted assets (loans and investments) acquired by the Bank and reflected in the Balance sheet.

Risk Weights: Risk weights are the perceptions of risk inherent in any types of claims the Banks have on counterparties (in their loans and investments). For example, a loan given against security of commercial real estate is riskier than a small loan given against gold jewelry. Both these assets need not attract the same amount of mandatory capital. At the same time, Basel-II takes in to account not only the Credit Risk but also Market and Operational risks. Detailed guidelines are given by RBI as to how the assets should be risk weighted taking all the three risks in to consideration

CAPITAL CHARGE FOR CREDIT RISK

As per Pillar-I of Basel-II standards, the assets of a Bank are risk weighted taking all the three major risks in to consideration. The ratio of capital to such risk weighted assets should be a minimum of 9%. Let us now take up the process of risk weighting a Bank's assets for Credit Risk.

The Basel II has recommended two approaches arriving at Capital charge for Credit risk purposes. These are:

- 1) Standardized Approach
- 2) Internal Rating based Approaches

As per RBI's current regulation, Banks have to use the first approach i.e. Standardized approach. However, RBI has already framed a time frame for Banks to move on to advanced approaches as follows:

Internal Ratings-Based (IRB) Approaches for Credit Risk (Foundation - as well as Advanced IRB)	Banks should apply to RBI by April 1, 2012	RBI approval would be given before March 31, 2014
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STANDARDIZED APPROACH FOR CALCULATION OF CAPITAL CHARGE FOR CREDIT RISK

STEP-01 - CLASSIFICATION OF ASSETS

- RBI has given various classes of claims and directed as to how these assets are to be risk weighted.
- Broadly, the Risk weights are either provided directly by RBI or based on the ratings by external agencies.
- In the latter case, RBI provides Ratings Versus Risk weight tables after mapping ratings by different agencies in to standardized ratings

RISK WEIGHTS PROVIDED BY RBI		
1	a) Claims on Domestic Sovereigns-Central Government	0%
	b) Claims on Domestic Sovereigns-State Government	0%
	c) Claims guaranteed by Central Government	0%
	d) Claims guaranteed by State Government	0%
	e) Claims on RBI, DICGC and CGTMSE	20%
	f) Claims on ECGC	0%
	Cash balances on the Balance sheet	20%
2	Claims on BIS, IMF & Multilateral Banks (ADB, World Bank etc)	0%
3	Claims on Foreign banks incorporated in India and foreign bank branches in India with CAR above 9%. (Depending on the Capital adequacy of the Bank, nature of the instrument etc, if the capital adequacy is above 9% and it is not an investment, the RW is 20%)	20%
4	Claims secured by Commercial Real Estate (includes SEZ)	100%
5	Claims included in the Regulatory Retail Portfolios	
	Education Loans	75%
	Loans up to Rs.1 lakh against Gold and Silver ornaments	50%
	All others included in Regulatory retail	75%
6	Claims on Specified Categories	
	Venture capital Funds	150%
	Consumer Credit (& Credit card exposures)	125%
	Capital Market exposures	100%
	NBFC-ND-SI	100%

7	Other Assets	Loans and advances to staff fully covered by superannuation benefits and/or mortgage of flat/ house	20%
		Other Loans to staff	75%
		CCP- Clearing Corporation of India	20%
		Other CCPs	Based on Ratings
8	NPA (unsecured portion, net of specific provisions)	If the specific provisions are less than 20% If the specific provisions are at least 20% If the specific provision is at least 50%	150% 100% 50%

9	Claims based on Residential mortgage (Housing loans) LOAN TO VALUE RATIO (LTV): Percentage with total outstanding in the account (viz. "principal +accrued interest + other charges pertain to the loan" without any netting) in the numerator and the realizable value of the residential property mortgaged to the bank in the denominator. Loans / exposures to intermediaries for on-lending not included claims secured by residential property but will be treated as claims on corporates or claims included in the regulatory retail portfolio as the case may be.																	
RATIONALISATION OF RWs & LTV RATIOS:																		
<table border="1" style="width: 100%;"> <thead> <tr> <th>CATEGORY OF LOAN</th> <th>LTV ratio (%)</th> <th>Risk Weight (%)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Upto Rs. 30 lakh</td> <td>≤ 80</td> <td>35</td> </tr> <tr> <td>> 80 and ≤ 90</td> <td>50</td> </tr> <tr> <td rowspan="2">Above Rs. 30 lakh and upto Rs. 75 lakh</td> <td>≤ 75</td> <td>35</td> </tr> <tr> <td>> 75 and ≤ 80</td> <td>50</td> </tr> <tr> <td>Above Rs. 75 lakh</td> <td>≤ 75</td> <td>75</td> </tr> </tbody> </table>			CATEGORY OF LOAN	LTV ratio (%)	Risk Weight (%)	Upto Rs. 30 lakh	≤ 80	35	> 80 and ≤ 90	50	Above Rs. 30 lakh and upto Rs. 75 lakh	≤ 75	35	> 75 and ≤ 80	50	Above Rs. 75 lakh	≤ 75	75
CATEGORY OF LOAN	LTV ratio (%)	Risk Weight (%)																
Upto Rs. 30 lakh	≤ 80	35																
	> 80 and ≤ 90	50																
Above Rs. 30 lakh and upto Rs. 75 lakh	≤ 75	35																
	> 75 and ≤ 80	50																
Above Rs. 75 lakh	≤ 75	75																
<ul style="list-style-type: none"> ● The LTV ratio should not exceed the prescribed ceiling in all fresh cases of sanction. In case the LTV ratio is currently above the ceiling prescribed for any reasons, efforts should be made to bring it within limits. ● Banks' exposures to third dwelling unit onwards to an individual will also be treated as CRE exposures. The extant instructions requiring additional risk weight of 25 percentage points for restructured housing loans and higher provisioning of 2% for housing loans extended at lesser rates by banks will continue to remain in force. 																		

RISK WEIGHTS BASED ON RATING		
10	Claims on Foreign Sovereigns	
11	Claims on Public Sector Entities	
12	Claims on other Foreign Banks	
13	Claims on Primary Dealers	
14	Claims on Corporates	
15	Securitization Exposures	
16	NBFCs categorized as Infrastructure Finance Companies	
RISK WEIGHTS FOR OFF BALANCE SHEET EXPOSURES WILL BE BASED ON CREDIT CONVERSION FACTORS & RBI GUIDELINES		

Off-Balance Sheet (Non-funded) Items: The credit risk exposure has to be first calculated by multiplying the face amount of each of the off-balance sheet items by the prescribed credit conversion factor and then multiplied by the relevant weights laid down.

While calculating the aggregate of funded and non-funded exposure of a borrower for the purpose of assignment of risk weight, banks may 'net-off' against the total outstanding exposure of the borrower

- Advances collateralized by cash margins or deposits,
- Credit balances in current or other a/c's which are not earmarked for specific purposes and free from any lien
- In respect of any assets where provisions for depreciation or for bad debts have been made
- Claims received from DICGC/ ECGC and kept in a separate account pending adjustment, and
- Subsidies received against advances in respect of Govt. sponsored schemes and kept in a separate account.

SCOPE OF APPLICATION OF EXTERNAL RATINGS:

- Banks should use the chosen credit rating agencies and their ratings consistently for each type of claim, for both risk weighting and risk management purposes.
- Banks must disclose the names of the credit rating agencies that they use for the risk weighting of their assets,
- To be eligible for risk weighting purposes, the rating should be in force and confirmed from the monthly bulletin of the concerned rating agency.
- The rating agency should have reviewed the rating at least once during the previous 15 months.
- For other assets which have a contractual maturity of more than one year, long term ratings accorded by the chosen credit rating agencies would be relevant.
- Cash credit exposures should be reckoned as long term exposures and accordingly the long term ratings accorded by the chosen credit rating agencies will be relevant.
- Similarly, Banks may use long-term ratings of a counterparty as a proxy for an unrated short-term exposure on the same counterparty.

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100%
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Mapping Process: A mapping of the credit ratings awarded by the chosen domestic credit rating agencies has been furnished by RBI that should be used by banks in assigning risk weights.

Risk weight mapping of Long term Ratings of the chosen domestic rating agencies :

Domestic Rating Agencies	AAA	AA	A	BBB	BB & below	Unrated
Risk weight	20%	30%	50%	100%	150%	100%

Illustration: ABC Bank has obtained ratings from CRISIL for its corporate clients (standard assets). When the bank completes the assignment of risk weights, the chart shows the total risk weighted assets under the corporate segment as follows.

Sl no	Name of the Customer	Supervisory category(Based on Sector classification)	Rating given by the rating agency -CRISIL	Risk weight to be given	Asset O/s as on 31 March in Rs. lakh	Risk weighted Asset Rs. lakh
1.	ABC Ltd	Corporate	AAA	20%	150	30
2.	XYZ Ltd	Corporate	AA	30%	120	40
3.	Ram Ltd	Corporate	A	50%	200	100
4.	Shyam Ltd	Corporate	BBB	100%	300	300
5.	DEF Ltd	Corporate	Unrated	100%	420	420
6.	Ujala Electronic Ltd	Corporate	BB-	150%	500	750
	Total				1690	1640

Part-B: Corporate assets-Short term exposures (less than one year)

Rating Agencies				Risk weights
PR 1+	P 1+	F 1+ (Ind)	A 1+	20%
PR 1	P 1	F 1 (Ind)	A 1	30%
PR 2	P 2	F 2 (Ind)	A 2	50%
PR 3	P 3	F 3 (Ind)	A 3	100%
PR 4 & 5	P 4 & 5	F 4 & 5 (Ind)	A 4 & 5	150%
Unrated	Unrated	Unrated (Ind)	Unrated	100%*

***Unrated Corporates**

- 2008-09: Fresh sanctions or renewals in excess of Rs.50 crore - 150%.
- 2009- April onwards: Fresh sanctions or renewals and unrated restructured advances for the year under watch if in excess of Rs. 10 crore- 150%.
- The threshold will be with reference to the aggregate exposure on a single counterparty
- Restructured/rephrased advances for the first year under watch-125% irrespective of the rating. If unrated, the above stipulations apply (100% up to and inclusive Rs.10 crore and 150% if above Rs.10 crore from 01-04-09 onwards).

CLAIMS INCLUDED IN THE REGULATORY RETAIL PORTFOLIOS

- All Claims included in Retail regulatory portfolio attract 75% risk weight
- For a claim (asset) to be classified as Retail Regulatory portfolio –four criteria should be met (include both fund-based and non-fund based)

(i) Orientation criterion (ii) Product criterion (iii) Granularity criterion (iv) Low value of individual exposures

1) ORIENTATION CRITERION	2) PRODUCT CRITERION
<ul style="list-style-type: none"> • The exposure (both FB & NFB) should be to an individual person or persons or to a small business; • Person means any legal person capable of entering into contracts and would include but not be restricted to individual, HUF, partnership firm, trust, private limited companies, public limited companies, co-operative societies etc. • Small business is one where the total average annual turnover is less than Rs. 50 crore. (Average of the last 3 years for existing entities; projected turnover for new entities; and both actual and projected turnover for entities which are yet to complete three years). 	<p>The exposure (both FB and NFB) in any of the following:</p> <ul style="list-style-type: none"> • Revolving credits and lines of credit (including overdrafts), • Term loans and leases (e.g. installment loans and leases, student and educational loans) and • Small business facilities and commitments.

<p>3) GRANULARITY CRITERION</p> <p>Banks must ensure that the Regulatory Retail portfolio is sufficiently diversified to a degree that reduces the risks in the portfolio, warranting the 75% risk weight. One way of achieving this is that no aggregate exposure to one counterparty should exceed 0.2% of the overall regulatory retail portfolio.</p>	<p>4) LOW VALUE OF INDIVIDUAL EXPOSURES</p> <p>The maximum aggregated retail exposure to one counterparty should not exceed the absolute threshold limit of Rs. 5 crore.</p>
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Assets or Claims that should not be included in the Regulatory Retail Portfolio

- Exposures by way of investments in securities (such as bonds and equities), whether listed or not
 - Mortgage loans to the extent that they qualify for treatment as claims secured by residential property or claims secured by commercial real estate
 - Loans and advances to bank's own staff which are fully covered by super-annuation benefits and / or mortgage of flat / house.
 - Consumer credit, including personal loans and credit card receivables
 - Capital market exposures
 - Venture capital funds.
- (Please note that for these claims, RBI has advised the applicable risk weights separately. If included in Regulatory retail, they would have attracted 75% risk weight)

SIMPLIFIED STANDARDIZED APPROACH (SSA)

To assist banks and national supervisors, Basel committee has provided a simplified approach. The salient points of the simplified approach are as below:

- a) For sovereign exposures rating, Export Credit Agency ratings are used.
- b) Risk weight for Corporates is a flat 100%, since ratings are not used.
- c) Reduced risk weights of 75% and 35% for retail and housing portfolio would be available.
- d) Off balance sheet items will have credit conversion factors.

INTERNAL RATING BASED (IRB) APPROACHES

There are two options available viz.

(1) FOUNDATION APPROACH

(2) ADVANCED APPROACH.

In the IRB approaches, the bank's internal assessment of key risk parameters serves as a primary input to capital computation. The salient features of IRB approach are as under:

- Capital charge computation is dependent on the following parameters:
 1. PD - Probability of default
 2. LGD - Loss given at default
 3. ED or EAD - Exposure at default
 4. M - Effective Maturity

● IRB approach computes the capital requirement of each exposure directly. Banks need to categorise banking book exposure into broad classes of assets with different risk characteristics. The classes of assets are:

(a) Corporate (b) Sovereigns (c) Banks (d) Retail (e) Equity.

Within Corporates and retail, there are sub-clauses which are separately identified. Risk weighted assets are derived from the capital charge computation. Banks must use the risk weight functions provided by Basel - II. IRB approach does not allow banks to determine all the above elements. These two approaches to IRB, differ only in the aspect who provided the in-puts. For example, in the Foundation Approach, EAD is provided by the Supervisor and in advanced IRB, EAD is provided by the bank.

RISK COMPONENT	FOUNDATION IRB Input Provided by	ADVANCED IRB Input provided by
Probability Default (PD)	Bank	Bank
Loss given default (LGD)	Supervisor	Bank
Exposure at Default (EAD)	Supervisor	Bank
Effective Maturity (M)	Bank or Supervisor	Bank
Risk weight	Function provided by Committee	Function provided by Committee
Data requirements	Historical data for five years to estimate Probability default(PD)	Historical data LGD-7 years,EAD-7 years ,PD -7 years
Internal Ratings-Based (IRB) Approaches for Credit Risk (Foundation - as well as Advanced IRB)	Banks should apply to RBI by April 1, 2012	RBI approval would be given before March 31, 2014

CREDIT RISK MITIGATION

ELIGIBLE FINANCIAL COLLATERAL: The following collateral instruments are eligible for recognition in the comprehensive approach of Credit Risk Mitigation:

- i) **Cash** (as well as certificates of deposit or comparable instruments, including fixed deposit receipts, issued by the lending bank) on deposit with the bank which is incurring the counterparty exposure.
- ii) **Gold:** Gold would include both bullion and jewelry. However, the value of the collateralized jewelry should be arrived at after notionally converting these to 99.99 purity.
- iii) **Securities** issued by Central and State Governments
- iv) **Kisan Vikas Patra** and National Savings Certificates provided no lock-in period is operational and if they can be encashed within the holding period.
- v) **Life Insurance** policies with a declared surrender value of an insurance company which is regulated by an insurance sector regulator.
- vi) **Debt securities** rated by a chosen Credit Rating Agency in respect of which the banks should be sufficiently confident about the market liquidity where these are either:
 - a) Attracting 100 per cent or lesser risk weight i.e., rated at least BBB(-) when issued by public sector entities and other entities (including banks and Primary Dealers); or
 - b) Attracting 100 per cent or lesser risk weight i.e., rated at least PR3 / P3/F3/A3 for short-term debt instruments.
- vii) **Debt securities** not rated by a chosen Credit Rating Agency in respect of which the banks should be sufficiently confident about the market liquidity where these are:
 - a) Issued by a bank; and
 - b) Listed on a recognised exchange; and
 - c) Classified as senior debt; and
 - d) All rated issues of the same seniority by the issuing bank are rated at least BBB(-) or PR3/P3/F3/A3 by a chosen Credit Rating Agency; and
 - e) The bank holding the securities as collateral has no information to suggest that the issue justifies a rating below BBB (-) or PR3/P3/F3/A3 (as applicable) and;
 - f) Banks should be sufficiently confident about the market liquidity of the security.
- viii) **Units of Mutual Funds** regulated by the securities regulator of the jurisdiction of the bank's operation mutual funds where:
 - a) A price for the units is publicly quoted daily i.e., where the daily NAV is available in public domain; and
 - b) Mutual fund is limited to investing in the instruments listed in this paragraph.

CALCULATION OF CAPITAL REQUIREMENT:

For a collateralized transaction, the exposure amount after risk mitigation is calculated as follows:

$$E^* = \max\{0, [E \times (1 - H_c) - C \times (1 - H_c - H_m)]\}$$

where:

- E^* = the exposure value after risk mitigation
- E = current value of the exposure for which the collateral qualifies as a risk mitigant
- H_c = haircut appropriate to the exposure
- C = the current value of the collateral received
- H_m = haircut appropriate to the collateral
- $H_c - H_m$ = haircut appropriate for currency mismatch between the collateral and exposure

The exposure amount after risk mitigation (i.e., E^*) will be multiplied by the risk weight of the counterparty to obtain the risk-weighted asset amount for the collateralized transaction.

Holding period will be the time normally required by the bank to realize the value of the collateral.

Haircuts

In principle, banks have two ways of calculating the haircuts:

- i) Standard supervisory haircuts, using parameters set by the Basel Committee, and
- ii) Own-estimate haircuts, using banks' own internal estimates of market price volatility.

Banks in India shall use only the standard supervisory haircuts for both the exposure as well as the collateral.

CAPITAL CHARGE FOR MARKET RISKS

Changes in market prices affect financial conditions. Values of financial instruments and other assets may fall due to changes in market parameters. Basel - I accord after the modification in 1996 addressed the issues of allocation of capital for market risk but not operational risk. There is a general perception that the operational risks are on the rising path. The failure of the old institution such as Barings Bank (due to Derivative trades by one Nick Leeson) was largely attributed to operational risk. Similarly, Societe Generale, second biggest bank in France has reported a huge loss, running in multi billion US Dollars due to the Derivative positions taken by a trader named Jerome Kerviel. Hence Basel-II prescribes Capital charge for Operational risk also.

CAPITAL CHARGE FOR MARKET RISK: The following assets of a bank require Capital charge for market Risks.

Trading Book Positions which are Interest related: These items are sensitive to the market interest rates. Their market values fluctuate with the market interest rates. For example, if a bank is holding a 10 year bond with coupon rate of 10% and the market rate for such instruments is 8%, the price at which the market is willing to buy this bond will be higher than when the general market rate is say 12%.

Equities in Trading Book: These are sensitive to market movements. They are sensitive both general market conditions & to specific issues related to the particular stock.

Foreign exchange open positions (inclusive of Bullion positions*)

These occur both in Trading and Banking books.

*Since 1997-98, a few Indian banks are authorised to import and deal with Bullion, Silver & platinum. The import is from Switzerland or Dubai mostly. The invoices are denominated in USD. The sale of gold is both on wholesale & retail basis. In the Indian scenario, the trading book comprises:

- > Securities under 'held for trading' (HFT) category
- > Securities under 'Available for sale' (AFS) category
- > Open gold positions
- > Open Forex positions
- > Trading positions in derivatives
- > Derivatives for hedging trading positions.

As per RBI guidelines, banks are required to calculate counter party credit risk charge for OTC derivatives.

CAPITAL CHARGE ON MARKET RISK

The minimum capital requirement is further divided in to components as follows:

1) General Market Risk Charge:

Capital requirements for General market risk are meant to capture the risk of loss arising variations in market interest rates. The capital charge is the sum of four components:

- 1) The net position in the trading book.
- 2) A small portion of the matched position in each time band (vertical disallowance).
- 3) A larger portion of the matched position across different time-bands (horizontal disallowance).
- 4) A net charge for positions in options.

As discussed before The Basel Committee has suggested two methodologies for computation of capital charge for market risks.

a) Standardized Method:

- > Maturity method
- > Duration Method*

b) Internal Model Approach:

In India, RBI has prescribed 'duration' method to arrive at the capital charge for market risk. Thus, banks will be required to measure the general market risk charge by calculating price sensitivity (modified duration) of each position separately. Measurement of capital charge for equities in the trading book.

2) Specific Charge for each Category of assets:

Thus we have to work out the above two charges for each of the three categories of assets and then aggregate.

CAPITAL CHARGE ON MARKET RISK

CATEGORY	General market Risk Capital Charge	Specific Charge (Category based)	Total Market Charge
	A	B	
1) Trading book positions which are interest related.	To be arrived using Standardised-Duration Method <ul style="list-style-type: none"> • Net position • Horizontal disallowance • Vertical disallowance 	* As per RBI guidelines given in Table 1 below	1) A+B
2) Equities in trading book	9% computed on the Bank's gross equity positions	9% computed on the Bank's gross equity positions.	2) A+B
3) Foreign exchange open positions (inclusive of Bullion positions*) These occur both in Trading and Banking books.	NA	9% The open position would be the limit or actual whichever is higher.	3) B
TOTAL CAPITAL CHARGE			1+2+3

TABLE - 1

The specific risk charges prescribed by RBI for Category 1 items: Interest rate related items.

	CLAIMS ON GOVERNMENT	MATURITY	SPECIFIC CAPITAL CHARGE (% OF EXPOSURE)
1	Investment in Government Securities	All	0%
2	Investment in other approved securities guaranteed by government	All	0%
3	Investment in other approved securities not guaranteed by government	All	1.8%
4	Investment in other non-approved securities guaranteed by Government, claims on banks	All	1.8%
5	Claims on banks for residual term other Tier 2 books	Up to 6 m. to 24 m- 24 months	0.3% 1.125% 1.8%
6	Tier 2 bonds claim on others	All	9%
7	Investment in mortgage based securities	All	4.5%
8	All other securities	All	9%

CAPITAL CHARGE FOR OPERATIONAL RISK

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputation risk. Basel II accord provides three methods for calculating operational risk capital charges.

- (I) The Basic Indicator Approach (BIA) (II) The Standardized Approach and
(III) Advanced Management Approaches (AMA).

BASIC INDICATOR APPROACH (BIA)

Under BIA regime, a bank must hold capital for operational risk equal to the average over the previous three years of a fixed percentage (denoted by alpha) of positive annual gross income is negative or alpha) of positive annual gross income. If annual gross income is negative or zero, it should be excluded while calculating the average. The charge may be expressed as follows:

$$K = \sum (GI_1 \dots 3 \times \alpha) / 3$$

Where K - Capital Charge under BIA, GI - Gross Income (annual), where positive, over the previous three years. α - 15%, this is set by Basel II accord. (α alpha).

DEFINITION OF GROSS INCOME

1. Gross income is defined as "Net interest income" plus "net non-interest income". It is intended that this measure should:

- i) be gross of any provisions (e.g. for unpaid interest) and write-offs made during the year;
- ii) be gross of operating expenses, including fees paid to outsourcing service providers, in addition to fees paid for services that are outsourced, fees received by banks that provide outsourcing services is included in the definition of gross income;
- iii) exclude reversal during the year in respect of provisions and write-offs made during the previous year(s);
- iv) exclude income recognised from the disposal of items of movable and immovable property;
- v) exclude realised profits / losses from the sale of securities in the "held to maturity" category;
- vi) exclude income from legal settlements in favor of the bank;
- vii) exclude other extraordinary or irregular items of income and expenditure; and
- viii) exclude income derived from insurance activities (i.e. income derived by writing insurance policies) and insurance claims in favor of the bank.

2. The above definition is summarized in the following equation:

$$\text{Gross Income} = \text{Net profit (+) Provisions \& contingencies (+) Operating expenses (Schedule 16 of Balance Sheet) (-) items (ii) to (viii) of para 1 above.}$$

Illustration-ABC Bank -Basic Indicator Method for calculating Capital charge for Operational risk

Year	31-03-2014	31-03-2015	31-03-2016
Gross Income	1000.00	1400.00	1600.00

(Amount in Crore)

Capital Charge for Operational Risk using Basic indicator method

This is to be calculated using Basic indicator method

$$K \text{ (BIA)} = GI \text{ (Annual Gross income of Previous three years)} \times \alpha \text{ i.e. } 15\%$$

$$= \frac{1500 + 1400 + 1600}{3} = 1500 \times 15\% = 225 \text{ Crores}$$

3

THE STANDARDIZED APPROACH (TSA) FOR MEASURING CAPITAL CHARGE

OPERATIONAL RISK

- In the Standardised Approach, bank's activities are divided into eight business lines: corporate finance, trading and sales, retail banking, commercial banking, payment and settlement, agency services, asset management, and brokerage.
- Within each business line, gross income is a broad indicator that serves as a proxy for the scale of business operations and thus the likely scale of operational risk exposure.
- The capital charge for each business line is calculated by multiplying gross income by a factor (denoted beta) assigned to that business lines.

Total Capital charge = Sum of (Gross Income x Beta).

In TSA gross income is measured for each business line, Gross income of eight business lines should be equal to the gross income of the institution

Beta = a fixed percentage set by the Committees, relating the level of required capital to the level of the gross income for each of the 8 business lines.

BUSINESS LINES BETA FACTORS (β)			Method of Arriving at Capital charge using TSA (The Standardized approach)
S. No	Business activity	Beta factor	
β1	Retail Banking	12%	a) The total capital charge is the three-year average of the simple summation of the regulatory capital charges across each of the business lines in each year. b) The year at the end of which the capital is being calculated will also be one of the three years. c) In any given year, negative capital charges (from negative gross income) in any business line may offset positive capital charges in other business lines without limit. However, where the aggregate capital charge across all business lines within a given year is negative, then the input to the numerator for that year will be zero. d) The total capital charge will be expressed as: $KTSA = \frac{\sum \text{years 1-3 max}[\sum(G_{1-8} \times \beta_{1-8}), 0]}{3}$ Where, KTSA = the capital charge under TSA G_{1-8} = annual gross income in a given year, for each of the eight business lines. β_{1-8} = a fixed percentage, set by the Basel Committee, relating the level of required capital to the level of the gross income for each of the eight business lines. The values of beta are detailed below.
β2	Retail Brokerage	12%	
β3	Asset management	12%	
β4	Commercial Banking	15%	
β5	Agency Service	15%	
β6	Corporate Finance	18%	
β7	Trading	18%	
β8	Payment & Settlement activities	18%	

XYZ BANK - ILLUSTRATION OF CAPITAL CHARGE FOR OPERATIONAL RISK-STANDARDIZED METHOD

S. No	Business activity	Beta factor	Year-01		Year-02		Year -03	
			Gross Income in Rs. Crore	Capital charge Operational risk	Gross Income in Rs. Crore	Capital charge Operational risk	Gross Income in Rs. Crore	Capital charge Operational risk
1	Retail Banking	12%	100	12	80	9.6	180	21.6
2	Retail Brokerage	12%	200	24	240	28.8	150	18
3	Asset management	15%	100	12	120	18	160	24
4	Commercial Banking	15%	100	15	140	21	120	18
5	Agency Service	15%	200	30	300	45	320	48
6	Corporate Finance	18%	2000	300	2400	432	2500	450
7	Trading	18%	1000	180	800	144	900	162
8	Payment & Settlement activities	18%	300	54	400	72	500	90
Total			4000	627	4480	770.4	4830	831.6

Capital charge as per The Standardized Approach = $KTSA = \frac{\sum \text{years 1-3 max}[\sum(G_{1-8} \times \beta_{1-8}), 0]}{3}$
 $KTSA = \frac{627 + 770.40 + 831.60}{3} = \text{Rs.743 crore}$

THE ALTERNATIVE STANDARDISED APPROACH (ASA)

CALCULATING CAPITAL CHARGE FOR OPERATIONAL RISK

The ASA is a special variant of TSA. A bank can use the ASA provided the bank is able to satisfy RBI that this alternative approach provides an improved basis for risk management. Once a bank has been allowed to use the ASA, it will not be allowed to revert to use of TSA without the permission of RBI.

- Under the ASA, the operational risk capital charge / methodology is the same as for TSA except for two business lines — Retail Banking and Commercial Banking.
- For these business lines, loans and advances — multiplied by a fixed factor 'm' — replaces gross income as the exposure indicator.
- The betas for retail and commercial banking are unchanged from TSA.

For instance, the ASA operational risk capital charge for retail banking can be expressed as:

$$KRB = B \times (m \times LArB)$$

Where

KRB = the capital charge for the retail banking business line B7 = the beta for the retail banking business line

LArB = total outstanding retail loans and advances (non-risk weighted and gross of provisions), averaged over the past 12 quarters; and

m = the fixed factor 0.035.

Overall capital charge under ASA will be calculated as under:

$$K_{ASA} = \{ \sum \text{years 1-3 max}[\sum(GI_{1-6} \times \beta_{1-6}), 0] \} / 3 + (\beta_7 \times m \times LArB) + (\beta_8 \times m \times LAcB)$$

Where

LArB = total outstanding retail loans and advances (non-risk weighted and gross of provisions), averaged over the past 12 quarters; and

LAcB = total outstanding commercial banking loans and advances (non-risk weighted and gross of provisions), averaged over the past 12 quarters; and

m = 0.035 (for both retail and commercial banking)

- For the purposes of the ASA, total loans and advances in the retail banking business line consists of the total drawn amounts in the following credit portfolios: retail, SMEs treated as retail, and purchased retail receivables.
- For commercial banking, total loans and advances consists of the drawn amounts in the following credit portfolios: corporate, sovereign, bank, specialized lending, SMEs treated as corporate and purchased corporate receivables. The book value of securities held for the purpose of interest income such as in HTM and AFS should also be included.
- Under the ASA, banks may aggregate retail and commercial banking (if they wish to) using a beta of 15%. Similarly, those banks that are unable to disaggregate their gross income into the other six business lines can aggregate the total gross income for these six business lines using a beta of 18%.
- As under TSA, the total capital charge for the ASA is calculated as the simple summation of the regulatory capital charges across each of the eight business lines.

ADVANCED MANAGEMENT APPROACHES (AMA)

Under AMA, internal operational risk measurement system is used. Internal measurement system is required to be vetted by the supervisor (RBI in India). The regulatory capital requirement will equal the risk measure generated by the bank's internal operational risk measurement system, using the quantitative and qualitative criteria for the AMA. The criteria are summarized below.

QUALITATIVE STANDARDS:

- 1) A Bank must have an independent operational risk management function.
- 2) Operational risk management system must be closely integrated into day-to-day risk management processes.
- 3) There must be regular reporting of operational risk exposures and loss experiences.
- 4) Operational risk management system should be well documented.
- 5) Internal / external auditors must perform regular reviews of operational risk management processes and measurement system.
- 6) The validation of operational risk management system should be done by external auditors and / or supervisors.

QUANTITATIVE STANDARDS: Basel Committee has chosen not to prescribe a specific approach as many options are available and are continuously being improved upon. However, a Bank must demonstrate that its operation risk measures fulfill soundness standards comparable to that of internal rating based approach. The quantitative standards prescribed by the Committee are given below:

- a) Internal operational risk measurement system should be consistent.
- b) The Bank should calculate Regulatory capital and the sum of Expected Loss (EL) & Unexpected Loss (UL).
- c) The measurement system must be sufficiently granular (detailed) to capture major events of operational risk.
- d) The systems for determining correlations must be sound and the bank must validate the correlation assumptions.

CALCULATING CAPITAL ADEQUACY RATIO

The scope of risk weighted assets is expanded to include certain additional aspects of Market risk and also operational risk. The area of operational risk is weighted assets include the capital requirement for market risk and operational risk multiplied by 12.5 (i.e. reciprocal of the minimum capital requirement of 8%) along with risk weighted assets for credit risk. Thus:

$$CRAR = \frac{\text{Total Capital Funds} \times 100}{\text{Total Risk weighted Assets}}$$

$$\text{Total Risk weighted assets (RWA)} = \text{RWA for Credit risk} + 12.5 \times \text{capital charge for Market risk} + 12.5 \times \text{Capital charge for Operational risk}$$

STEPS:

- a) Arriving at the sum of risk weighted assets compiled for Credit Risk.
- b) Arriving at the risk weighted assets figure for market risk and operational risk by multiplying the capital requirements for these risks by 12.5
- c) Adding the above sum of risk weighted assets to arrive at the denominator and the ratio will be calculated using the regulatory capital as the numerator. The ratio must be not lower than 8% for total capital as per Base guidelines and 9% as per RBI guidelines.

Banks should compute their Tier 1 CRAR and Total CRAR in the following manner:

$$\text{Tier 1 CRAR} = \frac{\text{Eligible Tier 1 Capital funds}}{\text{Credit Risk RWA} + \text{Market Risk RWA} + \text{Operational Risk RWA}}$$

$$\text{Total CRAR} = \frac{\text{Eligible total Capital funds}}{\text{Credit Risk RWA} + \text{Market Risk RWA} + \text{Operational Risk RWA}}$$

Tier 2 capital will be reckoned as capital funds up to a maximum of 100 % of Tier 1 capital, after making deductions and adjustments as per RBI guidelines.

COMPUTATION OF CAPITAL AVAILABLE FOR MARKET RISK:

Capital required for supporting credit risk should be deducted from total capital funds to arrive at capital available for supporting market risk as illustrated below:

1	Capital funds Tier I capital ----- Tier II capital -----	50 55	105
2	Total RWA RWA for credit risk ---RWA for market risk ---	1000 140	1140
3	Total CRAR		9.21 (105 x 100/1140)
4	Minimum capital required to support credit risk (1000*9%) Tier I - 45 (@ 4.5% of 1000) Tier II - 45 (@ 4.5% of 1000)	45 45	90
5	Capital available to support market risk (105 - 90) Tier I - (55 - 45) --- 10 Tier II - (50 - 45) --- 5 Total ----- 15	15	15

SUMMARY TABLE: METHODS OF CALCULATING CAPITAL CHARGES

CAPITAL CHARGE CREDIT RISK		CAPITAL CHARGE MARKET RISK		CAPITAL CHARGE OPERATIONAL RISK		
(1.a) Standardized Approach (RWA)	(2) Internal Rating Based Approach (Uses PD, LGD, ED & EM)	(1) Standardized Method	2) Internal Models Method	1) Basic Indicator Approach	2) Standardized Approach	(3) Advanced Mgmt Approach
(1.b) Simplified Standard approach (simplified Risk weightages)	2(a) Foundation IRB Approach (Bank gives PD, Supervisor gives the other inputs)	(1.a) Standardized Maturity Method		Average of 3 + ve years' Gross income is taken and Alpha (15%) is applied	TSA: Gross Income is divided in to 8 Business lines and different charges (Beta) varying from 12% to 18% applied ASA: GI is replaced by total advances multiplied by m (0.35) for Retail and Commercial Banking	Here Bank's Internal Risk measurement system is used.
	2(b) Advanced IRB approach (Banks provide all inputs, not only PD)	(1.b) Standardized Duration Method				

INTEGRATED RISK MANAGEMENT

Integrated risk management is the process of managing all risks that are there in a given business in a simultaneous and integrated way. A macro view should be taken and all the risks such as liquidity risk, interest rate risk, market risk, credit risk and operational risk should be assessed and addressed in the context of each other.

The sum total of all risk impacts is a critical factor for all organizations. Integrated Risk management therefore is a coordinated approach to all the risks in a comprehensive manner. Its objective is to minimize the aggregate risk to tolerable limits.

INTEGRATED RISK MANAGEMENT – CHALLENGES:

Real-Time Concern:

- Identifying & Measuring of Risk is critical to managing risks. Measuring and monitoring helps to maintain market discipline. MIS or data for integrated risk should be on tap where possible.
- The markets where the banks take exposure move so very fast that unless the data is almost simultaneous and real-time, nothing much can be achieved. Evolution of the real-time business environment (markets) giving rise to risks on a continuous basis especially the Foreign exchange markets
- Regulatory requirements make it compulsory to generate some of this data however, the primary objective of Integrated Risk management is to meet the business challenges such as: Quick obsolescence of technology.

CULTURAL ISSUES:

Most institutions are yet to migrate fully to integrated and inter-connected networks. Stand alone technology makes it difficult to share information, which is critical to integrated risk management. Inaccurate data works on a "junk in, junk out" basis this deteriorates or reduces the quality of information and therefore the quality of the decisions.

INTEGRATED RISK MANAGEMENT – APPROACH:

- **Organization Structure:** Chief Risk Officer & team, which reports directly to Board of directors.
- **Process:** Across the organization, standardization of the process of identifying, assessing, controlling risk.
- **System:** Information systems should be integrated with management systems to ensure availability of information and analytical tools.

INTEGRATED RISK LIMITS: A well-defined limit structure (discretionary powers) articulating various financial and other powers, which translate in to risk taking activities, should be put in place.

INTEGRATED RISK REPORTING:

- A comprehensive reporting system, which aggregates all the risks outstanding across the branches (enterprise-wide) should be prepared.
- The format should be in such a way that the users (Risk management committee and the Board) should have an immediate, real time, overall view to be able to give quality decisions.
- In an integrated risk management framework, the top management should have a holistic view of all risks.
- For Example, credit risk reports like outstanding counter party limits should include all outstanding limits across treasury and credit departments.

RISK BASED SUPERVISION (RBS) OF BANKS

- The international banking scene has in recent years witnessed strong trends towards globalization and consolidation of the financial system. Stability of the financial system has become the central challenge to bank regulators and supervisors throughout the world.
- The Indian banking scene too has witnessed progressive deregulation, introduction of prudential and exposure norms and an emulation of international supervisory best practices. The supervisory processes have also been evolved and have acquired a certain level of sophistication with the adoption of the CAMELS approach to supervisory risk assessments and rating.

OBJECTIVES OF RBS: The objective of RBS is to:

- a) To optimize utilization of supervisory resources and
- b) Minimize the impact of crisis situation in the financial system.

The RBS process essentially involves continuous monitoring and evaluation of the risk profiles of the supervised institutions in relation to their business strategy and exposures. This assessment will be facilitated by the construction of a Risk matrix for each institution.

MAJOR ELEMENTS OF RBS APPROACH

- | | |
|--|---|
| <ol style="list-style-type: none"> a) Risk Profiling of Banks. b) Supervisory Cycle and supervisory programme. c) Inspection Process. d) Review, evaluate and follow-up. | <ol style="list-style-type: none"> e) Monitorable Action Plan (MAP) f) Supervisory organization g) Enforcement process and incentive framework |
|--|---|

Risk Profiling of Banks:

- The risk profiling of the bank is done by document, which would contain various kinds of financial and non-financial risks faced by a banking institution.
- Risk profiling of banks is designed for assessing Business risks and Control risks.
- Business risks have been classified into eight categories namely capital, credit, market, earnings, liquidity, business strategy and environment, operational and group risks.
- Control risks have been classified into four categories namely internal control, organization, management and compliance risk. Overall risk of Banks will be assessed as low, moderate, fair or high. Banks with low risks will have longer supervisory cycle and less supervisory intervention.

Key Components of the Risk Profile Document:

- CAMELS rating with trends
- Narrative description of key risk features captured under each CAMELS component
- Summary of key business risks including volatility of trends in key business risk factors
- Monitorable action plan and bank's progress to date
- Strength, Weaknesses, Opportunities, Threats (SWOT) analysis and Sensitivity analysis

Supervisory Cycle:

The supervisory process would commence with the preparation of the Bank Risk profile (based on data furnished by banks to the DBS of RBI, besides data from other sources). The supervision cycle will vary according to risk profile of each bank, the principle being the higher the risk the shorter will be the cycle.

Supervisory Programme:

The supervisory programme would be tailored to individual banks and would focus on the highest risk areas as well as specify the need for further investigation in identified problem areas. The supervisory programme would also identify the package of supervisory tools to be deployed from a range consisting of:

- Greater off-site surveillance
- Targeted on-site inspection
- Structured meetings with banks
- Commissioned external audits
- Specific supervisory directions
- New policy notices (i.e. new policy directions to banks emanating from individual bank level concerns, which are relevant for the industry).

Inspection Process:

- The risk assessment process would highlight both the strengths and vulnerabilities of an institution and would provide a foundation from which to determine the procedures to be conducted during the inspection.
- The inspection would target identified high-risk areas from the supervisory perspective and would focus on the effectiveness of mechanism in capturing, measuring, monitoring and controlling various risks.

Review, Evaluation and Follow-up:

- An evaluation will be undertaken to ensure that the supervisory programme has been effective in improving the risk profile of the bank concerned.
- The risk profile document of the bank will accordingly be updated in the light of new information.

Monitorable Action Plans (MAPs):

- A Monitorable Action Plan (MAP) is devised to ensure that banks take corrective action in time to remedy or mitigate any significant risks that have been identified during the supervisory process.
- RBI uses MAPs to set out the requirements as identified during the on-site & off-site supervisory process. MAPs are effective in a number of ways. MAPs may include directions to Banks on actions to be taken. The remedial actions that would be outlined would be tied explicitly to the areas of high risks identified in the Risk profiling /Supervisory process and lead to improvements in the systems and controls environment at the Bank.
- Key individuals at the bank would have to be made accountable for each of the action points. If actions and timetable set out in the MAP are not met, RBI would consider issuing further directions to the defaulting banks and even impose sanctions and penalties.
- The mandatory and discretionary actions as enshrined in the Prompt Corrective Action (PCA) framework would be a part of the Supervisory enforcement action. The enforcement function would be carried out through an independent Enforcement Cell to be set up at the BSD to ensure consistency of treatment, maintain objectivity and neutrality of enforcement action.

Use of External Auditors in Banking Supervision:

- The use of specialist third parties, such as, external auditors can be of significant aid to the bank supervisors. In some countries, external auditors are required to perform an early warning function and inform supervisors without delay of information material to the supervisor.
- The Basel consultative paper 'Internal audit in Banks & the relationship of the Supervisory authorities with Internal and External auditors' discusses the commonality of focus & concern of External auditors & Bank supervisors.
- The supervisory process instead of duplicating the efforts of the external / internal auditors should seek to leverage off (use) their work / reports. LFAR format is being used in part realization of this goal.

BASEL - III

The Basel standards are developed by the Basel Committee on Banking Supervision (BCBS), a group within the Bank for International Settlements (BIS) in Basel, Switzerland, to ensure safety, soundness and solvency of the banking system.

OBJECTIVE OF BASEL - III: To improve banking sector resilience by strengthening global capital and liquidity regulations. RBI's guidelines would become effective from April 1, 2013 in a phased manner. The Basel III capital ratios will be fully implemented as on March 31, 2019. The reform package aims at:

- Enhancing banking sector's ability to absorb shocks arising from financial and economic stress.
- To improve risk management and governance as well as strengthen banks' transparency and disclosure standards relating to regulatory capital.
- To focus on macro-prudential focus, addressing system-wide risks which can build up across the banking sector as well as the cyclical amplification of these risks over time.

SUMMARY OF BASEL III CAPITAL REQUIREMENTS: The enhancements of Basel III over Basel II come in four areas: a) Augmentation in the level and quality of capital; b) Introduction of liquidity standards; c) Modifications in provisioning norms; d) Better and more comprehensive disclosures.

RBI PRESCRIPTION FOR INDIAN BANKS: Accordingly, under revised guidelines (Basel III), total regulatory capital will consist of the sum of the following categories:

- Tier 1 Capital (going-concern capital) (a) Common Equity Tier 1 (b) Additional Tier 1
- Tier 2 Capital (gone-concern capital).

REGULATORY CAPITAL PRESCRIPTIONS (as % age of risk weighted assets)			
		RBI's Prescriptions	
		Current (Basel II)	Basel III (as on 31-3-19)
A = (B+D)	Minimum Total Capital (MTC)	9.0	9.0
B	Minimum Tier 1 capital	6.0	7.0
C	Of which:		
	Minimum Common Equity Tier 1 capital	3.6	5.5
D	Maximum Tier 2 capital (within Total Capital)	3.0	2.0
E	Capital Conservation Buffer (CCB)	-	2.5
F = C+E	Minimum Common Equity Tier 1 capital + CCB	3.6	8.0
G = A+E	Minimum Total Capital + CCB	-	11.5
H	Leverage Ratio (ratio to total assets)		4.5

As a matter of prudence, RBI has decided that Banks (excluding LABs and RRBs) operating in India shall maintain a minimum total capital (MTC) of 9% of total risk weighted assets (RWAs) as against a MTC of 8% of RWAs as prescribed in Basel III rules text of the BCBS.

COMMON EQUITY TIER I CAPITAL:

COMMON EQUITY TIER I CAPITAL RATIOS: Common equity Tier I capital / RWA for (Credit risk + Market Risk + Operational Risk)

a) Elements of Common Equity Tier I Capital:

- Common shares (paid-up equity capital) issued by the bank which meet the criteria for classification as common shares for regulatory purposes;
- Stock surplus (share premium) resulting from the issue of common shares;
- Statutory reserves;
- Capital reserves representing surplus arising out of sale proceeds of assets;
- Other disclosed free reserves if any;
- Balance in profit & Loss account at the end of the previous financial year;
- Current year profits can be reckoned on quarterly basis provided incremental NPA provision at end of any of four quarters of previous financial year have not deviated more than 25% from the average of four quarters.

b) Elements of Additional Tier I Capital:

- Perpetual Non cumulative preference shares (PNCPS).
- Stock surplus (share premium) resulting from the issue of Instruments included in Additional Tier I capital.
- Debt capital instruments eligible for inclusion in Additional tier I capital.

c) Elements of Tier II Capital:

- General provisions and Loss Reserves: General Provisions on Standards Assets, Floating Provisions, held for country exposures, investment reserve account, excess provisions which arise on account of sale of NPAs and countercyclical provisioning buffer, up to a maximum of 1.25% of the total credit RWAs under Standardised approach. Under Internal Ratings Based (IRB) approach, where the total expected loss amount is less than total eligible provisions, banks may recognize the difference as Tier II capital up to a maximum of 0.6% of credit RWAs calculated under IRB approach.
- Debt capital instruments issued by the banks;
- Preference share capital instruments (perpetual cumulative preference shares (PCPS) / Redeemable Non-cumulative Preference shares (RNCPS) redeemable cumulative preference shares (RCPS) issued by the banks.
- Stock surplus (share premium) from instruments included in Tier 2 capital.
- Revaluation reserves – 45% to be taken at a discount of 55%. As per Basel III, it is included in Tier I capital)

OTHER IMPORTANT ASPECTS:

A) CAPITAL CONSERVATION BUFFER (CCB): The Capital Conservation Buffer is designed to ensure that banks build up capital buffers during normal times (i.e. outside periods of stress) which can be drawn down as losses are incurred during a stressed period. The requirement is based on simple capital conservation rules designed to avoid breaches of minimum capital requirements.

B) COUNTERCYCLICAL CAPITAL BUFFER: The purpose of countercyclical capital buffer is to achieve the broader macro-prudential goal of protecting the banking sector from periods of excess aggregate credit growth. A countercyclical capital buffer within a range of 0 – 2.5% of RWAs in form of Common Equity or other fully loss absorbing capital will be implemented according to national circumstances. For any given country, this buffer will only be in effect when there is excess credit growth that results in a system-wide build-up of risk.

C) RISK-BASED CAPITAL REQUIREMENT WITH A LEVERAGE RATIO:

One of the underlying features of the crisis was the build-up of excessive on-and off-balance sheet leverage in the banking system. In many cases, banks built up excessive leverage while still showing strong risk based capital ratios. Subsequently, the banking sector was forced to reduce its leverage in a manner that not only amplified downward pressure on asset prices, but also exacerbated the positive feedback loop between losses, declines in bank capital and contraction in credit availability. Therefore, under Basel III, a simple, transparent, non-risk based regulatory leverage ratio has been introduced.

Thus, the capital requirements will be supplemented by a non-risk based leverage ratio which is proposed to be calibrated with a Tier 1 leverage ratio of 3% (33.3 times). The ratio will be captured with all assets and off balance sheet (OBS) items at their credit conversion factors and derivatives with Basel II netting rules and a simple measure of potential future exposure (using Current Exposure Method under Basel II framework) ensuring that all derivatives are converted in a consistent manner to a "loan equivalent" amount. The ratio will be calculated as an average over the quarter.

D) DISCLOSURE REQUIREMENTS: One of the lessons of the crisis is that the disclosures made by banks on their risky exposures and on regulatory capital were neither appropriate nor sufficiently transparent to afford any comparative analysis. To remedy this, Basel III requires banks to disclose all relevant details, including any regulatory adjustments, as regards the composition of the regulatory capital of the bank.

BASEL III TRANSITIONAL ARRANGEMENTS:

In terms of extant guidelines on Basel III Capital Regulations issued by the RBI, the Capital Conservation Buffer (CCB) is scheduled to be implemented from March 31, 2015 in phases and would be fully implemented as on March 31, 2018. RBI has now decided that the implementation of CCB will begin as on March 31, 2016. Consequently, Basel III Capital Regulations will be fully implemented as on March 31, 2019. The revised Transitional Arrangements is as follows:

TRANSITIONAL ARRANGEMENTS-SCHEDULED COMMERCIAL BANKS (excluding LABs and RRBs)

Minimum Capital Ratios	(% of RWAs)						
	April 1, 2013	March 31, 2014	March 31, 2015	March 31, 2016	March 31, 2017	March 31, 2018	March 31, 2019
Minimum Common Equity Tier 1 (CET1)	4.5	5	5.5	5.5	5.5	5.5	5.5
Capital conservation buffer (CCB)	-	-	-	0.625	1.25	1.875	2.5
Minimum CET1+ CCB	4.5	5	5.5	6.125	6.75	7.375	8
Minimum Tier 1 capital	6	6.5	7	7	7	7	7
Minimum Total Capital*	9	9	9	9	9	9	9
Minimum Total Capital +CCB	9	9	9	9.625	10.25	10.875	11.5
Phase-in of all deductions from CET1(in %)#	20	40	60	80	100	100	100

* The difference between the min. total capital requirement of 9% and the Tier 1 requirement can be met with Tier 2 and higher forms of capital;

The same transition approach will apply to deductions from Additional Tier 1 and Tier 2 capital.

1.2) The revised minimum capital conservation standards for individual banks has been revised as under:

MINIMUM CAPITAL CONSERVATION STANDARDS FOR INDIVIDUAL BANK

Common Equity Tier 1 Ratio after including the current periods retained earnings			Minimum Capital Conservation Ratios (expressed as % of earnings)
As on March 31, 2016	As on March 31, 2017	As on March 31, 2018	
5.5% - 5.65625%	5.5% - 5.8125%	5.5% - 5.96875%	100%
>5.65625% - 5.8125%	>5.8125% - 6.125%	>5.96875% - 6.4375%	80%
>5.8125% - 5.96875%	>6.125% - 6.4375%	>6.4375% - 6.90625%	60%
>5.96875% - 6.125%	>6.4375% - 6.75%	>6.90625% - 7.375%	40%
>6.125%	>6.75%	>7.375%	0%

2) LOSS ABSORPTION FEATURES OF NON-EQUITY CAPITAL INSTRUMENTS:

The criteria for Additional Tier 1 (AT1) capital instruments require that these instruments should have principal loss absorption through either -

- Conversion into common shares, or
- A write-down mechanism which allocates losses to the instruments at an objective pre-specified trigger point. The pre-specified trigger is set at Common Equity Tier 1 (CET1) of 6.125% of risk weighted assets (RWAs).

RBI has now decided that all Basel III compliant AT1 instruments issued before March 31, 2019 i.e., before the full implementation of Basel III, will have two pre-specified triggers. A lower pre-specified trigger at CET1 of 5.5% of RWAs will apply and remain effective before March 31, 2019, after which this trigger would be raised to CET1 of 6.125% of RWAs for all such instruments. AT1 instruments issued on or after March 31, 2019 will, however, have pre-specified trigger at CET1 of 6.125% of RWAs only.

2.2) Presently, in addition to conversion feature, both the temporary and permanent write-down features have been permitted at the pre-specified trigger point for AT1 capital instruments. On a review, RBI has decided that banks may issue AT1 capital instruments with conversion / permanent write-down features only. Similarly, with regard to write-off feature at Point of Non-Viability (PONV) trigger, all non-equity capital instruments will have permanent write-off feature only, even in cases where there is no public sector injection of funds. Further, RBI has clarified that Basel III compliant capital instruments issued with temporary write-off feature till _____ will continue to be recognised as eligible regulatory capital instruments.

AMENDMENTS IN BASEL III FRAMEWORK

The RBI has made some amendments to the treatment of certain balance sheet items for the purposes of determining banks' regulatory capital. The review was carried out with a view to further aligning the definition of regulatory capital with the internationally adopted Basel III capital standards, issued by the Basel Committee on Banking Supervision (BCBS).

The salient features of the amendments are:

- Revaluation reserves arising from change in the carrying amount of a bank's property consequent upon its revaluation would be considered as common equity tier 1 capital (CET1) instead of Tier 2 capital as hitherto. These would continue to be reckoned at a discount of 55 per cent.
- Foreign currency translation reserves arising due to translation of financial statements of a bank's foreign operations to the reporting currency may be considered as CET1 capital. These will be reckoned at a discount of 25 per cent.

Deferred tax assets arising due to timing differences may be recognised as CET1 capital up to 10% of a bank's CET1 capital.

TREASURY MANAGEMENT (MODULE - C)

TREASURY MANAGEMENT

- Treasuries have a critical role in managing the various risks that the banking businesses face. There is however a risk that treasury operations themselves bring. Termed as "Treasury risk", this risk focuses on the operational risks that arise out of treasury functioning.
- Treasury risk management is critical because the nature of activity is such that though income is generated out of market opportunities, market risk is present in every single transaction.
- The risk of losing capital is very high unlike in the area of Credit (where capital adequacy norms ensure the limiting of exposures) as the treasury business gears itself on the high advantage facility that banks enjoy.
- The capital requirement for treasury operations is low because only margins have to be deposited but the risk of losing the capital is very high in comparison.
- The size of the transactions is also a cause for concern. The minimum lots in certain currencies are a quarter million. Though all these are factored in to the Limits policies, Staff policies, Overnight limits policies, the risks remain a concern.

TREASURY DECISIONS	CURRENCY MANAGEMENT	INTEGRATED TREASURY
1) Funds Management (short & long term)	Export earnings / import outgo to be carefully matched / synchronized.	Seamless integration of the treasury functions involving Money markets, Security markets and Foreign exchange dealing room operations.
2) Cash Management	Exchange rate fluctuations To be watched and managed	
3) Credit Management (repayment of interest and installments)	Interest rate fluctuations watched & foreign currency holdings managed	
Forex Management (exchange rate management, interest rate fluctuation management)	Country risk to be monitored and measured	
Risk Management (ALM, interest rate, credit, risk, country risk)		
4) Managing other Concurrent risks		

TREASURY - ORGANIZATIONAL CONTROL (INDICATIVE)

- Treasuries have three important divisions called Front Office, Middle Office and Back office. Their roles are discussed in detail elsewhere. The work flow and division is constructed to ensure that there is a cross verification of every single transaction.
- Once the dealer in the front office completes a deal, the slip is handed over to the back office. The back office staff settles the trade only after verifying compliance with internal controls. It obtains independent confirmation of each deal from the counterparty. It also verifies that the rates / prices in the deal slips conform to the market at the time of the deal. Reuter / Bloomberg screens are used for verification.
- The back office is responsible for compliance with risk limits imposed by the management and RBI, as well as for accuracy and objectivity of the transaction details.
- Middle office, maintains the overall risk profile of Treasury and monitors the liquidity and interest rate risks closely, in line with Asset Liability Management (ALM) guidelines. In quite a few banks, the ALM support group is a part of middle office, or works closely with the middle office.

ORGANIZATION OF TREASURY (INDICATIVE)

DIVISION	FUNCTIONS
FRONT OFFICE or THE DEALING ROOM	Headed by a Chief dealer with several dealers focusing on and dealing in different markets, Securities, Clients, Currencies depending on the size & needs of the Bank. Dealers are to function within set limits Exposure Limits: These caps are put in place to protect the bank from credit risk, which, in Treasury, may be of defaulters and counter party. Internal Controls: a) Deal size b) Open position c) Stop-loss.
MIDDLE OFFICE	Exclusively engaged in providing information to top management. Is responsible independent market risk monitoring, measurement, analysis and reporting for the bank's ALCO. Middle Office should independently report to ALCO.
BACK OFFICE	Verifies and confirms all the deals put through by the front office. The critical issue of settlement as per the deal terms and Nostro account issues rest with this section.

RISK CONTROL THROUGH DISCRETIONARY POWERS / EXPOSURE LIMITS

- Exposure limits ensure that the dealers while taking positions do not take more than a predetermined level of exposure against a given party. The idea is to limit the counter-party risk. Exposure limits are put in place against other banks and countries and Corporates etc.
- Delivery vs. Payment option exists in government securities as the banks have both the securities account (SGL) and funding account with RBI, so that debit and credit can take place simultaneously.
- In other deals, Settlement risk continues to exist now (except where RTGS is used).
- In foreign exchange transactions, the gap between Rupee and FC settlement is unavoidable when the FC settlement takes place in a different time zone (e.g. USD in New York). The counterparty risk is bankruptcy, or inability of the counterparty for whatever reason to complete their end of transaction.
- Banks impose limits and review them periodically to ensure that the Counter party and settlement risks are understood and controlled.

INTERNAL – CONTROL: Internal controls are positions limits and stop loss limits. Limits are allocated to the dealers who trade in foreign exchange and securities. **TRADING LIMITS ARE OF THREE KINDS:**

- 1) Limits on deal size
- 2) Limits on open-positions, and
- 3) Stop-loss limits.

NOTE ON STOP LOSS LIMITS:

- The limit is a protection against potential losses on the deal. Stop-loss limits represent the ultimate way of controlling trading operations.
- When the market moves adversely, the open positions will result in loss. Whenever such a situation arises, the human tendency would be to wait until the market turns around, such that the position can be closed with a profit. The stop loss limits prevent the dealer from waiting indefinitely and limit the losses to a level, which is acceptable to the management. If the stop loss limit is USD 10,000, the dealer must close his position (i.e. sell or buy at a loss) when the adverse movement reaches a loss level of USD 1000.
- Normally, stop losses are keyed in to the systems soon as the dealer takes a position such that when the levels are breached, the computers will square off the positions automatically.
- The stop-loss limits are prescribed per deal, per day, per month as also an aggregate loss limit per year. Back office monitors all these limits meticulously.

RISK CONTROL THROUGH USE OF DERIVATIVES:

- A derivative is a financial product, which has been derived from another financial product or commodity. Derivatives are financial contracts which derive their value off a spot price time-series, which is called the "underlying".
- For example, wheat farmers may wish to contract to sell their harvest at a future date to eliminate the risk of a change in prices by that date. The transaction would take place through a forward or futures market. This market is the "derivative market", and the prices on this market would be driven by the spot market price of wheat which is the "underlying".
- The derivatives do not have independent existence without underlying product and market. The underlying assets could be a stock index, a foreign currency, a commodity or an individual stock. The primitive and simplest form of derivatives is the forward contract (also known as the forefather of the derivatives).
- The most common examples of derivative instruments that are used for Treasury risk control are Future / Forwards, options and swaps.
- A separate chapter on derivatives is given later in greater detail.

TREASURY & TRANSFER PRICING

In the banking context, Transfer pricing is a mechanism of price at which resources are allocated within an organization across its various business units. (In banks, business units are branches, Extension counters, departments raising and using resource etc). Banks used terms such as Central office interest or Head Office interest for this process earlier. Branches are paid/ charged (either notionally or actually) at a rate known as "Transfer Price" for the funds raised by them or used by them (depending on whether it is a "Deposit oriented" or a "Sourcing branch" or an "Advances oriented" or "Using" branch). In most of the banks, it is the treasury which determines this rate periodically and administers the same.

TREASURY & ASSETS LIABILITY MANAGEMENT

- Bank branches routinely accept deposits and extend loans without having the macro view of where r these transactions are fitting in the balance sheet of the bank.
- A branch may very happily accept a Rs100 crore deposit for 6 months. The responsibility of deploying these funds in a manner profitable to the bank rests with fund managers in the treasury department.
- Similarly, if a branch clinches a proposal to be a part of the Rs.1800 crores loan that a big corporate is availing it is the treasury managers who have to worry about sources.
- It is reiterated that the above examples are simplistic and are created to sensitize the reader to the macro-view. Banks have other checks and balances to ensure that they do not get in to any major positions without going in to aspects of sources and uses before the deals are made.
- Thus treasury has a big role in ALM management. They are a link between the sources and uses. They monitor the various risks.
- They take trading positions to reduce the mismatches as discussed above and support the ALM.

TREASURY & SLR

- In most banks, funds department, planning department and treasury are integrated to various extents to manage the SLR regulations. Most of the SLR approved securities come in the trading book.
- Thus, altering the positions (buying or selling) based on the in-puts by the MIS from planning department is the responsibility of treasury.
- The figures from across the branch network for the relevant Fridays are of course dynamic.
- The required trades have to be put to ensure SLR compliance.
- SLR approved securities are risk free instruments and carry lesser yields. So, the bank would endeavor not to lock up more funds than necessary in such a portfolio.
- All these aspects are taken by the treasury and the dealers in the front office are given mandated to buy or sell accordingly.

TREASURY & CREDIT PRICING

- Modern day treasuries have to deal with sophisticated customers who want to avail their requirements through foreign currency loans or commercial paper rather than plain vanilla credit in rupee terms.
- Most banks have also introduced options of Fixed or floating interest rates. In these cases, the benchmarks to be watched and the spread rates to be quoted accordingly.
- Banks have teams / sophisticated systems to arrive at the pricing of all these products. Treasury is apart of all such sensitive activities
- When a bank subscribes to the Commercial paper raised by Corporates, once the issue is over, the product of the asset comes in to the trading books managed by the treasury.
- Here, apart from the usual market risks, Counter party risks also exist. The market movements of such products should be monitored and decisions regarding booking profits or stopping losses is to be taken.

CLASSIFICATION OF TREASURY INVESTMENTS

Treasury investments are categorized into government securities, other approved securities, shares, debentures and bonds, commercial papers, and mutual funds. In line with international best practices, the investments are classified in to the following categories:

- **Held to Maturity:** The securities contracted basically on account of long term investment relationships or for steady income and statutory obligations are classified under Held-To-Maturity (HTM) category.
- **Held for Trading:** The investments made to earn profits from the short-term price movements. These Securities are sold in 90 days (deleasance period).
- **Available for Sale:** The securities, which do not fall under the above two categories, are classified as Available for-Sale. Shifting of securities from HFT to AFS is normally permitted only under exceptional circumstances such as tight liquidity conditions, extreme volatility or exceptional market conditions and only with the approval of Board of Directors / ALCO / Investment Committee. These assets in the Trading Book are held for generating profit on differential interests/yields. Ideally, the securities held in the Trading Book are marked-to-market on a daily basis.

Marking to Market: Securities under HFT & AFS must be marked-to-market periodically as per bank / RBI guidelines.

Investment Fluctuation Reserve: Maintained to guard against any possible reversal of interest rate environment or unexpected developments. It is prudent to transfer maximum amount of gains realized to sale of securities to the IFR. Banks can build IFR up to 10 % of the portfolio under HFT and AFS with the approval of the Board of Directors.

TREASURY FUNCTIONS - FUNDING AND REGULATORY ASPECTS

- The treasury has the important function of managing the funds that flow through the bank in terms of the statutory requirements and banking regulations.
- In India, the 2 most important functions are maintaining the Cash Reserve Ratio and the Statutory Liquidity Ratio

	PARTICULARS	CASH RESERVE RATIO (CRR)	STATUTORY LIQUIDITY RATIO (SLR)
1	Concept and Objectives	A quantitative tool of Monetary policy to regulate money supply in the economy. RBI varies the CRR & regulates the lendable funds of the commercial banks.	SLR is a quantitative tool of Monetary policy to regulate the money supply in the economy by controlling funds available with commercial banks for lending activities.
2	Provision	Section 42(1) of Reserve Bank Act -1934	Section 24 (2-A) of BR Act - 1949.
3	Limits	Minimum-Maximum not prescribed	Minimum Nil- and maximum 40%
4	Current rates	4.00%	As per the time frame, the Statutory Liquidity Ratio of scheduled commercial banks reduced by 25 basis points to 21.25% as on 2 nd April 2016. Further, SLR to be reduced by 25 basis points on 9 th July 2016, 25 basis points on 1 st Oct 2016, and another 25 basis points on 1 st Jan 2017 to reach to 20.5%.

5	Applicable on	Net Demand and Time Liabilities (NDTL) in India on fortnightly basis	Total Demand & Time Liabilities in India as on last Friday of second preceding fortnight.
6	How maintained	RBI	To be kept in approved Securities within India.
7	Type of Investment	In cash only	In Cash, Gold or Unencumbered approved securities defined u/s 5(a) & 25 (a) of BR Act.
8	Requirements	Fortnightly Basis: Saturday to following Friday - 14 days. Daily Basis: RBI has reduced the minimum daily maintenance of the Cash Reserve Ratio from 95% of the requirement to 90% effective from the fortnight beginning April 16, 2016.	Last Friday of second preceding fortnight.
9	Interest	No Interest on CRR balances now by RBI	Return depends upon the investment made
10	Penalties	3% PA above bank rate on the day of shortfall, increased to a rate of 5% PA above the bank rate for succeeding days of default.	3% PA above bank rate on the day of shortfall and increased to a rate of 5% PA above the bank rate for next succeeding working day and collected for the actual days of default.

CALCULATION OF DTL / NDTL

<p>Liabilities not included for DTL/NDTL computation</p> <ul style="list-style-type: none"> ● Paid up capital, reserves, credit balance in the P&L A/C, refinance from RBI, Exim Bank, NABARD, etc. ● Amount of provision for excess income tax, Amount from DIGGC pending adjustments / ECGC, insurance company on ad-hoc settlement of claims, Court Receiver. ● Liabilities under Bankers Acceptance Facility ● DRDA subsidy of Rs.10,000/- kept in Subsidy Reserve Fund account in the name of Self Help Groups, Subsidy released by NABARD under Investment Subsidy Scheme for Construction/Renovation/Expansion of Rural Godowns. ● Net unrealized gain/loss arising from derivatives transaction under trading portfolio. ● Income flows received in advance such as annual fees and other charges which are not refundable. ● Bill rediscounted by a bank with eligible financial institutions as approved by RBI. ● Provision not being a specific liability arising from contracting additional liability and created from profit and loss account. ● Inter-bank term deposits / term borrowing liabilities of original maturities of 15 days & above and up to one year. This concession is not available for maintenance of SLR ● Inter-bank assets of term deposits and term lending of original maturity of 15 days and above and up to one year. This concession is not available for maintenance of SLR. ● Income flows received in advance such as annual fees and other charges which are not refundable. 	<p>Exempted Categories (CRR)</p> <ul style="list-style-type: none"> ● Liabilities to banking system in India as computed under Clause (d) of the Explanation to section 42(1) of the RBI Act, 1934. ● Credit balances in ACU (US\$) Accounts. ● Demand and Time Liabilities in respect of their Offshore Banking Units (OBU).
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RBI - LIQUIDITY ADJUSTMENT FACILITY

- Treasuries participate in the LAF to manage the liquidity and funding requirements.
- LAF is a mechanism used by RBI to inject or absorb liquidity from domestic markets
- Repo/Reverse Repo under LAF are operated by RBI for "overnight" or short term periods such as up to seven days as decided by RBI from time to time.
- RBI announces a calendar for conduct of these transactions well in advance

The Scheme Operates as under:

- Reverse Repo auctions (for absorption of liquidity) and
- Repo auctions (for injection of liquidity).
- The above instruments are conducted on a daily basis.
- **Minimum Bid Size:** Minimum Rs.5 crore and in multiples of Rs. 5 crore thereafter.
- **Rate of Interest:** Both the reverse repo and repo operations will be conducted by RBI at a fixed rate. The reverse repo rate will be fixed by the Reserve Bank from time to time. The repo rate will continue to be linked to the reverse repo rate through a spread as mark up over the reverse repo rate.

MECHANICS OF LAF OPERATIONS

- LAF is conducted through bids which are submitted electronically in the Negotiated Dealing System (NDS).
- The Reverse Repo / Repo will be conducted as "Hold- in- Custody" transaction, where the RBI will act as a custodian for the participants and hold the securities on their behalf in the Reverse Repo / Repo Constituents SGL Accounts.
- On acceptance of bid in respect of Reverse Repos, the tenderer's RRC SGL Account will be credited with the required quantum of securities and Current Account will be debited for the Reverse repo amount. The transaction will be reversed in the second leg. In the case of Repos, on acceptance of bid, the tenderer's RC SGL Account will be debited with the required quantum of securities and Current Account will be credited with the Repo amount. The transactions will be reversed in the second leg.
- Pricing of all securities including Treasury Bills will be at face value for Reverse Repo / Repo operations
- Since the securities available in RC SGL Account are meant only for availing liquidity from Reserve Bank, the system will automatically transfer the securities once the allotment is complete.

Eligible Securities: Reverse Repos and Repos will be undertaken in all SLR-eligible transferable Government of India dated Securities / Treasury Bills.

Margin Requirement: A margin will be uniformly applied in respect of the above eligible securities. The amount of securities offered or tendered on acceptance of a bid for Rs.100 will be Rs.105 in terms of face value.

Settlement of Transactions: The settlement of transactions in the auction will take place on the same day. As the second leg of all LAF transactions are automatically generated at the 'begin of day', participants must ensure sufficient balance in their current account in case of reversal of Repo.

Periodicity of LAF: Currently RBI conducts daily Repo transactions with a second Repo only on reporting Fridays. RBI gives out the calendar for conduct of the Reverse repo periodically.

Rates: RBI announces the Repo / Reverse rates periodically. Current rates are Repo 6.5% and Reverse Repo 6%. The difference between these two rates is referred to as the "Repo corridor". Under normal market conditions, "Call rates move within the Repo corridor".

MAIN TYPES OF MARKETS		
CAPITAL MARKET	FOREIGN EXCHANGE MARKET	MONEY MARKET
<p>Capital Market: Market for financial assets with long or indefinite maturity.</p> <p>Can be classified as:</p> <ol style="list-style-type: none"> 1) Corporate securities Market 2) Govt. or Gilt securities market (Central, State, quasi Govt. securities) <p>Can also be classified as :</p> <ol style="list-style-type: none"> a) Primary Market: New issues b) Secondary Market: Consists of SE & OTC exchanges governed by SEBI. <p>Capital Market Instruments:</p> <ul style="list-style-type: none"> > Equity / Preference shares > Company Fixed Deposits > Debentures / Warrants / Floating rate bonds > IDRS / ADRS / GDRS > Mutual fund units 	<p>Foreign Exchange Markets are global, 24 X7 markets in which Banks, Financial Institutions, Central Banks and merchants participate. Speculators are an integral part of FX markets (just as in equity markets)</p> <p>Apart from Foreign currencies, derivative instruments such as Futures and Options etc are traded in FX markets. Some of these derivatives are traded on the stock exchanges also. In India, Foreign currency futures in USD-INR were launched initially and now Euro-INR, GBP-INR and Jap Yen-INR are also permitted.</p> <p>In India, only Authorized Persons (as defined in FEMA) are allowed to deal in FX. The public can deal with APs for all their FX needs. Dealing rooms in each Bank, will quote rates, consolidate the FX received and manage positions as per the respective Bank's Board approved policies.</p>	<p>The Money market is a place for deploying and trading in money and short term highly liquid financial assets that are close substitutes for money.</p> <p>(a) Money Market Instruments</p> <p>(b) Treasury Bills</p> <p>(c) Commercial paper</p> <p>(d) Certificate of Deposit</p> <p>(e) Call Money / Notice Money</p>
IMPORTANT CAPITAL MARKET RATIOS		
Return on Equity (ROE)	Net Profit after Tax - Pref. Dividend / equity	Return on Equity can be compared with the opportunity cost of capital
Return on Asset (ROA)	PBIT - Tax / Avg. Total Assets	ROA enables the investor to compare his return on his assets
Earning per share (EPS)	Profit after Tax / No. of outstanding shares	Measures the profitability of the investment. Used for comparison with similar investments.
Price Earning (PE) ratio	Share price / Earning per share	A market indicator which is used for measuring valuations.
Dividend Yield	Dividend per share / Share price	Dividend yield indicates the returns total the equity investors by way of dividend
Book value per Share	Total equity / No of O/S shares	

IMPORTANT MONEY MARKET INSTRUMENTS – TABLE - 01

TREASURY BILLS	COMMERCIAL PAPER	CERTIFICATE OF DEPOSITS
<p>Treasury Bills represent Government borrowings issued by RBI through auctions at face value of Rs 1 lac or multiples thereof at varying discount rate depending upon the bids.</p> <p>Who is eligible to invest? Any person, resident in India, including individuals, firms, companies, corporate bodies, etc.</p> <p>Important features:</p> <ul style="list-style-type: none"> ● Tenor of the bills: 91 days, 182 & 364 days, in Eligible SLR securities. ● DFHI is the market maker & provides (daily) two-way quotes assuring liquidity. ● Repurchase option/ready forward transactions are allowed ● TB is a most important instrument for hedging against volatility in call money market. 	<p>Commercial Paper is a privately placed / unsecured money market instrument issued as a promissory note.</p> <p>Who can issue Commercial Paper (CP)? Corporates, PDs and FIs (under the umbrella limit fixed by the RBI). A corporate would be eligible to issue CP provided:</p> <ul style="list-style-type: none"> ● Tangible net worth, as per latest audited balance sheet is not less than Rs.4 crore. ● Has sanctioned working capital limits from banks or FIs. ● Standard Asset classification by the lending institutions. <p>Rating Requirement: Min. credit rating P2 of CRISIL / equivalent from RBI approved CRAs.</p> <p>Maturity: Minimum of 7 days and a maximum up to one year. Maturity date should be within validity of the credit rating.</p> <p>Denomination: Rs.5 lakh or multiples of Rs.5 lakh</p> <p>Limits and the Amount of Issue of CP:</p> <ul style="list-style-type: none"> ● CP can be issued as a "stand alone" product. ● Banks and FIs have the flexibility to fix working capital limits duly taking into account the resource pattern of companies' financing including CPs. ● Total amount should be raised within a period of two weeks from date of issue opening. ● CP may be issued on a single date or in parts on different dates provided that in the latter case, each CP has the same maturity date. Every issue of CP, including renewal, should be treated as a fresh issue 	<p>Certificate of Deposit (CDs) is a negotiable money market instrument issued in dematerialized form or as a Usance Promissory Note, against funds deposited at a bank / other eligible institutions for a specified time period.</p> <p>Who can issue? i) SCBs (except RRBs / LAB) (ii) Select Financial Institutions.</p> <p>Aggregate Amount</p> <ul style="list-style-type: none"> ● Banks - depending on their requirements. ● FI- within the overall limit fixed by RBI not to exceed 100 % of NoF. <p>Minimum Size/ Denominations Minimum - Rs.1 lakh, in multiples of Rs. 1 lakh thereafter.</p> <p>Who can Subscribe</p> <ul style="list-style-type: none"> ● Individuals, corporations, Cos, funds, associations, etc. ● NRIs on non-repatriable basis. <p>Maturity: Banks -Min 7 days, Max1 year.</p> <p>Reserve Requirements: CRR-SLR applicable</p> <p>Date of Maturity: No grace period. If the maturity date is a holiday, payment to be made on the immediate preceding working day.</p> <p>Loan facility: No loan can be granted against a certificate of Deposit.</p>

MONEY MARKET INSTRUMENTS – TABLE - 2

PARTICULARS	REPURCHASE OPTIONS (REPO) AND REVERSE REPO	CALL MONEY /SHORT NOTICE
DEFINITION	In India, these are Liquidity Adjustment Facility (LAF) providing tools used by RBI. Repo is an instrument meant for injecting the funds required and Reverse Repo for absorbing the excess liquidity of the Banks.	A short-term loan raising method used by Commercial Banks for maintaining their statutory obligations.
NATURE	Short-term Borrowings and Investments	Short-term Borrowings
PURPOSE	To make available funds to needy Banks by Repo & absorb surplus funds from Banks (Reverse Repo)	Raising of funds by commercial banks from other commercial banks.
ISSUER/CREDITOR	RBI	Banks
MINIMUM AMOUNT	Rs. 5 crores & multiple of Rs.5 crores	No Limit
TENOR	1 to 14 days	1 to 14 days
TIME	Bids held everyday except Saturdays and holidays before 10.30 a.m	As per Call Money centres timings

PARTICIPANTS	RBI / Banks	Banks, Primary Dealers, FIs, MFs
MODE	Auctions held by RBI	Arrangements by banks at Call Money Centres
RATE OF INTEREST	Fixed Rate declared by RBI from time to time. Repo 6.5%, Reverse Repo 6% (as on 1 st Sept. 2016)	Market Determined
SECURITY	Against RBI Approved Securities (Mainly Gold and Govt. Securities)	Against Call Money Centres' Acceptable Securities
REPAYMENT	Date Prior Fixed	Not Fixed
BORROWINGS LIMIT	No Limit	2% of Aggregate Deposits or 100% of owned funds which ever is higher. 125% of owned funds on a day during the fortnight is allowed to banks.
LIMIT FOR LENDING	No Limit	25% of owned funds on a fortnight average base. Banks permitted to lend 50% of their owned funds in a fortnight.

LATEST DEVELOPMENT - REPO IN CORPORATE DEBT SECURITIES

- Ready Forwards Contracts or Repos are allowed in corporate debt securities from 1-03-2010 in OTC markets.
- Only listed corporate debt securities rated 'AA' or above held by the repo seller, in demat form are eligible
- 'Corporate Debt Security' means Non-convertible debt securities, including debentures, bonds and such other securities of a Company. However Corporate Repo is not permissible in Commercial paper, Security Receipts and Securitized Debt instruments.
- Tenor: Minimum -One day, Maximum-One year.
- Trades should be reported within 15 minutes of the trade on the FIMMDA reporting platform and to any of the clearing houses of the exchanges for clearing and settlement.
- All trades must settle either on a T+1 basis or a T+2 bases under Delivery versus Payment (DvP) framework in the same manner as outright OTC trades in corporate debt securities.
- On the date of reversal of repo trades, the clearing houses will compute the obligations of the parties and facilitate settlement on DvP basis.
- The security acquired under repo can not be sold by the repo buyer.
- A haircut of 25% or higher is applicable on the market value of the corporate debt security prevailing on the date of trade of 1st leg.

TREASURY RISK MANAGEMENT

Risk Management is a critical function of the Treasury. As discussed before, Risk Management functions are in-built in the organizational structure of the Treasury. Deal and Dealer limits, Bifurcation of the Dealing room in to three sections are tools and methods of Risk Management. These however, focus on the Operational or human part of the Risk Management. Dealers however take positions in derivative markets to hedge the risks that a Treasury faces in the normal course of business. The Treasury also sells some of these products to the customers (exporters/importers/NREs etc) for covering their risks. Once a customer gets in these positions, the exchange of interest risk is passed on to the Treasury (Bank) which in turn has to hedge the risk in the market.

FOREIGN EXCHANGE DERIVATIVES

The primary purpose of the derivative instruments, is not to borrow or lend funds but to transfer price risks associated with fluctuation in asset values. The derivatives provide three important economic functions viz.

- a) Risk Management b) Price Discovery c) Transactional Efficiency.

TYPES OF DERIVATIVES:

The commonly used derivatives are as follows:

- a) Forward contracts b) Futures c) Options d) Swaps

FORWARD CONTRACTS:

- Authorized dealers (Banks) have been permitted under FEMA to enter in to Forward contracts for sale or purchase of Foreign Currency with their customers who are exposed to foreign currency risks arising out of their normal transactions which are permitted under current regulations.
- The mechanism of Forward Contract is very simple. On being approached by a customer for a forward cover, the AD would satisfy himself that there exists a genuine exposure and quote a rate.
- For example, if an Importer who is required to pay an inward bill maturing after one month may approach his banker for a forward cover. This is because the importer is either risk averse or feels that the rupee / dollar rate would move against him in the intervening month.
- The bank would then quote a forward rate. If the customer is satisfied with the quotation, he would sign the contract which would bind him to the rate and the date. Contract documents are signed and charges if any are collected.

If the customer fails to perform his part of the contract, the contract is cancelled and Swap charges are recovered where necessary. Similar contracts can be entered in to different customers based on their requirements.

In other words-subject to RBI / FEDAI guidelines, banks enter in to contracts to sell or buy specified amount of foreign currency on specified future dates.

- Forward Contracts are either Forward purchase contracts or Forward Sale contracts depending on the nature of the transaction.
- Exporters, NRIs, EEFC holders and so on would enter in to Forward purchase contracts.
- Importers, Constituents who have to make payments under foreign currency loans and so on would enter in to Forward sale contracts.
- It is again emphasized that the word purchase and Sale are used from the point of view of the Bank and not the customer.
- Forward Contracts in India are governed by RBI guidelines and FEDAI rules. RBI has permitted all entities having Exchange risk exposures permission to enter in to Forward contracts subject to rules and limits.

FUTURE CONTRACTS:

A future contract is defined as a commitment to buy or sell at a specified future settlement date and a designated amount of commodity or a financial asset. It is a legally binding contract by two parties to make / take delivery of commodity at certain point of time in the future.

MAIN FEATURES OF FUTURES CONTRACTS	FUTURES MARKETS	CURRENCY FUTURE CONTRACTS IN INDIA
1) Futures are traded on Security Exchanges. 2) Futures contracts have standard contract terms. 3) Futures exchanges are associated with clearing houses. 4) Futures' trading requires margin payments and daily settlement. 5) Futures positions can be exited easily 6) Futures markets are regulated by regulatory authorities (SEBI in India)	1) High level counter trading 2) Physical exchange rare. 3) Very high degree of leverage as margin based trading takes place. 4) Low default levels	Only Resident Indians may purchase or sell currency futures to hedge an exposure to foreign exchange rate risk or otherwise. (In other words, NRIs and FIs etc cannot participate in Currency Futures trading). 1) Recognized stock exchanges offer currency futures contracts in the currency pairs of USD-INR, Euro-INR, JPY-INR and GBP-INR. 2) The size of each contract should be in units of FX 1000 for all currencies and 100,000 for Japanese yen. 3) The contracts should be quoted & settled in Indian Rupees. 4) The maturity of the contracts should not exceed 12 months. 5) The settlement price should be the Reserve Bank's exchange (Reference) Rate on the last trading day.

DIFFERENCE BETWEEN FUTURES & FORWARD CONTRACTS:

Futures and forwards contracts are very similar to each other in terms of contractual obligations. However there are certain distinguishing features which are as follows:

FUTURES	FORWARD CONTRACTS
a) Traded on organized stock exchanges. b) Issued in standard forms and do not have flexibility regarding quantity or quality (of commodity to be delivered) c) Regulated by SEBI, RBI and other agencies.	a) Over the Counter products. b) Offer flexibility and are custom made. c) Indian banks entering in to forward contracts have to follow RBI guidelines.

CONCEPT OF OPTIONS

An option is a contract conveying the right but not the obligation to buy or sell a specified financial instrument at a fixed price before or at a certain future date.

THE OPTIONS BUYER	THE OPTION SELLER	EXERCISE PRICE OR STRIKE PRICE
The option buyer is also called as Holder/Owner. The option buyer pays a premium and purchases the option which confers a right to buy or sell the currency (as the case may be) at an agreed price in exchange for another currency at a future date.	Also called option Writer, he deals in Options. The Writer will sell an Option (whether it is a Buy option or a Sell option as per the counterparty's requirements) for a fee called Premium. He has to perform his commitment only if the Holder chooses to exercise the option.	The price at which the option buyer has the contractual rights to buy or sell the currency is called the exercise price or strike price.

TYPES OF OPTIONS

CLASSIFICATION BASED ON UNDERLYING TRANSACTION	CLASSIFICATION BASED ON TIME OF EXECUTION
<p>Call Option: The owner / buyer has the <u>right to purchase</u> and the writer / seller has the obligation to sell specified quantity of the underlying at a specified price prior to the option expiry date.</p> <p>Put Option: The owner or buyer has the right to sell and the Option writer / seller has obligation to buy specified quantity of the underlying at a specified price prior to the options expiry date.</p>	<p>American option: Option holder can exercise the option any time during the option term.</p> <p>European Option: Option holder can exercise the option only at the end of the Option period.</p> <p>In India, earlier only European Options were permitted. However, RBI has since permitted American options also.</p>
1) American Call Option: Option to buy and can be exercised any time during the option term	2) American put option: Option to sell and can be exercised any time during the option term
3) European Call option : Option to buy and can be exercised only at the end of the option period	4) European Put option: Option to sell and can be exercised only at the end of the option period

IN-THE-MONEY OPTION	AT-THE-MONEY OPTION	OUT-OF-THE-MONEY OPTION
An in-the-money (ITM) option is an option that would lead to a positive cash flow to the holder if it were exercised immediately. A call option on the currency (say USD) is said to be in-the-money when the current value of currency (say USD) stands at a level higher than the strike price (i.e. spot price > strike price). If the value of currency is much higher than the strike price, the call is said to be deep ITM. On the other hand, a put option on currency is said to be ITM if the value of currency is below the strike price.	An at-the-money (ATM) option is an option that would lead to zero cash flow if it were exercised immediately. An option on the currency (say USD) is at-the-money when the current value of currency in the markets equals the strike price (i.e. spot price = strike price).	An out-of-the-money (OTM) option is an option that would lead to a negative cash flow if it was exercised immediately. A call option on the currency (say USD) is said to be out-of-the-money when the current or market value of currency stands at a level which is less than the strike price (i.e. spot price < strike price). If the currency is much lower than the strike price, the call is said to be deep OTM. On the other hand, a put option on currency is OTM if the value of currency is above the strike price.

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SWAP & COVER DEALS: Swap literally means exchange of commodities. In banking, Swap in a foreign exchange market refers to simultaneous sale and purchase of currencies.

CURRENCY SWAPS: Exchange of predetermined streams of payments in different currencies on pre-determined dates, at pre-determined exchange rates. Here there are two simultaneous deals for the same amount as follows

- One at the spot and other for future date or
- Both for future dates.

contracts

In other words, in Swap Deals, there are two different transaction / maturity dates for the same amount. Some examples are as follows:

- A transaction where bank buys 1 lakh USD spot (against rupees) and sells 1 lakh USD one month forward.
- A transaction where bank sells 1 lakh USD spot and buys 1 lakh USD one month forward.
- A transaction where bank buys 1 lakh USD one month forward and sells 2 months forward.
- A transaction where bank sells 1 lakh USD one month forward and buys 2 months forward.

financial

WHY SWAP DEALS?

- Banks have to meet obligations arising out of merchant transactions with customers such as Forward contracts and normal Sale / Purchases where there is a time lag.
- They also have to manage their Foreign Currency holdings (FCNR balances).
- They may go for swap operations for short-term interest arbitrage. Under such operations, they buy one currency from a place where interest is low and sell at some other market to buy another currency where interest is high. They also cover their cross currency future maturity deals by swap operations.
- The most compelling reason for entering in to Swap transaction is avoidance of exchange risk on their open positions.
- The Swap deals are made for future coverings. Therefore, it is the future points or margins that affect the swap rates.

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MECHANISM OF SWAP: Every swap operation has two legs / aspects:

a) Buying

b) Selling

The difference between the buying rates and selling rates for the swap operation is known as swap differential. One point that should be kept in mind that the bank undertakes a Swap Deal only on gain. On the other hand, while covering its position by outright sale or purchase, there could be a loss. Banks cover the mismatch between the buying and selling operation by swap deals.

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INTEREST RATE SWAPS:

- Here an exchange of different streams of interest structures occurs. There would be no exchange of principle amounts under interest rate swap, and only the interest streams would be exchanged.
- Interest rate swaps are further classified as Coupon swaps, where fixed interest rate are swapped with floating interest rates and Index or Basis swaps, where floating rates based on one benchmark is exchanged with floating rates based on another benchmark. Cross currency interest rate swap is a combination of currency swap and an interest rate swap, where streams of currencies as also interest rate structures are swapped.

EXCHANGE TRADED INTEREST RATE DERIVATIVES: Interest rate risk the world over is managed through the process of hedging with derivatives. Instruments like futures and options are tools through which investors can manage volatility better and provide insurance to investors against interest rate fluctuations. Following recommendations of Working Group on Rupee Derivatives (Chairman Sh. Jaspal Bindra), SEBI has decided to introduce anonymous order driven trading system for trading in IRDs on Stock Exchange, Mumbai (BSE) and National Stock Exchange (NSE), for following products:

- Ten-year long bond futures,
- Futures on notional T-Bills with a maturity of 91 days.
- Options on notional long bond and notional Treasury Bills (T-Bills).

PARTICIPANTS WHO CAN UNDERTAKE THE TRANSACTIONS: With a view to enabling regulated entities to manage their exposure to interest rate risks, RBI has decided to allow Scheduled Commercial Banks, Primary Dealers (PDs) and specified All India Financial Institutions (AIFIs) to deal in IRDs in a phased manner.

TYPE OF INSTRUMENTS: In this first phase, the above participants can transact only in interest rate futures on national bonds and T-Bills for the limited purpose of hedging the risk in their underlying investment portfolio. Allowing transactions in a wider range of products, as also market making, will be considered in the next stage based on the experience gained.

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BALANCE SHEET MANAGEMENT (MODULE -D)

UNIT - 20

ASSET LIABILITY MANAGEMENT

What is ALM? - ALM is the management of Assets and Liabilities in the balance sheet in such a way that the net earning from interest is maximized and Liquidity Risk and Interest Rate risks are minimized. It is mandatory now for banks since April 01, 1999. RBI has issued guidelines on ALM to banks.

Definition of ALM: Asset Liability Management (ALM) is the act of planning, acquiring and directing the flow of funds through an organisation. The ultimate objective of this process is to generate adequate / stable earnings and to steadily build an organization's equity over time, while taking reasonable and measured business risks.

Objectives of ALM: The objectives of ALM is two fold: ensuring profitability and ensuring liquidity. Mismatches in Assets / Liabilities lead to banks incurring a cost for meeting their contractual obligations. This will affect their profitability. ALM strives to minimize the adverse impact.

Asset Liability Committee: A top management committee to oversee implementation of ALM, to be headed by CMD or ED or CEO.

MEASURING EFFECTIVENESS OF ALM: The parameters that are impacted due to Asset Liability Mismatches and are used as a measure of the effectiveness and efficiency of ALM in are:

a) Net Interest Income (NII) b) Net Interest Margin (NIM) c) Economic Equity Ratio

a) **Net Interest Income (NII):** The impact of volatility on the short-term profit is measured by Net Interest Income. To stabilize short-term profits; banks have to minimize fluctuation in the NII. $\text{Net Interest Income} = \text{Interest Income} - \text{Interest Expenses}$

b) **Net Interest Margin (NIM):** Net Interest Margin is defined as net interest income divided by average total assets.

$\text{Net Interest Margin (NIM)} = \frac{\text{Net Interest Income}}{\text{Average total Assets}}$

Net Interest Margin can be viewed as the 'Spread' on earning assets.

c) **Economic Equity Ratio:** The ratio of the shareholders funds to the total assets measures the shifts in the ratio of owned funds to total funds. This fact assesses the sustenance capacity of the bank.

SIGNIFICANCE OF ASSET LIABILITY MANAGEMENT: A financial institution may have sufficient assets to satisfy its liabilities. However, if there is a mismatch like for example if 60% of the liabilities mature within 1 year but only 5% of the assets mature within the same period, the institution may become temporarily insolvent due to a severe liquidity crisis. Alternatively, it may have to fund itself at Market costs which will impact the profitability (NIM). Some of the reasons for growing significance of Asset Liability Management are:

- 1) Volatility
- 2) Product Innovation
- 3) Regulatory Environment
- 4) Management awareness of significance of ALM

ALM METHODOLOGY: Indian banks were issued guidelines from RBI for ALM in 1999. There is no change to those guidelines. Even though RBI subsequently issued draft amendments to these guidelines once in April 2006 and again in July 2007, they remain draft guidelines only. As per RBI guidelines, banks have to adopt the Flow Approach and construct Maturity Ladders for identifying gaps for Liquidity management and Interest rate risk management. These guidelines are discussed in detail under the chapters devoted to the respective Risks.

Benefits of ALM: Enables bank managements to take informed business decisions, manage their liquidity and Interest rate structures better leading to improved profitability.

Conclusion: Asset Liability Management is the continuous process of acquiring / deploying funds in a planned manner such that the organization is not only liquid and able to meet the demand of the investors but also generates steady and adequate margins all the time. ALM departments are functional in all banks under the guidance of ALCO. ALCO has powers to mix and match of assets and liabilities and can recommend winding-up activities, which do not fit business ALM strategy. ALM demonstrates to the market that the bank is safe and capable of repaying its borrowings.

SIGNIFICANCE OF ALM FOR BANKS IN INDIA

- Earlier in India, RBI administered interest rates. Pricing products was not an important exercise.
- In today's deregulated environment, pricing is a critical function.
- Competition amongst Banks is forcing them to quote very fine rates leading to very narrow spreads.
- Liquidity is another critical area. Now, no bank can afford to have mismatched Assets and Liabilities, which would result in their having to borrow at market costs to satisfy their obligations leading to reduced Net interest income.
- Reduction in Net interest income will affect the Net interest margin.
- ALM is therefore essential for the management of the Net Interest Margin (NIM), and is implemented through managing the Assets and Liability portfolios of the bank.
- The primary goal therefore is the control of net interest margins on an on-going basis through ALM.

CURRENCY RISK MANAGEMENT:

- Managing Currency Risk is one more dimension of Asset- Liability Management.
- Mismatched currency position besides exposing the balance sheet to movements in exchange rate also exposes it to country risk and settlement risk.
- The simplest way is to avoid mismatches. Banks have been given the discretion to set up overnight limits linked to maintenance of Capital to Risk-Weighted Assets Ratio (CRAR) of 8% (9% in India) of open position limit.
- Presently, the banks are also free to set gap limits with RBI's approval but are required to adopt Value at Risk (VaR) approach to measure the risk associated with forward exposures. Thus, the open position limits together with the gap limits form the risk management approach to Forex operations.

Scope of ALM functions can be defined as:

- Liquidity Risk Management
- Management of Market Risk
- Funding in Capital Planning
- Trading Risk Management

RBI - GUIDELINES ON ALM

RBI has given broad guidelines in respect of interest rate and liquidity risks management systems in banks, which form part of the Asset-Liability Management (ALM) function. The ALM process must rest on three pillars:

I-Pillar: ALM Information Systems	II Pillar: ALM Organization	III Pillar: ALM Process
<p>Management Information Systems Information availability, accuracy, adequacy and expediency ALM has to be supported by clearly specifying the risk policies and tolerance limits. Information is the key to the ALM process. Hence, over a period of time and with the help of computers, banks should put in place an adequate MIS system.</p>	<p>Structure and responsibilities. Level of top management involvement. Asset Liability Committee (ALCO): A top management committee to oversee implementation of ALM, to be headed by CMD or ED or CEO only. ALCO is responsible for balance sheet planning from risk-return perspective, strategic management of interest rate and liquidity risks. ALM departments are functional in all banks under the guidance of ALCO. ALCO has powers to mix and match of assets and liabilities and can recommend winding up activities, which do not fit business / ALM strategy.</p>	<ul style="list-style-type: none"> ● Risk parameters ● Risk identification ● Risk measurement ● Risk management ● Risk policies & tolerance levels.

The guidelines given in this RBI note mainly address Liquidity and Interest Rate risks which are discussed in detail later.

COMPONENTS OF A BANK'S BALANCE SHEET

To study assets and Liability Management in banks, it is essential to understand the balance sheet of the bank first. Like the balance sheet of any firm, the bank's balance sheet also comprises of sources and uses of funds.

SOURCES = Liabilities + Net worth USES = Assets (Loans + Investments + Other Assets)

LIABILITIES	ASSETS
Capital	Cash & Balances with RBI.
Reserves & Surplus: Statutory reserves, Capital reserves, Share premium, revenue & other reserves, balance in P & L a/c.	Balances with Banks, Money lent at Call & Short Notice.
Deposits: Demand, time, call, notice deposits etc)	Investments: Government Securities, shares / debentures / in subsidiaries etc.
Borrowings: Refinance and Borrowings from RBI & Exim bank and other such bodies.	Advances (Loans, Cash Credit, Bills purchased / discounted etc)
Other Liabilities & Provisions: Bills payable, DD / TT / BC, Inter-branch adjustments, Interest accrued, IT provisions, Interest tax, TDS etc.	Fixed Assets: Immoveable property, Furniture, Fixture.
Contingent liabilities: LC, LG, Claims against the bank not acknowledged etc.	Other Assets: Inter-office adjustments, Tax paid in Advance, Stationery, Stamps, Non-banking assets.

BANK'S PROFIT AND LOSS ACCOUNT

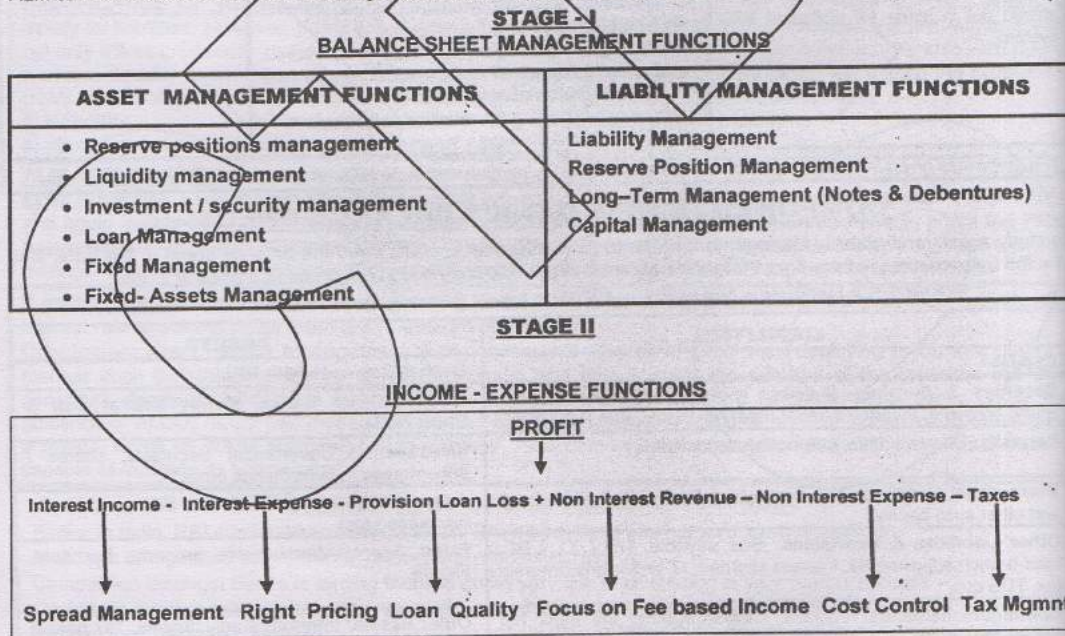
A Bank's profit and loss account has following components:

- Income: Interest income + Other income, and
- Expenses: Interest expended + Operating expenses + Provisions + Contingencies.

INCOME		EXPENSES	
INTEREST INCOME		INTEREST EXPENSES	
▪ Income on investments.		▪ Interest on deposits.	
▪ Commission, exchange and brokerage.		▪ Interest on RBI / Inter-bank borrowings.	
		▪ Others- Discount / Interest on all other borrowings.	
▪ Interest / discount on advances / bills.		OPERATING EXPENSES	
▪ Income on Investments.		▪ Payments to and provisions for employees.	
▪ Interest on balances with RBI and Interbank funds.		▪ Rent, Taxes, Printing and stationery.	
▪ Miscellaneous income.		▪ Depreciation on bank's property.	
OTHER INCOME		▪ Auditors fees and expenses.	
• Commission, Exchange & Brokerage.		▪ Postage, Insurance, Rent, taxes and lighting.	
• Profit on sale of Investments, exchange transaction		▪ Advertisement and publicity.	
• Income earned by way of dividends.		▪ Director's fees allowance and expenses.	
• Profit on revaluation of Investments.		▪ Law Charges.	
• Income earned from subsidiaries etc.		▪ Repairs and Maintenance.	
Misc Income		▪ Other expenditure.	

ALM & BALANCE SHEET MANAGEMENT

ALM can be viewed in terms of two-stage approach to balance sheet financial management as follows:



The diagram illustrates how all the components that affect the profits have to be managed consciously and conclusively. Slippage in any one will affect the entire Profit scenario. Banks are required to formulate strategies and policies specific to each of the above mentioned components in the Income-Expense statement to achieve the objectives of Assets Liability management.

UNIT - 21 & 22

BANKING REGULATION & THE BASEL - II

- Bankers have traditionally been managing the various risks in their business through collateralizing their exposures in various ways (property / financial security / third party guarantee/insurances and so on).
- The inadequacy of existing measures was felt after a notorious incident named as "Herstatt incident".
- The "Herstatt" incident led Central Bankers from major countries to formulating and ensuring minimum standards for participants in International financial markets.

HERSTATT INCIDENT:

- In 1974, an incident took place which shook the complacent bankers in to action which finally led to international best practices in risk identification and management.
- Bankhaus Herstatt was a small bank in Cologne, Germany active in the foreign exchange market.
- On 26th June 1974, Herstatt Bank was suddenly closed at the end of the business day in Germany by its banking supervisor. This was at 10.30 a.m. at New York time.
- Prior to the announcement of closure, several counterparties had entered in to contracts with Herstatt and given it Deutsche (German) marks in exchange for US dollars to be delivered to the debit of its account with a Correspondent bank in New York.
- Once the news of the closure was out, Herstatt's New York correspondent stopped all outgoing dollar payments from its account.

CONSEQUENCES OF HERSTATT INCIDENT:

- The action of the Central bank in Germany left all the counterparties exposed to "Settlement" and "Liquidity" risks up to the amount of deliveries made by them.
- Other parties to lose were Banks that had deposits with Herstatt and those who had entered in to Forward contracts with the collapsed bank. This incident highlighted the Settlement Risk and Systemic Risk.
- Systemic risk refers to the failure of one big bank, leading to failure of large number of smaller banks, eroding the confidence of people in the banking system. It creates a 'ripple effect' threatening the stability of financial system.

G-10 COUNTRIES RESPONDED TO HERSTATT INCIDENT BY FORMING BASEL COMMITTEE:

- In response to the Herstatt incident, Group Ten (G10) central banks began working towards common supervisory issues including the issue of the "Foreign exchange settlement risk" (also called Herstatt risk).
- A committee named as "The Basel Committee" was established in 1974.
- The Basel Committee as well as its four main working groups meet regularly four times a year.
- With its current expanded membership, the Committee is now comprised of representatives from 27 countries including India.

THE BASEL COMMITTEE ON BANKING SUPERVISION (BCBS):

- The Basel Committee (BCBS) does not possess any formal supranational supervisory authority, and its conclusions do not, have legal force. However, it reports to the Central bank Governors or Heads of Supervisory authorities of G-10 countries and seeks their endorsement for its major initiatives.
- BCBS formulates broad supervisory standards / guidelines and recommends best practice in the expectation that individual national authorities will take steps to implement them.
- Each national supervisor is expected to make arrangements that are best suited to its own national systems leading to convergence towards common approaches and common standards
- An important objective of the Committee's work is to close gaps in international supervisory coverage in pursuit of two basic principles: that no foreign banking establishment should escape supervision; and that supervision should be adequate. To achieve this, the Committee has issued a long series of documents since 1975.

BASEL CAPITAL ACCORDS: Two important Basel accords called as Basel-I and Basel-II accords have emerged over the past two decades.

BASEL-I ACCORD:

- 1988- The Basel Committee introduced a capital measurement system commonly referred to as the Basel Capital Accord. The 1988 system provided for the implementation of a Credit risk measurement framework with a minimum capital standard of 8% by end-1992.
- 1996- Basel-I accord was modified to include the issues related to Market Risk
- Thus the Basel-I accord addressed two major risks faced by banks- the Credit risk and the Market risk.

BASEL-II ACCORD & THE THREE PILLARS:

- In 2004, BCBS issued another comprehensive framework that seeks to arrive at significantly more risk sensitive approaches to capital requirements.
- Essentially it identified "operational Risk" as a source of threat and included this risk for calculating the "risk weighted assets" for which a minimum capital is prescribed

- Thus, the Basel-II accord captured three of the five major risks in banking which are the Credit, Market and Operational risks
- The new Capital Framework consisted of Three Pillars:
 - Pillar -01: Minimum capital requirements
 - Pillar-02: Supervisory review process
 - Pillar-03: Market discipline

OBJECTIVES OF BASEL ACCORDS: Basel II objectives, which are central to sustained economic development in long run include:

- a) Promotion of safety and soundness in the financial system by stronger risk management practices in banks.
- b) Designing approaches for credit and operational risk that are based on increasing risk sensitivity and allow banks to select an approach that is most appropriate to the stage of development of bank's operation.
- c) The ultimate objective of Basel accords is to encourage the International players in the financial sector (namely Banks) to converge towards a minimum standard both in Capital adequacy and processes, such that there is adequate confidence built up. This is especially applicable to cross border transactions (international transactions).

PROCESS OF ARRIVING AT CRAR

CAR: Capital adequacy is the ratio of capital funds available in the Bank to the assets (Loans plus investments acquired and reflected in the Balance sheets).

CRAR: Capital to Risk weighted assets is the ratio of Capital funds available to the Risk weighted assets (loans and investments) acquired by the Bank and reflected in the Balance sheet.

Risk Weights: Risk weights are the perceptions of risk inherent in any types of claims the Banks have on counterparties (in their loans and investments). For example, a loan given against security of commercial real estate is riskier than a small loan given against gold jewelry. Both these assets need not attract the same amount of mandatory capital. At the same time, Basel-II takes in to account not only the Credit Risk but also Market and Operational risks. Detailed guidelines are given by RBI as to how the assets should be risk weighted taking all the three risks in to consideration

THREE TIERED CAPITAL FUNDS: A minimum standard for Capital adequacy is the most important objective of the Basel accords. Here, the concern is about the quality of the capital also. The Basel Capital Accord 1988 classifies capital under three tiers. Tier I Capital & Tier II Capital are as follows:

TIER I CAPITAL	TIER II CAPITAL	TIER III CAPITAL (not allowed by RBI in India)
<ul style="list-style-type: none"> ● Permanent Equity. ● Perpetual Non-cumulative Preference shares. ● Disclosed Reserves ● Innovative Capital Instruments. 	<ul style="list-style-type: none"> ● Undisclosed Reserves. ● Revaluation Reserves (Now as per Basel III, it is included in Tier I capital) ● General provisions / general loan-loss reserves. ● Hybrid Debt Capital Instruments (an instrument with mix of equity capital and debt characteristics), and ● Subordinated Term Debt. 	<ul style="list-style-type: none"> ● As per BCBS each national authority (Example-RBI in India) at its discretion may employ a third tier of capital (Tier -III), consisting of short-term subordinated debt for the sole purpose of meeting a proportion of the capital requirements for market risks.

STRUCTURE OF CAPITAL FUND

Banks are required to maintain a minimum CRAR of 9 % on an ongoing basis. As per RBI's final guidelines on Basel -II, Banks have to maintain the higher of the following two as their minimum capital :

- 1) Minimum Regulatory Capital prescribed - 9%(presently), or
- 2) A floor percentage of the capital required for Credit Risk plus Market risk which will be progressively reduced.

Out of minimum capital of 9% prescribed, Banks are encouraged to maintain Tier-1 of at least 6%

TIER I

- Paid-up capital (ordinary shares), Statutory reserves, and other Disclosed free reserves, if any.
- Innovative Perpetual Debt Instruments (IPDI) eligible for inclusion as Tier I capital (up to 15% of Tier-1).
- Perpetual non-cumulative Preference shares eligible for inclusion as Tier I capital - subject to laws in force from time to time; (PNCPS together with Innovative PDI can not exceed 40% of Tier-1.Excess if any can be taken under Tier-2)
- Capital reserves representing surplus arising out of sale proceeds of assets.

Minus: Equity Investment in Subsidiaries & Intangible assets.

TIER II

- Un-disclosed reserves
- Perpetual *Cumulative* Preference shares.
- Revaluation Reserves (at a discount of 55% while determining their value for inclusion in Tier I Capital as per Basel III).
- General Provisions on Standard Assets, Floating Provisions, Provisions held for Country Exposures, Investment Reserve Account and excess provisions which arise on account of sale of NPAs up to a maximum of 1.25% of weighted risk assets.
- Hybrid debt capital instruments.
- Subordinated debt (long term unsecured loans only if fully paid-up and unsecured) Instruments with maturity less than 5 years or remaining maturity of one year or less are not eligible. (Limited to 50 % of Tier I capital.)
- Deferred value expenditure under VRS.
- Upper Tier II plus Tier II elements should be limited to a maximum of 100% of total Tier I elements for the purpose of compliance with the norms. (Note: Instruments such as PNCPG & IPDI which are included in the Tier-II because the limit is exceeded in Tier-II are termed as Upper Tier-II. Other Tier-II instruments are termed lower Tier-II).

TIER III: Short-term Subordinated debt for the sole purpose of meeting a proportion of the capital requirements for market risks. **CURRENTLY NOT ALLOWED IN INDIA.**

- Tier I capital is also known as core capital. It provides the most permanent and readily available support to a bank against unexpected losses.
- Tier II capital contains elements that are less permanent in nature. Tier II capital at no point of time should be more than 50% of the total capital.
- Tier II capital at no point of time should be more than 100% of Tier I capital.

BASEL - II STANDARDS

- The Basel committee had bestowed discretion to each Country's supervisor to make detailed arrangements and give a time frame within which the Banks in that country should migrate to the new Basel-II standards.
- The Committee has prescribed the "minimum" standard of 8% capital adequacy under the first pillar and left it to each country to prescribe more stringent norms where felt necessary.
- RBI has prescribed 9% as required minimum CRAR under Basel pillar -01.
- RBI issued Prudential Guidelines on Capital Adequacy and Market Discipline – Implementation of the New Capital Adequacy Framework (NCAF) which gave detailed guidelines and directed as follows:

TIME FRAME TO COMMERCIAL BANKS IN INDIA TO MIGRATE TO NCAF

- Foreign banks operating in India and Indian banks having operational presence outside India were directed to migrate to NCAF with effect from March 31, 2008.
- All other commercial banks (except Local Area Banks & Regional Rural Banks) were encouraged to migrate to the Revised Framework not later than March 31, 2009.
- Thus all eligible banks in India are now Basel-II compliant

BASEL ACCORDS - AN OVERVIEW

1988	Basel-I accord by G-8 countries.	Addressed Minimum Capital Adequacy and Credit Risk. Capital charge for Credit risk introduced, to avoid situations like Herstatt Bank incident.
1996	Basel-I modified	Market Risk to be identified, quantified and capital charge provided for
2004	Basel-II norms defined: Banks to provided capital charge for Operational risk also.	Three pillars defined as a) Minimum Capital b) Supervisory Processes c) Market Disclosures
RBI GUIDE LINES	Basel-II-Time frame Indian Banks with Overseas Presence and Foreign banks in India migrated to Basel-II by 31-03-2008. All other banks (except RRBs, UCB) migrated by 31-03-2009 as per RBI directives	BASEL NORMS Pillar-I: Minimum Capital Adequacy Basel-II norm -8%, RBI-9%(stronger) Pillar II: Supervisory Process RBI supervises through On-site & Off-site methods Pillar III: Market Disclosure

July 2009	Basel-II Enhancements & RBI guidelines	In July 2009, the newly expanded Basel Committee on Banking Supervision approved a final package of measures to strengthen the 1996 rules governing trading book capital and to enhance the three pillars of the Basel II framework. In India, RBI has advised banks that the Enhancement to Basel II Framework will be effective from March 31, 2010 .
CAPITAL CHARGE / CAPITAL CALCULATIONS		
<p>Credit Risk: Indian Banks have to adopt Standardized method for calculations as per Basel / RBI guidelines. Here, Risk weights are assigned as per RBI guidelines / Approved external rating agencies and 9% of the RWA is arrived at as the Minimum Capital requirement for Credit Risk.</p> <p>Market Risk: Indian Banks have to adopt Standardized (Duration) method as per RBI guidelines Capital charge arrived at using Duration method and Capital requirement arrived at by multiplying the Capital charge by 12.5.</p> <p>Operational Risk: Indian Banks have to adopt Basic indicator approach as per RBI guidelines Capital charge arrived at using basic indicator method of applying 15% (alpha) on the average Gross Income of past three positive years. Once the Capital charge is arrived, Capital requirement is arrived by multiplying Capital charge by 12.5.</p>		
PILLAR - I	PILLAR - 2	PILLAR 3
MINIMUM CAPITAL REQUIREMENT	SUPERVISORY REVIEW	MARKET DISCIPLINE
<p>1) Capital for Credit Risk</p> <p>a) Standardized approach</p> <p>b) Internal rating based (IRB) approaches</p> <p style="padding-left: 20px;">(i) Foundation approach</p> <p style="padding-left: 20px;">(ii) Advanced approach</p> <p>2) Capital for Market Risk</p> <p>a) Standardized method</p> <p style="padding-left: 20px;">(i) Maturity method</p> <p style="padding-left: 20px;">(ii) Duration method</p> <p>b) Internal Model Approach (IMA)</p> <p>3) Capital for Operational Risk</p> <p>a) Basic Indicator Approach (BIA)</p> <p>b) The Standardized Approach (TSA)</p> <p>c) Advanced Measurement Approach (AMA)</p>	<p>1) Evaluate Risk assessment</p> <p>2) Ensure soundness and integrity of bank's internal processes to assess the adequacy of capital.</p> <p>3) Ensure maintenance of minimum capital with PCA for shortfall.</p> <p>4) Prescribe differential capital, where necessary i.e. where the internal processes are slack.</p> <p>In India, RBI has prescribed "ICAAP" or Internal Capital Assessment Adequacy Process" which should be followed by each Bank.</p>	<p>1) Enhance disclosures</p> <p>2) Core disclosures and supplementary disclosures</p> <p>3) Timely at least semiannual disclosures.</p>
BASEL ENHANCEMENTS - SUMMARY		
<p>Pillar-1: The changes are mainly aimed at increasing the capital requirements for specific risk and liquidity facility for securitisation exposures.</p> <p>Pillar-2: The revised guidance is intended to assist banks in better identifying and appropriately capturing risks in their internal assessments of capital adequacy and managing risks. Apart from other things, it requires Banks to address reputation risks, have stress testing practices and sound compensation policies.</p> <p>Pillar 3: Include more granular disclosure requirements for credit risk mitigations and securitized exposures.</p> <p>Banks operating in India should make additional disclosures in the following areas:</p> <p>(i) Securitisation exposures in the trading book;</p> <p>(ii) Sponsorship of off-balance sheet vehicles;</p> <p>(iii) Valuation with regard to securitisation exposures; and</p> <p>(iv) Pipeline and warehousing risks with regard to securitisation exposures</p>		
PROVISION COVERAGE RATIO (LOAN - LOSS COVERAGE RATIO)		
<ul style="list-style-type: none"> ● RBI has mandated that Banks should maintain a Loan-Loss coverage ratio of 70%, by 30th Sept. 2010. ● Banks have to comply with the new norms by the end of September 2010. 		

UNIT - 23

BASEL - II THE SECOND PILLAR - SUPERVISORY REVIEW PROCESS

The Supervisory Review Process of the framework addresses two issues.

- To ensure that banks have adequate capital to support all the risks in their business and
- To encourage banks to develop & use better risk management techniques in monitoring/mitigating their risks.

The Supervisors need to concentrate on three main areas viz.

- Risks considered under Pillar I but not fully captured such as Credit concentration risk.
- Factors not addressed in Pillar I process such as strategic risk or interest rate risk in the banking book.
- Factors external to the bank such as business cycle effects.

PRINCIPLES OF SUPERVISORY REVIEW PROCESS

PRINCIPLE - 1	PRINCIPLE - 2	PRINCIPLE - 3	PRINCIPLE - 4
<p>Banks should have a process for assessing capital adequacy viz a viz to their risk profile and strategy for maintaining their capital levels. Bank management must have a rigorous process for ensuring that the Bank has adequate capital to support its risks. The five main features of such a rigorous process are as below:</p> <ol style="list-style-type: none"> Board & Senior Management overview Sound capital assessment Comprehensive assessment of risks Monitoring and reporting Internal control review 	<p>The periodic review would involve following components:</p> <ol style="list-style-type: none"> On site - examinations or inspections Off site review Discussions with Bank Management Review of work done by Auditors Periodic reporting 	<p>Supervisors (RBI in India) will require banks to operate with a buffer over and above the Pillar I standard. Buffer is meant to cover uncertainties related to the system. Similarly Bank specific uncertainties are addressed by Bank specific buffer prescriptions. For example, though minimum capital adequacy of 8% is prescribed by Basel committee, RBI has prescribed 9% with 1% extra as buffer.</p>	<p>Supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to support the risk characteristics of a particular bank and should require rapid remedial action if capital is not maintained or restored</p>

RBI GUIDELINES UNDER SUPERVISORY REVIEW & EVALUATION PROCESS

- SREP guidelines require Banks to ensure a well-defined internal assessment process within the Bank through which they assure RBI that adequate capital is indeed held towards the various risks to which they are exposed.
- The process of assurance must involve active dialogue between the Bank and the RBI such that, when warranted, appropriate intervention could be made to reduce the risk exposure of the Bank or augment / restore its capital.
- Such a process of internal assessment is termed as "Internal Capital adequacy assessment process" or ICAAP
- Thus, ICAAP is an important component of the SREP.

Main aspects to be addressed under the SREP & ICAAP:

- The risks that are not fully captured by the Minimum Capital Ratio prescribed under Pillar 1;
- The risks that are not at all taken into account by the Pillar 1; and the factors external to the Bank.

The capital adequacy ratio prescribed by the RBI under the Pillar 1 of the Framework is only the regulatory minimum level, addressing only the three specified risks (viz., Credit, Market and Operational risks). Therefore holding additional capital might be necessary for the banks, on account of both – the possibility of some under-estimation of risks under the Pillar 1 and the actual risk exposure of a bank vis-à-vis the quality of its risk management architecture.

Illustrative list of the risks not captured or not fully captured in the Regulatory CRAR

1. Interest Rate Risk in the Banking book	2. Strategic risk
3. Credit Concentration Risk	4. Risk of under-estimation of credit risk under the Standardized approach
5. Liquidity Risk	6. "Model risk" (Risk of under-estimation of credit risk under the IRB approaches)
7. Settlement Risk	8. Risk of weakness in the Credit-risk mitigants
9. Reputational Risk	10. Residual risk of securitization, etc

Banks make their own assessment of their various such risk exposures, through a well-defined internal process, and maintain an adequate capital cushion for such risks. This is apart from definitive guidelines from RBI (like ALM guidelines and Exposure limits etc)

RBI GUIDELINES - EXPOSURES LIMITS IN BANKS' LENDINGS

To ensure that Banks maintain their financial health & soundness, and do not put the depositors at stake by incurring Concentration Risk, RBI stipulates exposure limits or ceilings from time to time.

These are limits are on funds based and non-funds based facilities to big borrowers and bank's investments in relation to its own Net worth.

Items not covered under Exposure limits:

- Advances against bank's own deposits are excluded from exposures.
- Advances which have been guaranteed by the Govt. of India

Limits of Exposures:

- Single Borrower : 15% of Capital Fund of the Bank
- Single Borrower for infrastructure projects: 20% of Capital Fund of the Bank
- Borrowings by a Group : 40 % of Capital Fund of the Bank
- Borrowings by a Group : 50% of Capital Fund of the Bank.
- Further 5% with the approval of the Board if found necessary.

INTERNAL CAPITAL ADEQUACY ASSESMENT PROCESS (ICAAP)

Issues to be addressed	<ol style="list-style-type: none"> 1. The risks that are not fully captured by the minimum capital ratio prescribed under Pillar 1. 2. The risks that are not at all taken into account by the Pillar 1. 3. The factors external to the bank.
Implementation	ICAAP was operationalized w.e.f. March 31, 2008 by the Foreign banks and the Indian banks with operational presence outside India, and from March 31, 2009 by all other commercial banks, excluding LABs & RRBs
Approach to ICAAP	RBI has only provided Banks with broad principles to be followed in developing their ICAAP. Each Bank had to develop and put in place, with the approval of their Boards, an ICAAP commensurate with their size, level of complexity, risk profile and scope of operations.
Board-approved Capital plan	Thus, the banks must have an explicit, Board-approved capital plan which should spell out the institution's objectives in regard to level of capital, the time horizon for achieving those objectives, and in broad terms, the capital planning process and the allocate responsibilities for that process. The plan must outline: <ol style="list-style-type: none"> a) The bank's capital needs. b) The bank's anticipated capital utilization. c) The bank's desired level of capital d) Limits related to capital. e) A general contingency plan for dealing with divergences and unexpected events.
Banks' responsibilities	<ol style="list-style-type: none"> a) Banks should have in place a process for assessing their overall capital adequacy in relation to their risk profile and a strategy for maintaining their capital levels (Principle 1) b) Banks should operate above the minimum regulatory capital ratios (Principle 3). <p>Thus, ICAAP comprises a bank's procedures / measures designed to ensure the following:</p> <ul style="list-style-type: none"> • An appropriate identification and measurement of risks. • An appropriate level of internal capital in relation to the bank's risk profile, and • Application and further development of suitable risk management systems in the bank. • ICAAP should be forward looking and should be independently reviewed by external and internal auditors also.
Risks to be addressed	1) credit risk, 2) market risk, 3) operational risk, 4) liquidity risk, 5) concentration risk, 6) interest rate risk in the banking book, 7) residual risk of securitisation, 8) strategic risk, 9) business risk, 10) reputation risk, 11) pension obligation risk, 12) other residual risk; and 13) any other risks that might have been identified
Supervisor's (RBI) responsibilities (SREP)	<ol style="list-style-type: none"> a) Supervisors should review and evaluate a bank's ICAAP. (Principle 2). b) Supervisors should take appropriate action if not satisfied with the results of this process. (Principle 2). c) Supervisors should review & evaluate a Bank's compliance with the regulatory capital ratios. (Principle 2). d) Supervisors should have the ability to require Banks to hold capital in excess of the minimum. (Principle 3). e) Supervisors should intervene at an early stage to prevent capital from falling below minimum levels. (Principle 4) f) Supervisors should require rapid remedial action if capital is not maintained or restored. (Principle 4).
Structural aspects of the ICAAP	<ul style="list-style-type: none"> • Basel II framework is applicable to all commercial banks (except the Local Area Banks and the Regional Rural Banks), both at the solo level (global position) as well as at the consolidated level. • Thus, the ICAAP should be prepared, on a solo basis, at every tier for each banking entity within the banking group, as also at the level of the consolidated bank (i.e., a group of entities where the licensed bank is the controlling entity). This requirement would also apply to the foreign banks, which have a branch presence in India, and their ICAAP should cover their Indian operations only
Responsibilities of the Board of Directors (ultimately Board is responsible for ICAAP)	ICAAP must be a Board-approved process. <ol style="list-style-type: none"> (a) Setting the tolerance level for risk. (b) Ensuring that the senior management of the Bank establish a risk framework in order to assess and appropriately manage the various risk exposures of the bank, develop a system to monitor the bank's risk exposures and to relate them to the bank's capital and reserve funds etc. (c) Adopting and supporting strong internal controls. (d) Ensuring that the bank has appropriate written policies and procedures in place. (e) Ensuring that the bank has an appropriate strategic plan in place, which, as a minimum, must duly outline: <ul style="list-style-type: none"> The bank's current and future capital needs. The bank's anticipated capital expenditure and The bank's desired level of capital.
Board review of the outcome of the ICAAP	ICAAP is an ongoing process a written record on the outcome of the ICAAP should be periodically submitted by the banks to their board of directors. Record should include risks identified, the manner in which those risks are monitored and managed, the impact of the bank's changing risk profile on the bank's capital position, details of stress tests / scenario analysis conducted and the resultant capital requirements. Based on the outcome of the ICAAP as submitted to and approved by the Board, the ICAAP Document, should be furnished to the RBI in the RBI approved format (currently, once a year after 31 March). The Board should, at least once a year, assess and document whether the processes relating the ICAAP implemented by the bank successfully achieve the objectives envisaged by the board.

P)

THE PRINCIPLE OF PROPORTIONALITY - CLASSIFICATION OF BANKS

The implementation of ICAAP should be guided by the principle of proportionality. The degree of sophistication adopted in the ICAAP should be commensurate with the nature, scope, scale and the degree of complexity in the bank's business operations. For this purpose, RBI has indicated that Banks might classify themselves as Simple, Moderately active and Complex.

BANKS WITH SIMPLE ACTIVITIES AND RISK MANAGEMENT PRACTICES	BANKS WITH MODERATELY COMPLEX ACTIVITIES AND RISK MANAGEMENT ACTIVITIES	BANKS THAT DEFINE THEIR ACTIVITIES AND RISK MANAGEMENT PRACTICES AS COMPLEX
<p>a) Identify and consider the Bank's largest losses over last 3 - 5 years and whether such losses are likely to recur.</p> <p>b) Prepare a short list of the most significant risks to which that bank is exposed.</p> <p>c) Consider how that bank would act, and the amount of capital that would be absorbed in the event that each of the risks identified were to materialize.</p> <p>d) Consider how that bank's capital requirement might alter under such scenarios and how its capital requirement might alter in line with its business plans for the next 3 to 5 years.</p> <p>e) Document the ranges of capital required in the scenarios identified above and forms an overall view on the amount and quality of capital, which that bank should hold, ensuring that its senior management is involved in arriving in the view.</p>	<p>a) Prepare a comprehensive list of the major risks to which each business is exposed.</p> <p>b) Estimate the range and distribution of possible losses, which might arise from each of those risks and consider using shock stress tests to provide risk estimates.</p> <p>c) Consider the extent to which that bank's capital requirement adequately captures the risks identified above.</p> <p>d) For areas in which the capital requirement is either inadequate or does not address a risk, estimate the additional capital needed to protect that bank and its customers, in addition to any other risk mitigation action that bank plans to take.</p> <p>e) Project bank's business activities forward in detail for one year and in less detail for the next 3 to 5 years, and estimate how that bank's capital and capital requirement would alter, assuming that business develops as expected.</p> <p>f) Assume that business does not develop as expected and consider how that bank's capital and capital requirement would alter and what that bank's reaction to a range of adverse economic scenarios might be.</p> <p>g) Document the results obtained from the analyses as above in a detailed report for that bank's top management / board of directors, and</p> <p>h) Ensure that systems and processes are in place to review the accuracy of the estimates made as above (i.e., systems for back testing) vis-à-vis the performance / actual results.</p>	<p>a) Follow a proportional approach to that bank's ICAAP covering issues identified in the Banks with moderate risk, but may also involve the use of models, most of which will be integrated into its day-to-day management and operations.</p> <p>b) Models of the kind referred to above may be linked to generate an overall estimate of the amount of capital that a bank considers appropriate to hold for its business needs.</p> <p>c) Bank may also link such models to generate information on the economic capital desirable for that bank.</p> <p>ECONOMIC CAPITAL MODEL (ECM) :Economic capital is the target amount of capital, which optimizes the return for a bank's stakeholders for a desired level of risk. A model, that generates the Economic Capital target, is known as-Economic Capital Model.</p> <p>For example, a bank is likely to use value-at-risk (VaR) models for market risk, advanced modeling approaches for credit risk and, possibly, advanced measurement approaches for operational risk.</p>

SPACE FOR NOTES

UNIT - 24

BASEL - II : THIRD PILLAR - MARKET DISCIPLINE

- The III Pillar, Market Discipline has been recommended to complement the minimum capital requirements under Pillar 1 and the supervisory Review Process under Pillar II.
- BCBS has developed a set of disclosure requirements which will allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes and hence the capital adequacy of the institution.
- The Committee believes that such disclosures have particular relevance under the New Accord, where reliance on internal methodologies gives banks more discretion in assessing capital requirements.

DISCLOSURES SET OUT IN PILLAR 3:

The disclosures set out in Pillar 3 should be made on a semi-annual basis, subject to some exceptions.

- Qualitative disclosures that provide a general summary of a bank's risk management objectives and policies, reporting system and definitions may be published on an annual basis. These disclosures will facilitate market participants to access key information. Market discipline can contribute to a safe and sound banking environment.
- If information on risk exposure or other items is prone to rapid change, then banks should also disclose information on a quarterly basis.
- Tier 1, total capital adequacy ratios, and their components must be disclosed on a quarterly basis.
- A bank may not disclose proprietary and confidential information such as customer information, methodologies, parameters etc. But it must state the information it has not disclosed and also state reasons for the non-disclosure. However, it must disclose more general information about the subject matter.
- Efforts to see that Pillar 3 disclosure framework does not conflict with the requirements under accounting standards are made.
- Material provided under Pillar 3 framework must be consistent with the audited statements & disclosures. Banks are encouraged to provide all information at one place.
- Banks should have a formal disclosure policy approved by the Board of directors.
- The policy should state the bank's approach to determining what disclosures it will make and the internal controls over the disclosure process. Pillar 3 prescribes qualitative and quantitative disclosure under the following 13 areas:

AREAS OF DISCLOSURE

- (1) Scope of application
- (2) Capital structure
- (3) Capital adequacy
- (4) Credit risk – general disclosures
- (5) Credit Risk – disclosures for portfolios, under standardized approach.
- (6) Credit Risk – disclosures for portfolios, under IRB approaches.
- (7) Credit Risk mitigation – Disclosures for standardized & IRB approach
- (8) Securitization – disclosures for standardized & IRB approaches.
- (9) Market Risk – disclosures under standardized approach.
- (10) Market Risk – disclosures under internal models approach.
- (11) Operational Risk
- (12) Equities – disclosures for banking book positions.
- (13) Interest Rate Risk in the Banking book.

UNIT - 25
ASSET CLASSIFICATION & PROVISIONING NORMS
NPA GUIDELINES

- **TERM LOANS:** Interest and / or installment remain overdue for a period of more than 90 days.
 - **CC / OVERDRAFT:** Account remains out of order for a period of more than 90 days.
 - **BILLS ACCOUNT:** BP or BD remains overdue / unpaid for a period of more than 90 days.
 - **AGRICULTURE:** Short Duration Crop (Crop season up to one year): If the installment, or interest overdue for two crop seasons. Long Duration Crop (Crop season longer than one year): If the instalment or interest overdue for one crop seasons.
- NPA ON ACCOUNT OF EROSION IN THE VALUE OF SECURITY:**
- If RVS is less than 50%, the a/c to be shifted directly to Doubtful category.
 - If RVS is less than 10 % of the O/S, the a/c to be classified as loss asset.

ASSETS CLASSIFICATION

GROUP	DEFINITION				
STANDARD	Accounts which are in order				
SUB STANDARD	Accounts which have been classified as NPAs for a period <u>not exceeding</u> 12 months				
DOUBTFUL	Sub standard accounts, which have remained NPAs for a period <u>exceeding</u> 12 months				
LOSS ASSETS	Accounts which have become unrealizable, where losses have been identified by the bank / internal / external auditor / RBI Inspectors.				
SMA	Special mentioned assets: RBI has instructed banks to identify a/cs which are overdue/out of order but not NPA & maintain a special watch.				
CATEGORY	PROVISION REQUIREMENTS				
STANDARD ASSETS	Direct Agri & SME sectors	All other loans & Advances	Commercial Real Estate	Teaser Rate – Housing Loan	
	0.25%	0.40%	1%	2%	
SUB-STANDARD ASSETS	Secured Sub-standard		Unsecured Sub-standard : Where the value of security is not more than 10% right from the beginning i.e. ab-initio		
	15% of outstanding dues		25% of outstanding dues		
DOUBTFUL ASSETS	D1		D2		D3
	First 12 months		Next 24 months		Over 36 months
	RVS	Shortfall in Security	RVS	Shortfall in Security	100% Uniformly
	25%	100%	40%	100%	
LOSS ASSETS	The entire assets should be written off. If permitted to remain in the books for any reason, 100% of the outstanding should be provided for.				

- Standard Assets provisions are covered under Tier II capital under the head Other liabilities & provisions (Schedule 5).
- As per the income recognition norms, interest is recognized on realization / cash system basis.
- State Govt. guaranteed advances – 90 days norms w.e.f. 31-3-2006. Central Govt. guaranteed advances when govt. repudiates its guarantee.
- Accounts with Stock Statement overdue for 3 months : Out of Order
- Accounts in which Renewal / reviewal overdue for 6 months : NPA
- Classification of accounts is borrower-wise and not account-wise. In case of consortium advances, each bank to classify the account on the basis of its own record of recovery.
- Accounts which have rescheduled / restructured should be upgraded after 12 months from the due date of first installment.
- The provisioning on Teaser Rate Housing Loan to be reduced to .40% after one year from the date on which the rates are reset at higher rates if the account remains standards.

UNIT - 26

LIQUIDITY MANAGEMENT**MEASURING AND MANAGING LIQUIDITY RISK**

- 1) Developing a structure for managing liquidity risk.
- 2) Setting tolerance level and limit for liquidity risk.
- 3) Measuring and managing liquidity risk.

Sound liquidity risk management involves:

A) DEVELOPING A STRUCTURE:

Sound strategy overseen by the Board / Senior management effectively.

Sound processes for measuring, monitoring and controlling liquidity risk.

Specific policies on various aspects such as:

- a) Composition of assets and liabilities
- b) Maintaining cumulative gaps
- c) Approach to managing liquidity in different currencies/locations.

The Board should monitor the performance and review the liquidity risk profile of the bank periodically.

Treatment of Foreign Currencies:

In case of banks with an international presence, treatment of assets and liabilities in multiple currencies adds complexity to liquidity management. The bank may not be well known to the account holders in those foreign (currency) markets. The account holders may not be able to distinguish rumors from facts about the banks. This means, if market develops any concerns, especially about the bank's domestic operating environment (like a rumor about political instability in India), they may panic and withdrawal of their funds causing heavy outflows all of a sudden. The bank may not always be able to mobilize liquidity (domestically) to meet foreign currency funding requirements. Therefore any bank conducting business in multiple currencies should have clear guidelines as to Management structures and design clear strategy in each currency.

B) SETTING TOLERANCE LEVEL AND LIMIT FOR LIQUIDITY RISK:

Bank managements should set limits on the mismatches to ensure liquidity.

C) MEASURING AND MANAGING LIQUIDITY RISK:

Measuring & managing funding requirement can be done through two approaches as follows:

- (i) STOCK APPROACH
- (ii) FLOW APPROACH

(Note: In India, Banks have to follow the Flow approach as per RBI guidelines)

FLOW APPROACH OR THE GAP METHOD OF MEASURING MANAGING LIQUIDITY:

This is the method to be followed by Indian banks as per RBI guidelines. The framework for assessing and managing bank liquidity through flow approach has three major dimensions:

- a) Measuring and managing net funding requirements.
- b) Managing Market access, and
- (c) Contingency planning.

Flow approach is the basic approach being followed by Indian banks as per RBI guidelines. A maturity ladder is constructed and all the assets and liabilities are placed in the respective time buckets based on their residual maturity. This gives a clear picture of the Inflows and outflows. Thereafter a structural liquidity gap report is prepared and the net funding requirement is calculated.

SPACE FOR NOTES

RBI GUIDELINES ON CONSTRUCTION OF STRUCTURAL MATURITY LADDER:

- The Statement of Structural Liquidity has to be prepared by placing all cash inflows and outflows in the maturity ladder according to the expected timing of cash flows. It has to be prepared over a time horizon of 90 days.
- Though prepared daily, it should be submitted to RBI on fortnightly basis on the first and third Wednesday of each month.
- The mismatches (negative gap) during the first four buckets should not exceed 5%, 10%, 15% & 20% of the cash outflows in each time bucket respectively (see table).
- A maturing liability will be a cash outflow while a maturing asset will be a cash inflow. The rupee inflows and outflows on account of Forex operations should be taken in to account.
- In order to enable the banks to monitor their short-term liquidity on a dynamic basis over a time horizon spanning from 1 to 90 days, banks are permitted to estimate their short-term liquidity profiles based on business projections for planning purpose.

STRUCTURAL LIQUIDITY STATEMENT

To be constructed on daily basis by Banks.

To be submitted to RBI on fortnightly basis on the first and third Wednesday of each month.

S. No.	TIME BUCKETS	RBI GUIDELINES- Negative Gap should not exceed
1	Next day	5% of the total outflow.
2	Day 2 -7 days	10% of the total outflow.
3	8-14 days	15% of the total outflow.
4	15-28 days	20% of the total outflow.
5	29 days and up to 3 months	Each Bank must have its own ALCO/Board Approved policy regarding the permissible gaps
6	Over 3 months and up to 6 months	
7	Over 6 months and up to 1 year	
8	Over 1 year and up to 3 year	
9	Over 3 years and up to 5 years	
10	Over 5 years	

IMPORTANT RBI INSTRUCTIONS

RBI has given detailed guidelines as to the placement of various Inflows and Outflows depending on the nature of the item (guidelines given below)

1. The placement should be as per Residual maturity. For example, if a deposit is received today for 36 months, it will be placed in the 8th bucket (Over 1 year – up to 3 years). However, an existing deposit which will mature in the next week will be placed in the 3rd bucket (8-14 days) though originally it was also for 36 months. This is the concept of Residual maturity.
2. The classification of various components of assets and liabilities into different time buckets for preparation of Gap reports (Liquidity and Interest Rate Sensitivity) are given by RBI.
3. It is important to note that Banks have to construct two separate maturity ladders, one for measuring Liquidity and another for managing Interest Rate sensitivity and Risk.
4. Each item (Asset or Liability) would be placed in the time buckets as per RBI guidelines and respective ladders constructed.

MATURITY PROFILE - TIME BUCKETS FOR LIQUIDITY (RBI GUIDELINES)

A. OUTFLOWS	
HEADS OF ACCOUNTS	CLASSIFICATION INTO TIME BUCKETS
1. Capital, Reserves & Surplus	Over 5 years bucket.
2. Demand Deposits (Current and Savings Bank Deposits).	Savings and Current Deposits to be classified into volatile and core portions. 10% of SB and 15% of Current deposits may be treated as volatile and placed in the 1-14 days time buckets (distributed in the first three buckets based on the Bank's judgment of the behavior of its SB portfolio). The core portion may be placed in over 1-3 years bucket . Banks can also classify them in the appropriate buckets based on behavioral maturity instead of contractual maturity, subject to the approval of the Board / ALCO.
3. Term Deposits.	Respective maturity buckets or buckets based on Contractual or behavioral maturity. <i>However, wholesale deposits should be shown under respective maturity buckets only.</i>
4. Certificate of Deposits, Bonds, Subordinated Debts.	Respective maturity buckets. <i>Where call/put options are built into the issue structure of any instruments, the call/put date/s should be reckoned as the maturity date/s and the amount should be shown in the respective time buckets.</i>
5. Other Liabilities & Provisions	
i) Bills Payable	The core component, which could reasonably be estimated based on past data and behavioral pattern, may be shown under over 1-3 years time bucket. The balance amount may be placed in 1-14 days bucket.
ii) Inter-office Adjustment	The net credit balance may be shown in 1-14 days bucket.
iii) Provisions other than for loan loss & depreciation in investments.	Respective buckets depending on the purpose.
iv) Other Liabilities.	Respective maturity buckets. Items not representing cash payables (i.e. income received in advance, etc.) may be placed in over 5 years bucket.
6. Export Refinance	Respective maturity buckets of underlying assets.
B. INFLOWS	
1. Cash	1-14 days bucket.
2. Balances with RBI	Excess balance over required CRR/SLR under 1-14 days bucket. Statutory Balances to be distributed corresponding to the maturity profile of DTL with a time-lag of 14 days.
3. Balances with other Banks	
(i) Current Account	Non-withdraw able (minimum) balances over 1-3 years bucket. Remaining balances under 1-14 days bucket.
(ii) Money at Call and Short Notice, Term Deposits & other placements.	Respective maturity buckets.
4. Investments (Net of provisions)	
(i) Approved securities.	Respective maturity buckets excluding the amount required to be reinvested to maintain SLR corresponding to the DTL profile in various time buckets.
(ii) Corporate debentures / bonds, PSU bonds, CDs, CPs, Redeemable Preference shares, Units of MFs (close ended), etc.	(ii) Respective maturity buckets. Investments classified as NPAs should be shown under over 3-5 years bucket (Sub-standard) or over 5 years bucket (Doubtful).
(iii) Shares/Units of Mutual Funds (open ended)	(iii) Over 5 years bucket.
(iv) Investments in Subsidiaries / Joint Ventures.	(iv) Over 5 years bucket.
(v) Securities in the Trading Book	(v) 1-14 days, 15-28 days and 29-90 days according to defeasance periods.

5) Advances (Performing)	
(i) Bills Purchased and Discounted (including bills under DUPN)	(i) Respective maturity buckets.
(ii) Cash Credit / Overdraft (including TOD) / Demand Loan component of Working Capital.	(ii) Behavioral/ seasonal pattern of the core and volatile portion should be identified. While the volatile portion could be shown in the near-term maturity buckets, the core portion may be shown under over 1-3 years bucket.
(iii) Term Loans	(iii) Interim cash flows may be shown under respective maturity buckets.
6) NPAs (Net of provisions, interest suspense and claims received from ECGC/DICGC)	
(i) Sub-standard	(i) Over 3-5 years bucket.
(ii) Doubtful and Loss	(ii) Over 5 years bucket.
7. Fixed Assets	Over 5 years bucket
8) Other Assets	
(i) Inter-office Adjustment	Net debit balance in 1-14 day. Intangible assets and assets not representing cash receivables in over 5 yr bucket.
(ii) Leased Assets	Interim cash flows may be shown under respective maturity buckets.
C) Contingent Liabilities / Lines of Credit committed / available and other Inflows / Outflows.	
1.(i) Lines of Credit to/ from Institutions	(i) 1-14 days bucket.
(ii) Unavailed portion of Cash Credit / OD / Demand loan component of W/C limits (outflow)	(ii) Based on behavioral/ seasonal pattern of potential availments in relevant maturity buckets up to 12 months.
(iii) Export Refinance Unavailed (inflows)	(iii) 1-14 days bucket.
2. Letters of Credit / Guarantees (outflow)	Historical trend analysis to be conducted on devolvement and the amounts arrived at distributed in various time buckets. The assets created out of devolvement may be shown under respective maturity buckets based on probable recovery dates.
3. Repo / Bills Rediscounted / Swaps INR / USD, maturing Forex forward contracts etc. (outflow / inflow)	Respective maturity buckets.
4. Interest payable / receivable (outflow / inflow) - Accrued interest which are appearing in the books on the reporting day	Respective maturity buckets.
OTHER RBI GUIDELINES	
<ul style="list-style-type: none"> • Liability on a/c short fall in CRR balance on reporting Fridays, wage settlement, capital expenditure, etc. and any other contingency may be shown under respective maturity buckets. • All overdue liabilities may be placed in the 1-14 days bucket. • Interest / installments from overdue advances/ investments, overdue for less than one month to be placed in over 3-6 months, bucket. • Interest and installments due (before classification as NPAs) in over 6-12 months bucket without the grace period of one month if the earlier receivables remain uncollected. 	

MATURITY LADDER : AN EXAMPLE

Maturity Ladder based on Contractual Maturities

DAY - I CASH INFLOWS	Amount	CASH OUTFLOWS	Amount	Gap (Excess / Shortfall)	RBI Tolerance limits	Remarks
Maturing Assets	100	Maturing liabilities	25		Negative Gap or net cumulative mismatch should not be more than 5% of Total outflows.	Gap is positive RBI Compliant
		Volatile SB (10%)	10			
		Volatile CA (15%)	15			
Interest Receivable	20	Contractual maturities	10			
Asset Sales	50	Interest Payable	30			
Draw downs on Commercial Lines	10	Other Deposit Runoffs	10			
		Draw downs on Lending Commitment	-			
TOTAL	180	TOTAL	100	+80		
DAY - 2-7 CASH INFLOWS		CASH OUTFLOWS				
Maturing Assets	100	Maturing Liabilities	70		Negative Gap should not be more than 10% of Total outflows	Negative Gap is 5% of the Total outflow RBI compliant
Interest Receivable	25	Contractual maturities	40			
Asset Sales	55	Interest Payable	40			
Draw downs on Commercial Lines	10	Other Deposit Runoffs	50			
		Draw downs on Lending Commitment	-			
TOTAL	190	TOTAL	200	(-)10		
DAY - 8-14 CASH INFLOWS		CASH OUTFLOWS				
Maturing Assets	160	Maturing Liabilities with	90		Negative Gap should not be more than 15% of Total outflows	Negative Gap is 25% of the total outflow Here the Bank has breached RBI tolerance limits
Interest Receivable	50	Contractual maturities	130			
Asset Sales	60	Interest Payable	40			
Draw downs on Commercial Lines	30	Other Deposit Runoffs	140			
		Draw downs on Lending Commitment	-			
TOTAL	300	TOTAL	400	(-) 100		
DAY - 15-28 CASH INFLOWS		CASH OUTFLOWS				
Maturing Assets	160	Maturing Liabilities with	130		Negative Gap should not be more than 20% of Total outflows	Gap is positive RBI compliant
Interest Receivable	80	Contractual maturities	60			
Asset Sales	90	Interest Payable	80			
Draw downs on Commercial Lines	40	Other Deposit	80			
		Draw downs on Lending Commitment	-			
TOTAL	370	TOTAL	350	+20		

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FUNDING EXERCISE

- Some banks borrow in call markets and some lend. An efficient funds manager will lend in call markets if his calculations show that excess liquidity is available and can be deployed. He will borrow in various markets and for various maturities if there is a short fall.
- Typically, if a bank finds substantial funding gaps in distant periods, it will endeavor to fill these gaps by influencing the maturity of transactions to off-set the gap.
- For example, if there is a significant funding requirement 30 days hence but there is excess position now, the fund manger will invest in an asset maturing on the required day or one day prior to that depending on the bank's policy of floats.

Financing of Gap to maintain RBI Norms:

- In case the negative gap exceeds the prudential limit of 5%,10%,15% & 20% of outflows in the first four buckets, the bank may show by way of a foot note as to how it proposes to finance the gap to bring the mismatch within the prescribed limits.
- The Gap can be financed from market borrowings (call / term), Bills Rediscounting, Repo and deployment of foreign currency resources after conversion into rupees (un-swapped foreign currency funds).
- However, prudent Bankers would avoid borrowing in the markets by managing their ALM better. Any borrowing will lead to "interest expense" reducing the Net Interest Income (NII). Any reduction in NII will lead to a lower "Net Interest Margin" or NIM. This is how, NII and NIM become indicators of whether the Bank is having an efficient ALM system or not.

CONSTRUCTING ALTERNATIVE SCENARIOS TO ASSESS LIQUIDITY POSITIONS

Once the maturity ladder is constructed, Banks should study the net funding requirements under three alternate scenarios such as:

- a) **GENERAL (NORMAL) MARKET CONDITIONS:** Liquidity positions on a normal business day
- b) **BANK SPECIFIC CRISIS:** Liquidity positions if there is a Bank specific crisis (some adverse news specific to that Bank normally triggers a run on the deposits by the public and hesitation on the part of the peer Banks to lend to the bank which is experiencing the crisis)
- c) **GENERAL MARKET CRISIS:** Assessing the liquidity positions if there is an Industry / market crisis. Such a situation did occur in India in the latter part of the financial year 2008-09. Indian Banks tided over this crisis mainly because of the quick and decisive action of RBI (reduction in CRR, SLR, Repo rate etc to induce liquidity).

The framework for assessing and managing bank liquidity presented here has three major dimensions:

- a) **Measuring and managing net funding requirements as discussed above**
- b) **Managing Market Access:** Through understanding of how funds can be arranged internally (inter-branch transfers) or externally (borrowing arrangements with other Banks), building strong relationships with funds providers (SBI for example lends to most other Banks under some arrangement or the other), and developing markets for asset sales or exploring arrangements under which a bank can borrow against its assets.
- c) **Contingency Planning:** Spelling out procedures to ensure that information flows remain timely and uninterrupted, and provide senior management with the precise information it needs on asset and liability behavior, in order to make quick decisions. Contingency plans should also include procedures for making up cash flow shortfalls in emergency situations (for example, the assets that can be liquidated to generate funds should be pre-decided rather than during the emergency).

Distinction between Market access and Contingency planning: Market access is the plan for normal business activities while as Contingency plans are used when normal funding is insufficient and are meant for more serious situations such as a "Bank specific crisis" or "General market crisis".

Given below is a hypothetically constructed "Alternate scenario" for ABC Bank. It takes in to account, three possible situations and assesses the outcomes that can occur. Based on the results, fund managers can keep their plans to ensure liquidity ready.

ABC BANK - MATURITY LADDER UNDER ALTERNATIVE SCENARIOS

CASH INFLOWS	1). Normal Business Conditions	2). ABC Bank (Institution) Specific Crisis	3). General Market Crisis
Maturing Assets	200	200	180
Interest Receivable	40	40	20
Asset Sales	100	120	0
Draw downs	20	0	10
Total	360	360	210
CASH OUTFLOWS			
Maturing Assets	100	100	100
Interest Payable	20	20	20
Deposit Runoffs	60	200	120
Draw downs on lending Commitments	100	120	150
Total	280	440	390
Liquidity Excess / (Shortfall)	+80	-(80)	-(180)

Note: We can note that ABC Bank which would have a comfortable liquidity position of + 80 crore on a normal business day went in to a negative position of (-) 80 crore in a Bank specific crisis and a crisis situation of (-) 180 crore when the crisis spread to the whole market. After making such assessments, Fund managers keep their Market access and Contingency plans ready.

STOCK APPROACH TO LIQUIDITY MANAGEMENT

STOCK APPROACH	
<p>Stock approach is based on the level (Stock) of assets and liabilities and off balance sheet exposure (Contingent liabilities) on a given date. <u>Nine types of ratios</u> are calculated to assess the liquidity position of the bank.</p>	
RATIOS WHICH ARE HIGHER THE BETTER	RATIOS WHICH ARE LOWER THE BETTER
<p>(1) Ratio of Core deposit to Total assets: Higher the ratio better the position as core deposits will constitute deposits from the public in the normal course of business which are likely to remain in the same range.</p>	<p>(1) Net Loans to Totals deposits ratio - Reflects the ratio of loans to public deposits or core deposits. Total loans here represent net advances after deduction of provision for loan losses and interest suspense a/c. Loan Component of a bank is not a liquid asset & therefore lower ratio better it is.</p>
<p>(2) Ratio of time deposit to total deposits: Time deposits provide stable level of liquidity and negligible volatility. Therefore, higher the ratio better it is.</p>	<p>(2) Ratio of volatile liabilities to Total assets: Volatile liabilities like market borrowings are to be assessed and measured against the total assets. Volatile assets cause liquidity problems. Lower the ratio better it is.</p>
<p>(3) Ratio of liquid assets to total assets. Higher level of liquid assets in total assets will ensure better liquidity. Therefore, higher the ratio better it is. Liquid assets - bank balances, money at call and short notice; inter bank markets due within one month, securities held for trading and Available for sale having ready market.</p>	<p>(3) Ratio of short-term liabilities to liquid assets: Short-term liabilities are likely to be redeemed at the end of their terms. Therefore, they will require liquid assets to meet their liability. A lower ratio should be aimed at.</p>
<p>(4) Ratio of prime asset to total asset: Prime assets - Cash balances with the bank & balances with other banks including RBI (Central bank) which can be drawn any time without any notice. Higher the ratio better it is.</p>	<p>(4) Ratio of short-term liabilities to Total assets: Short-term liabilities are balances in current account, volatile portion of savings account leaving behind core portion of saving which is constantly maintained. Maturing deposits within a short period of one month. It is better to contain this Ratio at low levels.</p>
	<p>(5) Ratio of market liabilities to Total assets: Market liabilities include money market borrowings; inter bank liabilities repayable within a short period. Lower the ratio better it is.</p>
<p>The Stock approach is a simplistic approach. The ratios are to be controlled in the context of other corporate objectives. For example, it may be easier from the liquidity manager's point of view to keep high balances with other banks and RBI but it should be remembered that these are idle assets earning nothing for the bank. Advocating keeping idle funds at huge levels for liquidity concerns, is not an objective of the Bank. The objective would be to minimize liquidity risks and optimize profitability in its context.</p>	

SPACE FOR NOTES

Definition
financial
banking
CLASS
Interest
option
1) GAP
amounts,
level of
liabilities
2) BASIS
given per
3) NET IN
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UNIT - 27

INTEREST RATE RISK MANAGEMENT

Definition: Interest rate risk is the risk where changes in market interest rates might adversely affect a bank's financial condition. It is the risk of getting locked in wrong pricing positions by wrong pricing. It exposes the bank's financial assets to adverse movements in interest rates. Interest rate risk is now accepted as an inherent risk in banking business.

CLASSIFICATION & SOURCES OF INTEREST RATE RISK:

Interest rate risk is broadly classified into mismatch or gap risk, basis risk, net interest position risk, embedded option risk; yields curve risk, price risk and reinvestment risk.

1) **GAP OR MISMATCH RISK:** A gap or mismatch risk arises from assets and liabilities with different principal amounts, maturity dates or re-pricing dates in a given time period, thereby creating an exposure to changes in the level of interest rate between assets and liabilities. The gap is the difference between the value of assets and liabilities on which the interest rates are reset during a given period.

2) **BASIS RISK:** The risk that the interest rate of assets and liabilities can change in different magnitudes (Over a given period of time) is called Basis risk.

3) **NET INTEREST POSITION RISK:** The bank's net interest position exposes it to an additional interest rate risk. If a bank has more assets on which it earns interest than its liabilities on which it pays interest. Interest rate risk arises when interest rate earned on assets changes while the cost of funding of the liabilities remains the same.

Thus, the bank with a positive net interest position (higher assets) will experience a reduction in NII as interest rate declines (on new assets or re-pricing the existing assets) and an expansion in NII as interest rate rises.

A large positive net interest position accounts for most of the profit generated by financial institutions that fund their assets from equity rather than borrowings. In an increasing interest rate market, assets keep getting re-priced at higher rates but liabilities are hardly prone to changes being long term equity mostly.

4) **EMBEDDED OPTION RISK:** Large changes in the level of market interest rates create another source of risk to banks profit by prepayment of loans and bonds (with put or call options) and/or premature withdrawal of deposits before their stated maturity dates. In cases where there is no penalty for prepayment of loans, the borrowers have a natural tendency to pay-off their loans when a decline in interest rate occurs. In such cases, the bank will receive only a lower NII. Many banks stipulate a Pre-closure penalty to cover the embedded option risk.

5) **YIELD CURVE RISK:** A Yield curve is a line on a graph plotting the yield of all maturities of a particular instrument. Yield curve changes its slope and shape from time to time depending upon re-pricing and other such factors. As the economy moves through business cycle, the yield curve changes rather frequently. At the intervention of Reserve Bank of India, the yield curve can be twisted in desired direction by altering the yields on Government stocks or different maturities.

6) **PRICE RISK:** Price risk occurs when assets are sold before their maturity dates. For example, if a T-bill with 10% yield with 10 year maturity is held until maturity, it will give the holder full value. However, its value comes down if the market interest rates are above 10% as no one would pay a premium on an instrument which would give them 10% return when they can earn higher interest by deploying elsewhere in the market. If the holder has to sell before maturity, he may have to sell it at discount (loss). This phenomenon where the "Price" of an instrument or the realizable value of the instrument is at risk is called "Price risk".

7) **REINVESTMENT RISK:** Uncertainty with regard to interest rate at which assets and future cash flows can be reinvested is called reinvestment risk. For example, in a rising interest scene, a bank has to keep paying higher rate of interest to the same depositors each time he renews his deposit. This is called "Reinvestment" risk.

EFFECTS OF INTEREST RATE RISK:

Changes in interest rates can have adverse effects both on a bank's earnings and its economic value. Therefore effects of interest rate risks can be assessed in three ways.

- > Earnings Perspective
- > Economic Perspective
- > Embedded Losses

1) **EARNINGS PERSPECTIVE:** In the earning perspective, the focus is on the impact of changes in the interest rates on actual or reported earnings. Variations in earnings represented by Net Interest Income is the focal point for interest rate risk analysis as reduced earnings or outright losses (for example - where a bank is paying more interest on its liabilities than it is earning on its assets because it is locked in to contractual positions) can harm the financial stability. The losses can reduce the market confidence it enjoys. Banks have now moved into other activities that generate fee-based and other non-interest income and a broader focus on overall net income, incorporating both interest and non-interest income and expenses, has become more common.

2) **ECONOMIC VALUE PERSPECTIVE:** Variation in market interest rates affects the economic value of a bank. The sensitivity of a bank's economic value to movements in interest rates is relevant from an investor's point of view. The economic value of a bank is the Present value of the bank's expected future cash flows.

Economic Value of an Enterprise(Bank) = Present value of future cash flows on assets + Expected net cash flows on off-balance sheet items - present value expected cash flows on liabilities.

Economic value perspective of measuring interest rate risk actually measures the sensitivity of the net worth of the bank to changes in interest rates.

3) **EMBEDDED LOSSES:** The impact that past interest rates on future performance is called embedded risk. Investments that are not marked to market may already contain embedded gains or losses due to past rate movements. These gains or losses may be reflected over time in the bank's earnings. For example, say a bank has invested in its subsidiary and hold its shares at par value (Rs.10). The subsidiary's shares are trading in the market at Rs2/- but the bank continues to show the shares at par value in its balance sheet as the shares are not marked to market. There is an embedded loss in the balance sheet which can affect the bank in a future date.

Note: Due to diligent accounting principles, bank balance sheets have become fairly transparent. Most of the holdings are marked to market these days.

MEASUREMENT OF INTEREST RATE RISK

Measuring the interest rate risk is the first step towards managing this risk. Measurement systems should:

- Assess interest rate risk associated with a bank's assets, liabilities, and OBS positions;
- Utilize generally accepted financial concepts and risk measurement techniques; and
- Have well-documented assumptions and parameters.

Techniques are available for measuring the interest rate risk exposure of both earnings and economic value. They range from simple calculations to static simulations and highly sophisticated dynamic modeling techniques.

INTEREST RATE RISK MEASUREMENT TECHNIQUES

The usual methods followed in measuring the interest rate risk are :

- a) **EARNINGS PERSPECTIVE:** Gap Analysis, simulation techniques and Internal Models based on VaR
- b) **ECONOMIC PERSPECTIVE:** Gap analysis combined with Duration gap analysis, Simulation techniques and Internal Models based on VaR.

1) **RE-PRICING SCHEDULES:** This is a simple exercise of assigning or distributing interest sensitive assets, liabilities and off-balance sheet items to different time-bands according to Residual maturity. Assets and liabilities lacking definitive maturity dates such as savings accounts are assigned to re-pricing time bands according to the judgment and past experience of the bank (Behavioral maturity).

2) **GAP ANALYSIS:** Maturity / re-pricing schedules are used here to generate simple indicators of the interest rate risk sensitivity of both earnings and economic value to changing interest rates. When this approach is used to assess the interest rate risk of current earnings, it is referred to as gap analysis. Gap analysis was one of the earliest tools used to measure a bank's interest rate risk exposure, and continues to be widely used by banks.

- To evaluate earnings exposure, interest rate-sensitive liabilities in each time band are subtracted from the corresponding interest rate-sensitive assets to produce a re-pricing 'gap' for that time band.
- This gap can be multiplied by an assumed change in interest rates to yield - an approximation of the change in the Net interest income that would result from such an interest rate movement.
- This approximation in the possible change of the interest rate used in the analysis can be arrived at on the basis of a variety of factors, including historical experience, simulation of potential future interest rate movements, and the judgment of the bank management.
- A negative, or liability-sensitive gap occurs when liabilities exceed assets (including OBS positions) in a given time band. This means that an increase in market rates could cause a decline in net interest income. That is liabilities will incur higher cost.
- A positive or asset-sensitive gap occurs when assets exceed liabilities. This means that a decrease in market interest rates could cause a decline in net interest income.

Shortcomings of Gap Analysis

- Gap analysis assumes that there are no variations in the characteristics of different positions within a time band and that all positions within a given time band will mature / re-price simultaneously. This simplification has significant impact on the estimates as the degree of aggregation within a time band increases.
- Gap analysis ignores differences in spreads between interest rates that could arise as the level of market interest rates changes (basis risk)
- It does not take into account any changes in the timing to payments that might occur as a result of changes in the interest rate environment. Thus, it fails to account for differences in the sensitivity or income that may arise from option-related positions.
- Finally, most gap analyses fail to capture variability in non-interest revenue and expenses, a potentially important source of risk to current income.

3) DURATION METHOD:

Duration is a measure of the percentage change in the economic value of a position that will occur given a small change in the level of interest rates.

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A maturity / re-pricing schedule is used to evaluate the effects of changing interest rates on a bank's economic value by applying sensitivity weights to each time band. Typically, such weights are based on estimates of the duration of the assets and liabilities that fall into each time band.

This method focuses on two important factors:

- 1) Balance life of the asset or liability and
- 2) Impact of any change in interest rates on the economic value of the asset.

4) **SIMULATION APPROACHES:** The Simulations techniques involve detailed assessments of the potential effects of changes in interest rates on earnings and economic value by simulating the future path of interest rates and their impact on cash flows.

Simulation approaches involve a more detailed breakdown of various categories of on-and off-balance-sheet positions, and incorporates specific assumptions about the interest and principal payments and non-interest income and expenses arising from each type of position. In addition, simulation techniques can incorporate more varied and refined changes in the interest rate environment, ranging from changes in the slope and shape of the yield curve to interest rate scenarios derived from Monte Carlo simulations. Simulations techniques could be static or dynamic.

(a) **Static Simulations:** In static simulations, the cash flows arising solely from the bank's current on/off-balance sheet positions are assessed. For assessing the exposures of earnings, simulations estimating the cash flows and resulting earnings streams over a specific period are conducted based on one or more assumed interest rate scenarios.

(b) **Dynamic Simulation:** In dynamic simulation approach, the simulation builds in detailed assumptions about the future course of interest rates and the expected changes in a bank's business activity over that time. For instance, the simulation involves assumptions about a bank's strategy for changing administered interest rates (on savings deposits, for example), behavior of the bank's customer (e.g. withdrawals from Current and savings deposits), and/or about the future stream of business (new loans or other transactions) that the bank may have.

(c) **Additional Issues:** One of the most difficult tasks when measuring interest rate risk is how to deal with those positions where behavioral maturity differs from contractual maturity or where there is no stated contractual maturity. For example, how can an assessment be made as to how many depositors would close their accounts prematurely when the interest rate on deposits increases in this bank or the markets?

Similarly, in a falling interest rate regime, many loan parties may want to close their loans in this bank and borrow fresh at lower rates in some other bank. This is called 'Behavioral maturity'. Contracted maturity of course is the agreed upon due date as the name suggests. The question being raised is how to assess this behavior and quantify it for the purpose of analysis. Thus measuring embedded options is a complex issue and banks normally go by historic behavioral data and also information gathered from branches on the trend and customer psychology.

GUIDELINES FOR CONSTRUCTING STATEMENT OF INTEREST RATE SENSITIVITY

An asset or liability is normally classified as rate sensitive if:

1. Within the time interval under consideration, there is a cash flow;
2. The interest rate resets / re-prices contractually during the interval;
3. RBI changes the interest rates (i.e. interest rates on Savings Bank Deposits, DRI advances, Export credit, Refinance, CRR balance, etc.) in cases where interest rates are administered ; and
4. It is contractually pre-payable or withdrawal before the stated maturities.

The Gap Report should be generated by grouping rate sensitive liabilities, assets and off-balance sheet positions into time buckets according to residual maturity or next re-pricing period, whichever is earlier.

Banks have to identify gaps in the following buckets for Interest rate risk			
1	1-28 days	5	Over 1 year and up to 3 years
2	29 days and up to 3 months	6	Over 3 years and up to 5 years
3	Over 3 months and up to 6 months	7	Over 5 years
4	Over 6 months and up to 1 year	8	Non-sensitive

The Gap is the difference between Rate Sensitive Assets (RSA) & Rate Sensitive Liabilities (RSL) for each bucket.

RBI GUIDELINES - TIME BUCKETS FOR INTEREST RATE SENSITIVITY

HEADS OF ACCOUNTS	RATE SENSITIVITY AND TIME BUCKET
LIABILITIES	
1) Capital, Reserves and Surplus	Non-sensitive.
2) Current Deposits	Non-sensitive.
3) Savings Bank Deposits	Sensitive to the extent of interest paying (core) portion. <i>This may be included in over 3-6 months bucket. The non-interest paying portion may be shown in non-sensitive bucket.</i> Where banks can estimate the future behavior/sensitivity of current/savings bank deposits to changes in market variables, the sensitivity so estimated could be shown under appropriate time buckets.
4) Term Deposits and Certificates of Deposit	Sensitive and re-prices on maturity. The amounts should be distributed to different buckets on the basis of remaining term to maturity. However, in case of floating rate term deposits, the amounts may be shown under the time bucket when deposits contractually become due for re-pricing.
5) Borrowings – Fixed	Sensitive and re-prices on maturity. The amounts should be distributed to different buckets on the basis of remaining maturity.
6) Borrowings – Floating	Sensitive and re-prices when interest rate is reset. The amounts should be distributed to the appropriate bucket, which refers to the re-pricing date.
7) Borrowings – Zero Coupon	Sensitive and re-prices on maturity. The amounts should be distributed to the respective maturity buckets.
8) Borrowings from RBI	Up to 1 month bucket.
9) Refinances from other agencies.	(a) Fixed rate: As per respective maturity. (b) Floating rate: Reprices when interest rate is reset.
10) Other Liabilities and Provisions	
i) Bills Payable	i) Non-sensitive.
ii) Inter-office Adjustment	ii) Non-sensitive.
iii) Provisions	iii) Non-sensitive.
iv) Others	iv) Non-sensitive.
11) Repos / Bills Re-discounted (DUPN), Swaps (Buy / Sell) etc.	Re-prices only on maturity and should be distributed to the respective maturity buckets.
ASSETS	
1) Cash	Non - Sensitive.
2) Balances with RBI	Interest earning portion may be shown in over 3 - 6 months bucket. The balance amount is non-sensitive.
3) Balances with other Banks	
i) Current Account	i) Non-Sensitive.
ii) Money at Call and Short Notice, Term Deposits and other placements	ii) Sensitive on maturity. The amounts should be distributed to the respective maturity buckets.
4) Investments (Performing).	
i) Fixed Rate / Zero Coupon	i) Sensitive on Maturity.
ii) Floating Rate	ii) Sensitive at the next re-pricing date
5) Shares/Units of Mutual Funds	Non-Sensitive.
6) Advances (Performing)	
(i) Bills Purchased and Discounted (including bills under DUPN)	(i) Sensitive on Maturity.
(ii) Cash Credits / Overdrafts (including TODs) / Loans repayable on demand and Term Loans	(ii) Sensitive only when PLR/risk premium is changed. Of late, frequent changes in PLR have been noticed. Thus, each bank should foresee the direction of interest rate movements of funding options and capture the amounts in the respective maturity buckets, which coincide with the time taken by banks to effect changes in PLR in response to changes in market interest rates.

7) NPAs (Advances & Investments) *	
(i) Sub-Standard	(i) Over 3-5 years bucket.
(ii) Doubtful and Loss	(ii) Over 5 years bucket.
8) Fixed Assets	Non-sensitive.
9) Other Assets.	
(i) Inter-office Adjustment	(i) Non-sensitive.
(ii) Leased Assets	(ii) Sensitive on cash flows. The amounts should be distributed to the respective maturity buckets corresponding to the cash flow dates.
(iii) Others	(iii) Non-sensitive.
10) Reverse Repo, Swaps (Sell / Buy) & Bills Rediscounted (DUPN)	Sensitive on maturity.
11) Other products (Interest Rate)	
(i) Swaps	(i) Sensitive and should be distributed under different buckets with reference to maturity.
(ii) Other Derivatives	(ii) Should be suitably classified as and when introduced.

Profitability for banks depend on six factors viz. interest income, fee based income, trading income, interest expenses, staff expenses and other operating expenses.

GAP ANALYSIS:

- The Gap is the difference between Rate Sensitive Assets (RSA) and Rate Sensitive Liabilities (RSL) for each time bucket. A Positive Gap indicates that it has more RSAs than RSLs whereas the Negative Gap indicates that it has more RSLs.
- The Gap reports indicate whether the institution is in a position to benefit from rising interest rates by having a positive Gap (RSA > RSL) or from declining interest rates by a negative Gap (RSL > RSA).
- The Gap can, therefore, be used as a measure of interest rate sensitivity.
- Each bank should set prudential limits on individual Gaps with the approval of the Board / Management Committee. The prudential limits should have a bearing on the Total Assets, Earning Assets or Equity. The banks may work out Earnings at Risk (EaR) or Net Interest Margin (NIM) based on their views on interest rate movements and fix a prudent level with the approval of the Board / Management Committee.

STRATEGIES FOR CONTROLLING INTEREST RATE RISK

- First step is to analyze and identify the assets/liabilities which are interest rate sensitive. Studying maturity pattern is one method.
- Banks normally rely on historical behavior of the various types of assets and liabilities.
- Having identified the rate sensitive items, the bank should focus on controlling the gap between Rate Sensitive Assets and rate Sensitive Liabilities.
- Most banks endeavor to match the assets and liabilities maturities as closely as possible in order to reduce the gap to zero and insulate the NI from the volatility of interest rate.
- The basic strategy of the banks is focused on bridging the gap position.
- The Balance sheet strategies to reduce the assets and liabilities sensitivity to interest rate dynamics of the markets are:

REDUCTION OF ASSET SENSITIVITY	REDUCTION OF LIABILITY SENSITIVITY
<ul style="list-style-type: none"> ● Increase short-term borrowings ● Increase long-term lending ● Extend investment portfolio maturities ● Increase floating rate deposits ● Increase fixed rate lending ● Sell floating rate loans 	<ul style="list-style-type: none"> ● Increase short-term lending ● Increase long-term deposits (borrowing) ● Reduce investment portfolio maturities ● Increase floating rate lending's

The other options available to the bank for managing interest rate risk are:

- Match long-term assets preferably with non-interest bearing liabilities.
- Match re-price able assets with a similar re-price able liabilities; the term re-price able automatically denotes items which come up for renewing.
- Use Forward Rate Agreements, Swaps, Options and Financial Futures to construct synthetic securities and thus hedge against exposure to interest rate risk; and
- Maturity mismatch is deepened by increase in non performing Assets (NPAs) and loan re-negotiations. Banks should have sound policies for monitoring assets and avoid slippages. It must be remembered that NPAs are non-interest earning assets funded out of volatile interest expending liabilities.

UNIT - 28

PROFIT PLANNING

Profit planning in a bank essentially involves balance sheet management covering credit, investment and non-fund based income. Banks' income arises from three sources viz. interest income, fee based income and treasury income. Interest income is derived from lending as well as investments in securities, bonds etc. Banks are required to have a proper blending of investment in government securities and credit portfolios to maximize the profits for a given level of risk appetite. Let us take one example of various combinations. Suppose, a bank has Rs. 1000 to invest or lend. We look at four different scenarios as below:

	I	II	III	IV
a) Investment in Govt. Securities with yield 6% and risk weightage of 0%	1000	400	300	300
b) Lending to AAA rated customers with yield 8% p.a. and risk weightage of 20%	0	600	300	300
c) Lending to AA rated customers with yield of 10% p.a. and risk weightage of 50%	0	0	400	200
d) Lending to A rated customers with yield of 12% p.a. and risk weightage of 100%	0	0	0	200
Total Investment	1000	1000	1000	1000
Yield	I	II	III	IV
a)	60	24	18	18
b)	0	48	24	24
c)	0	0	40	20
d)	0	0	0	24
Total Yield	60	72	82	86
Rate	6.00%	7.20%	8.20%	8.60%
Risk Weighted Assets	I	II	III	IV
a)	0	0	0	0
b)	0	120	60	60
c)	0	0	200	100
d)	0	0	0	200
RWA	0	120	260	360
Capital Required (at 8% CRAR)	0	96	20.8	28.8

Thus, you would observe that risk would increase for lending to lower rated customers resulting in an increased need for capital and also lending portfolio to earn the best possible returns for a given capital level.

Effect of NPA: Banks have to take into account the effect of NPA on the interest income and thereby on the profitability. NPAs have two fold effects, reduction in income and need for additional capital. Hence, return on capital or profitability gets further deteriorated.

Fee based Income: The second major source of income for banks is from fee based activities. The traditional activities such as demand drafts, remittances, safe custody, guarantees, letters of credits, bills etc. continue to be prevalent. The last and most important component of income is treasury income, which is derived by trading in securities, foreign exchange, equities, bullion, commodities and derivatives. This is largely a speculative activity, which banks undertake with stringent internal controls and checks in place. If a bank is not adequately capitalized, such losses can cause serious problems for it. In the 90s, Barings Bank, a very old British Bank, collapsed due to very large losses on the Exchange.

Controlling the Expenses: On the expenses side, there are two major expenses viz. interest expenses and operating expenses. There are three major parts of the deposit portfolio. Current Deposits which are interest free, Savings Deposits – which get a regulated interest rate of 3.5% in our country and term (short & long) Deposits – for which interest rates are deregulated in India. Thus, a bank has to find ways and means to improve the share of low cost deposits such as Current and Savings Bank. This helps them to lower interest costs.

The second factor of expenditure is operating costs which consist of staff costs and other costs. Banks try to improve productivity and also link up some of the staff costs and other costs. Banks try to improve productivity and also link up some of the staff costs to productivity by providing incentive based packages.

GLOSSARY

- **Asset:** An asset is anything of value that is owned by a person or business.
- **Available for Sale:** The securities available for sale are those securities where the intention of the bank is neither to trade nor to hold till maturity. These securities are valued at the fair value which is determined by reference to the best available source of current market quotations or other data relative to current value.
- **Balance Sheet:** A balance sheet is a financial statement of the assets and liabilities of a trading concern, recorded at a particular point in time.
- **Banking Book:** The banking book comprises assets and liabilities, which are contracted basically on account of relationship or for steady income and statutory obligations and are generally held till maturity.
- **Basel Capital Accord:** The Basel Capital Accord is an Agreement concluded among country representatives in 1988 to develop standardized risk-based capital requirements for banks across countries. The Accord was replaced with a new capital adequacy framework (Basel II), published in June 2004. Basel II is based on three mutually reinforcing pillars that allow banks and supervisors to evaluate properly the various risks that banks face. These three pillars are: minimum capital requirements, which seek to refine the present measurement framework supervisory review of an institution's capital adequacy and internal assessment process; market discipline through effective disclosure to encourage safe and sound banking practices
- **Basel Committee on Banking Supervision:** The Basel Committee is a committee of bank supervisors consisting of members from each of the G10 countries. The Committee is a forum for discussion on the handling of specific supervisory problems. It coordinates the sharing of supervisory responsibilities among national authorities in respect of banks' foreign establishments with the aim of ensuring effective supervision of banks' activities worldwide.
- **Basic Indicator Approach:** An operational risk measurement technique permitted under Basel II. The approach sets a charge for operational risk as a fixed percentage ("alpha factor") of a single indicator. The indicator serves as a proxy for the bank's risk exposure.
- **Basis Risk:** The risk that the interest rate of different assets, liabilities and off-balance sheet items may change in different magnitude is termed as basis risk.
- **Capital:** Capital refers to the funds (e.g., money, loans, equity) which are available to carry on a business, make an investment, and generate future revenue. Capital also refers to physical assets which can be used to generate future returns.
- **Capital Adequacy:** A measure of the adequacy of an entity's capital resources in relation to its current liabilities and also in relation to the risks associated with its assets. An appropriate level of capital adequacy ensures that the entity has sufficient capital to support its activities and that its net worth is sufficient to absorb adverse changes in the value of its assets without becoming insolvent. For example, under BIS (Bank for International Settlements) rules, banks are required to maintain a certain level of capital against their risk-adjusted assets.
- **Capital Reserves:** That portion of a company's profits not paid out as dividends to shareholders. They are also known as undistributable reserves.
- **Convertible Bond:** A bond giving the investor the option to convert the bond into equity at a fixed conversion price or as per a pre-determined pricing formula.
- **Core Capital:** Tier 1 capital is generally referred to as Core Capital.
- **Credit Risk:** Risk that a party to a contractual agreement or transaction will be unable to meet their obligations or will default on commitments. Credit risk can be associated with almost any transaction or instrument such as swaps, repos, CDs, foreign exchange transactions, etc. Specific types of credit risk include sovereign risk, country risk, legal or force majeure risk, marginal risk and settlement risk.
- **Derivative:** A derivative instrument derives much of its value from an underlying product. Examples of derivatives include futures, options, forwards and swaps. For example, a forward contract can be derived from the spot currency market and the spot markets for borrowing and lending. In the past, derivative instruments tended to be restricted only to those products which could be derived from spot markets. However, today the term seems to be used for any product that can be derived from any other.
- **Deferred Tax Assets:** Unabsorbed depreciation and carry forward of losses which can be set-off against future taxable income which is considered as timing differences result in deferred tax assets. The deferred Tax Assets are accounted as per the Accounting Standard 22. Deferred Tax Assets have an effect of decreasing future income tax payments, which indicates that they are prepaid income taxes and meet definition of assets. Whereas deferred tax liabilities have an effect of increasing future year's income tax payments, which indicates that they are accrued income taxes and meet definition of liabilities
- **Debentures:** Bonds issued by a company bearing a fixed rate of interest usually payable half yearly on specific dates and principal amount repayable on a particular date on redemption of the debentures.
- **Duration:** Duration (Macaulay duration) measures the price volatility of fixed income securities. It is often used in the comparison of the interest rate risk between securities with different coupons and different maturities. It is the weighted average of the present value of all the cash flows associated with a fixed income security. It is expressed in years. The duration of a fixed income security is always shorter than its term to maturity, except in the case of zero coupon securities where they are the same.

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- **Economic Capital Model (ECM):** Economic capital is the target amount of capital, which optimizes the return for a Bank's stakeholders for a desired level of risk. A model, that generates the Economic Capital target, is known as Economic Capital Model (refer ICAAP table for context).
- **Foreign Institutional Investor:** An institution established or incorporated outside India which proposes to make investment in India in securities; provided that a domestic asset management company or domestic portfolio manager who manages funds raised or collected or brought from outside India for investment in India on behalf of a sub-account, shall be deemed to be a Foreign Institutional Investor.
- **Forward Contract:** A forward contract is an agreement between two parties to buy or sell an agreed amount of a commodity or financial instrument at an agreed price, for delivery on an agreed future date. In contrast to a futures contract, a forward contract is not transferable or exchange tradable, its terms are not standardized and no margin is exchanged. The buyer of the forward contract is said to be long the contract and the seller is said to be short the contract.
- **General Provisions and Loss Reserves:** Such reserves, if they are not attributable to the actual diminution in value or identifiable potential loss in any specific asset and are available to meet unexpected losses, can be included in Tier II capital.
- **General Risk:** Risk that relates to overall market conditions while specific risk is risk that relates to the issuer of a particular security.
- **Hedging:** Taking action to eliminate or reduce exposure to risk.
- **Held for Trading:** Securities where the intention is to trade by taking advantage of short-term price / interest rate movements.
- **Horizontal Disallowance:** A disallowance of offsets to required capital used the BIS Method for assessing market risk for regulatory capital. In order to calculate the capital required for interest rate risk of a trading portfolio, the BIS Method allows offsets of long and short positions. Yet interest rate risk of instruments at different horizontal points of the yield curve are not perfectly correlated. Hence, the BIS Method requires that a portion of these offsets be disallowed.
- **Hybrid Debt Capital Instruments:** In this category, fall a number of capital instruments, which combine certain characteristics of equity and certain characteristics of debt. Each has a particular feature, which can be considered to affect its quality as capital. Where these instruments have close similarities to equity, in particular when they are able to support losses on an ongoing basis without triggering liquidation, they may be included in Tier II capital.
- **Interest Rate Risk:** Risk that the financial value of assets or liabilities (or inflows/outflows) will be altered because of fluctuations in interest rates. For example, the risk that future investment may have to be made at lower rates and future borrowings at higher rates.
- **Long Position:** A long position refers to a position where gains arise from a rise in the value of the underlying.
- **Market Risk:** Risk of loss arising from movements in market prices or rates away from the rates or prices set out in a transaction or agreement.
- **Modified Duration:** The modified duration or volatility of an interest bearing security and represents the percentage change in a securities' price for a 100 basis points change in yield.
- **Mortgage-Backed Security:** A bond-type security in which the collateral is provided by a pool of mortgages. Income from the underlying mortgages is used to meet interest and principal repayments.
- **Mutual Fund:** Mutual Fund is a mechanism for pooling the resources by issuing units to the investors and investing funds in securities in accordance with objectives as disclosed in offer document. A fund established in the form of a trust to raise monies through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments.
- **Net Interest Margin:** Net interest margin is the net interest income divided by average interest earning assets.
- **Net NPA:** Net NPA = Gross NPA – (Balance in Interest Suspense account + DICGC/ECGC claims received and held pending adjustment + Part payment received and kept in suspense account + Total provisions held)
- **Nostro Accounts:** Foreign currency settlement accounts that a bank maintains with its overseas correspondent banks. These accounts are assets of the domestic bank.
- **Off-Balance Sheet exposures:** Off-Balance Sheet exposures refer to the business activities of a bank that generally do not involve booking assets (loans) and taking deposits. Off-balance sheet activities normally generate fees, but produce liabilities or assets that are deferred or contingent and thus, do not appear on the institution's balance sheet until or unless they become actual assets or liabilities.
- **Open position:** It is the net difference between the amounts payable and amounts receivable in a particular instrument or commodity. It results from the existence of a net long or net short position in the particular instrument or commodity.
- **Option:** An option is a contract which grants the buyer the right, but not the obligation, to buy (call option) or sell (put option) an asset, commodity, currency or financial instrument at an agreed rate (exercise price) on or before an agreed date (expiry or settlement date). The buyer pays the seller an amount called the premium in exchange for this right. This premium is the price of the option.

- **Risk:** The possibility of an outcome not occurring as expected. It can be measured and is not the same as uncertainty, which is not measurable. In financial terms, risk refers to the possibility of financial loss. It can be classified as credit risk, market risk and operational risk.
- **Risk Asset Ratio:** A bank's risk asset ratio is the ratio of a bank's risk assets to its capital funds. Risk assets include assets other than highly rated government and government agency obligations and cash, for example, corporate bonds and loans. The capital funds include capital and undistributed reserves. The lower the risk asset ratio the better the bank's 'capital cushion'.
- **Risk Weights:** Basel II sets out a risk-weighting schedule for measuring the credit risk of obligors. The risk weights are linked to ratings given to sovereigns, FIs and corporations by external credit rating agencies.
- **Securitisation:** The process whereby similar debt instruments/assets are pooled together and repackaged into marketable securities which can be sold to investors. The process of loan securitisation is used by banks to move their assets off the balance sheet in order to improve their capital asset ratios.
- **Short Position:** A short position refers to a position where gains arise from a decline in the value of the underlying. It also refers to the sale of a security in which the seller does not have a long position.
- **Specific Risk:** Within the framework of the BIS proposals on market risk, specific risk refers to the risk associated with a specific security, issuer or company, as opposed to the risk associated with a market or market sector (general risk).
- **Subordinated Debt:** Refers to the status of the debt. In the event of the bankruptcy or liquidation of the debtor, subordinated debt only has a secondary claim on repayments, after other debt has been repaid.
- **Tier One (or Tier I) Capital:** A term used to refer to one of the components of regulatory capital. It consists mainly of share capital and disclosed reserves (minus goodwill, if any). Tier I items are deemed to be of the highest quality because they are fully available to cover losses. The other categories of capital defined in Basel II are Tier II (or supplementary) capital and Tier III (or additional supplementary) capital.
- **Tier Two (or Tier II) Capital:** Refers to one of components of regulatory capital. Also known as supplementary capital, it consists of certain reserves and certain types of subordinated debt. Tier II items qualify as regulatory capital to the extent that they can be used to absorb losses arising from a bank's activities. Tier II's capital loss absorption capacity is lower than that of Tier I capital.
- **Trading Book:** A trading book or portfolio refers to the book of financial instruments held for the purpose of short-term trading, as opposed to securities that would be held as a long-term investment. The trading book refers to the assets that are held primarily for generating profit on short-term differences in prices / yields. The price risk is the prime concern of banks in trading book.
- **Underwrite:** Generally, to underwrite means to assume a risk for a fee. Its two most common contexts are:
 - (a) **Securities:** a dealer or investment bank agrees to purchase a new issue of securities from the issuer and distribute these securities to investors.
 - (b) The underwriter may be one person or part of an underwriting syndicate. Thus the issuer faces no risk of being left with unsold securities.
 - (c) **Insurance:** a person or company agrees to provide financial compensation against the risk of fire, theft, death, disability, etc., for a fee called a premium.
- **Undisclosed Reserves:** These reserves often serve as a cushion against unexpected losses, but they are less permanent in nature and cannot be considered as 'Core Capital'.
- **Revaluation Reserves:** arise from revaluation of assets that are undervalued on the bank's books, typically bank premises and marketable securities. The extent to which the revaluation reserves can be relied upon as a cushion for unexpected losses depends mainly upon the level of certainty that can be placed on estimates of the market values of the relevant assets, the subsequent deterioration in values under difficult market conditions or in a forced sale, potential for actual liquidation at those values, tax consequences of revaluation, etc.
- **Value At Risk (VAR):** It is a method for calculating and controlling exposure to market risk. VAR is a single number (currency amount) which estimates the maximum expected loss of a portfolio over a given time horizon (the holding period) and at a given confidence level.
- **Venture Capital Fund:** A fund with the purpose of investing in start-up businesses that is perceived to have excellent growth prospects but does not have access to capital markets.
- **Vertical Disallowance:** In the BIS Method for determining regulatory capital necessary to cushion market risk, a reversal of the offsets of a general risk charge of a long position by a short position in two or more securities in the same time band in the yield curve where the securities have differing credit risks.

Men are not superior by race or colour - but by heart or brain.

INTERNATIONAL BANKING (TEST - 01)

- 1) In case rates for a particular pair of Currencies are not being quoted in a market directly, dealers arrive at the rates indirectly with the help of _____.
- 2) If the transaction to be settled on the same day, they are to be conducted on _____ basis.
- 3) Whenever two banks deal with each other, unless otherwise stated, the rate quoted (by default) is _____ rate.
- 4) If a currency is quoted at a premium, Forward rate = Spot rate + _____.
- 5) A foreign draft purchased by the customer earlier to be cancelled now. The rate to be applied is _____.
- 6) Surplus BOP is expected to make the domestic currency _____.
- 7) The Reserve Bank of India has appointed a Committee headed by _____ to set out the framework for moving towards further Capital account convertibility.
- 8) FEDAI guidelines about computing Merchant rates have been deleted from the FEDAI rule book with effect from _____ and freedom for calculating rates / fixing charges for merchant transactions is left to individual banks.
- 9) A dealer normally has to maintain two positions. These are the Currency position and _____ position.
- 10) Normally limits on Day light positions are _____ overnight position.
- 11) _____ takes care of settling the deals, accounts, reconciliation and so on. It provides the necessary checks and balances to ensure that the deals concluded by the dealers are put through properly and as intended.
- 12) Exchange rates where home currency is fixed and foreign currency fluctuates is _____.
- 13) In direct rate quoted situations, the maxim of _____ applies.
- 14) New Delhi branch of Universal Bank is approached by a foreign tourist to encash three travelers' cheques worth USD300. The present dollar rate is Rs. 45.90. This transaction is _____.
- 15) In foreign exchange transaction, which is the basic buying rate?
- 16) When a foreign currency is said to be at discount in future market _____.
- 17) USD is being quoted at a premium for one month future transactions. Which amongst the following category of customers may benefit?
- 18) Exchange rates where home currency is shown fluctuating and foreign currency as fixed is: _____.
- 19) Your branch has received a Usance export document. What will be the applicable rate?
- 20) When there is inflow of foreign exchange and out flow of rupees, these transactions are called _____ from a bank's point of view.
- 21) Basel II norms stipulate that banks should provide for _____ along with Credit & Market risks.
- 22) The element of uncertainty which may result in the value of the Currency depreciating is called the: _____.
- 23) _____ measures the risk involved due to change in the foreign exchange rate between the time the transaction is executed and the time it is settled.
- 24) _____ exposure relates to valuation of foreign currency assets and liabilities at the end of accounting year realizable values.
- 25) _____ is considered the first step in Forex risk management.
- 26) Foreign exchange open positions are classified as Daylight limits and _____.
- 27) If the maturity spread between foreign currency assets and liabilities are at variance, a _____ position would arise.
- 28) _____ Risk may be defined as the risk to operating cash flows, or to the value of investment, resulting from operating in a particular country.
- 29) CRM in the context of Risk management refers to _____ for which RBI has given guidelines to the Banks.
- 30) As per extant guidelines, banks are required to formulate the CRM policy for dealing with _____, wherever a bank's net funded exposure is 2 per cent or more of its total assets.
- 31) Exposures to a domestic commercial borrower with a large economic dependence on a certain country may be considered as subject to indirect country risk, which may be reckoned at _____ of the exposure.
- 32) Till the time banks move over to internal rating systems for Country risks, banks may use the seven category classification followed _____ for the purpose of classification and making provisions for country risk exposures.
- 33) The provision for country risk by banks will be in addition to the provisions required to be held according to the asset classification status of the asset. In the case of 'loss assets' and 'doubtful assets', provision held, including provision held for country risk, may not exceed 100% of the outstanding. However, Banks may not make any provision for _____ country exposures.
- 34) _____ risk is the cost (if there is counter party default) of replacing non-settled contracts.
- 35) In case of Stock & Commodity markets, respective _____ takes the role of the counter-party and mitigate Counter-party risk.
- 36) _____ risk arises as a result of human, machine failures, judgmental errors, frauds and so on.

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- 37) Segregating Dealing, Accounting (Back-up) and Control (Audit) and establishing separate Front, Middle and back offices is a good measure of mitigating _____ in Foreign exchange transactions.
- 38) The derivatives do not have independent existence without _____ and market.
- 39) _____ is the primary function of derivatives.
- 40) Derivatives are financial contracts which derive their value off a spot price time-series, which is called the "underlying". Examples for Derivatives are _____.
- 41) In India, the most favored derivative for managing the Foreign exchange risk is _____.
- 42) An Exporter who wishes to enter in to Forward Contract with his bank would enter in to a _____.
- 43) Importers & Constituents who have to make payments under foreign currency loans and so on would enter in to Forward _____ contracts with their banks.
- 44) _____ contract is defined as a "commitment to buy or sell at a specified future settlement date and a designated amount of commodity or a financial asset. It is a legally binding contract by two parties to make / take delivery of commodity at certain point of time in the future.
- 45) These Derivatives come with standard sizes (values), are traded on Security Exchanges, requires margin payments and daily settlement and can be exited easily. They are _____.
- 46) A _____ is a contract conveying the right but not the obligation to buy or sell a specified financial instrument at a fixed price before or at a certain future date.
- 47) In a _____ option, the holder of the option can only exercise his right (if he should so desire) on the expiration date.
- 48) In _____ option, he can exercise this right anytime between purchase date and the expiration date.
- 49) In a _____ option, the owner / buyer has the right to purchase and the writer / seller has the obligation to sell specified number of shares of the underlying stocks at a specified price prior to the option expiry date.
- 50) In a _____ option the owner or buyer has the right to sell and the writer / seller has obligation to buy specified number of the underlying shares at a specified price prior to the options expiry date.
- 51) The option buyer is also called as _____.
- 52) The option seller is also called _____.
- 53) The price at which the option buyer has the contractual rights to buy or sell the currency is called the _____ price or strike price.
- 54) An Option to buy USD 100,000 at Rs 65 with a right to exercise the Option any day during the option

term is known as :

- 55) In India, _____ types of Options are now permitted:
- 56) A _____ in a foreign exchange market refers to simultaneous sale and purchase of currencies.
- 57) Exchange of predetermined streams of payments in different currencies on pre-determined dates, at pre-determined exchange rates is called a _____.
- 58) A transaction where bank sells 1 lac USD spot and buys 1 lac USD one month forward against rupees is called a _____.
- 59) The most compelling reason for currency Swaps is _____.
- 60) The difference between the buying rates and selling rates for the swap operation is known as _____.
- 61) In _____ an exchange of different streams of interest structures occurs. There would be no exchange of principle amounts.
- 62) In a _____ fixed interest rate are swapped with floating interest rates.
- 63) Swaps where floating rates based on one benchmark is exchanged with floating rates based on another benchmark is called _____.
- 64) AD banks are permitted to offer foreign currency – rupee options if they have a minimum _____.
- 65) As per RBI guidelines, all the conditions applicable for booking, rolling over and cancellation of forward contracts would be applicable to _____ also.
- 66) As per RBI guidelines, only one _____ transaction can be booked against a particular exposure/ part thereof for a given time period.
- 67) Corporates should be permitted to hedge upon declarations of the underlying exposures and Banks may be permitted to initiate overseas cross currency positions were two of the major recommendations of _____ committee.
- 68) As per RBI guidelines for facilities for Persons Resident in India for Foreign exchange exposure risk Management, the maturity of the hedge should not exceed the maturity of the underlying transaction and the currency of hedge and tenor:
- 69) Global Depository Receipts (GDRs) issued by Resident Indian entities will be become eligible for hedge.
- 70) Who has formulated Uniform Customs and Practices for Documentary Credits?
- 71) The latest version of UCPDC i.e. UCPDC 600 has come in to effect from _____.
- 72) If a letter of credit is silent about the expiry date for negotiation, the documents presented within a maximum of _____ days of Shipment are accepted by banks:
- 73) Transferable letter of credit is a :
- 74) The request for adding confirmation should come

from:

- 75) In a LC if the amount is mentioned as about USD 12000/, what is the tolerance level provided by UCPDC 600?
- 76) If a bank adds its confirmation to a letter of credit, it undertakes a liability similar to that of _____.
- 77) In letter of credit transactions, the bank, which make payment against the specified documents is called:
- 78) Unless otherwise provided specifically by the LC, banks will accept only _____.
- 79) Your import customer has retired goods under a Usance LC opened on his behalf. He is now refusing payment stating that the goods are not as per his quality specifications. The documents received however were exactly in accordance with the terms of Credit. Is he in order?
- 80) If an export order specifies that the goods are to be shipped after insuring them with freight pre paid the contract terms can said to be _____.
- 81) XYZ Bank has received a bill of lading which does not provide details /terms of Contract of carriage. Such a B/L is called a _____.
- 82) Your bank has received a Letter of credit favouring an export customer. The correspondent requests for adding your confirmation and provides for extending pre-shipment finance up to 75% of the LC value if the exporter so desires. The LC is a _____ letter of Credit.
- 83) A letter of Credit for USD 500,000 expires on Monday 26th January, which is a public holiday in India. When does it expire for negotiation in Mumbai, India?
- 84) ABC enterprises USA requires your New York branch to open a letter of Credit favouring Sony, Japan in lieu of a bank guarantee for the underlying transaction of supply of color television for a continuous period of three years. Such a LC is called _____.
- 85) UCPDC 600 covers _____ letters of Credit also:
- 86) A LC for 1000 MT of seafood is received for about USD 500,000. The bill drawn under this LC for shipment of 1000MT is for USD 549550. What should the bank do?
- 87) A LC is opened in favour of Jayalakshmi Exports for quantity 10000 MT /value USD 10000 for export of tea. The exporter presents a bill of lading / Invoice showing export of 9400 MT/ for USD 9400. Should the bank negotiate?
- 88) Jayalakshmi Exports Ltd exports Tea to Russia. They buy tea in open auctions and store in warehouses. When a container load is bid and received, they export the tea. They are informed that their buyers are willing to help them both in bidding stage with funds and storing stage by taking up the charges. The exporter wishes to have your advice as to what type of LC they should be asking for. Your reply will be _____.
- 89) When an exporter or seller undertakes to make the goods available at his factory, such arrangement is called:
- 90) Bombay agencies have received a LC for USD 10,000. The LC is available for part shipment and is transferable. The firm wants to divide the order and transfer the LC in favour of two other exporters. Is this possible?
- 91) If a bank chooses to advise a LC, does it automatically incur the responsibility of negotiation?
- 92) ABC enterprises have received a LC for USD 23,000 on CIF terms. One of the required documents is the insurance policy. Can they present a policy denominated in Indian rupees?
- 93) Certificate of origin is meant to verify:
- 94) Orra Gems Ltd a gem and jewellery merchant exporter delivers a packet of semi-precious stones to Virgin Atlantic airlines at Mumbai as per the terms of the LC opened by Armani, London branch. The terms of export can said to be _____.
- 95) An exporter customer receives a LC from Bank de Nationale Paris, which states 'negotiation available with Indian Overseas Bank, Anna Salai Chennai'. This LC is a _____ letter of credit.
- 96) ABC enterprises receive a LC on C & I, New York basis. This means that your customer is responsible for _____.
- 97) In a bill of lading the specified goods have been consigned to the named person. This is a _____.
- 98) If the LC is silent about the number of days from shipment within, which the documents have to be submitted, the documents can be accepted within _____.
- 99) Your branch has received a Letter of Credit dated 01/01/2016 from Midland Bank on 7/01/16. After verifying the genuineness, it was advised to the exporter and mailed through registered post. There was delay due to postal strike and the LC expired before the exporter received the same. The exporter is claiming damages from the bank. Are you liable?
- 100) Under Uniform Practices for Documentary Credit, if quantity is not specified to be exceeded or reduced, it should not exceed the tolerance level of:

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INTERNATIONAL BANKING

(TEST - 02)

- 1) The issuing bank has _____ for verifying the documents received under Letters of Credit opened in terms of UCPDC 600.
- 2) ABC enterprises had received a LC wherein 10th Jan 2016 is the last date for shipment and 15th Jan 2016 is the last date for negotiation. An amendment extending the date of negotiation to 20th January is now received. Does this mean that the date of shipment is also extended automatically?
- 3) Your branch had sanctioned a pre-shipment credit to an exporter who has sent the goods for shipment but so far he has not handed over the bill of lading, although shipment has taken place few weeks back.
- 4) Your branch opens a letter of credit on behalf of your customer M/s Ramesh Trading Company Ltd for which the documents have been received but the company has not been retiring the documents. The bill in foreign currency, will be crystallized if it is not paid within _____.
- 5) Crystallization of Export & Import Bills is in terms of _____.
- 6) Overseas Bank of India has negotiated documents under a letter of credit opened by Bank of Dubai Ltd, Dubai and forwarded the documents to the opening bank. It has now received an intimation from the opening bank stating reimbursed will not be forthcoming as it has been noticed that the Insurance certificate is forged. What is the recourse available to the Overseas Bank Ltd now?
- 7) Omni Exports Ltd has received a Letter of Credit for shipment of Spices. They wish to complete the shipment in two lots. The Shipping agent has informed that direct shipment is not possible and Trans-shipment is the only option. The LC is silent about these aspects. What advise would you give him?
- 8) Bombay Agencies have received a Letter of credit for USD 10,000. The LC permits part shipment and they have enquired whether M/s Omni Exports Ltd can take up the execution for USD 5000/. They are willing to perform the necessary paperwork etc. This is possible only if the LC is a _____.
- 9) ABC Exports is a trading firm. They have received an export LC for USD 25000. Based on this order, they request you to open a LC on their suppliers on same terms and conditions. The second LC is called _____.
- 10) The negotiating bank in case of letter of credit, examined the documents submitted by an exporter for negotiation in 4 days. What time will be available to the opening bank for scrutiny of these documents?
- 11) Articles _____ of UCPDC 600 states that in letter of credit operations all parties' concerned deal with documents and not with goods, services and or other performances to which the documents may relate.
- 12) Banks do insist on _____ while assessing a customer for Export finance.
- 13) An Exporter has received a Letter of Credit in his favour from Russia for export of Tea and has approached you for pre shipment credit. What are the documents that are needed by you to arrive at the permissible bank finance?
- 14) XYZ Ltd is exporting for the first time and has received an order which reads as USD 25,000 for 25 containers for product XYZ on FOB terms. They are confused and request you to explain the implications. You will explain that _____.
- 15) XYZ enterprises have finished shipping and have brought the 'Bill of Lading' to show you. It states that packing is defective. Such a document is called a _____.
- 16) Exporters can export by means of post, Sea, Road or Air. Export declaration forms for modes other than by post are called: _____.
- 17) Recently Customs department is computerized. The export declaration forms submitted there are called: _____.
- 18) The export declaration form used for software export - in non-physical form is _____.
- 19) The credit facilities extended to a party to procure, process or manufacture and export are called: _____.
- 20) Omni Exports Ltd have approached you with a confirmed order for USD 20,000 CIF for pre-shipment advance. You have ascertained that the freight is around USD 400 and the insurance premium Rs 4,500/- On what basis can the MPBF be worked out: _____.
- 21) An exporter is expected to receive the proceeds within _____ months in the case of Cash exports?
- 22) Omni exports ltd clears a consignment of Red chilly powder to Dubai from the port of Kakinada in Andhra Pradesh. This being a small port, the customs department is yet to be computerized. The export declaration form that is to be submitted is _____.
- 23) If a bill negotiated under LC is not paid on time, the liability of the exporter is crystallized in terms of INR _____.
- 24) The term Post-shipment credit refers to: _____.
- 25) _____ are reported to RBI in XOS statements:
- 26) Import-export code number (IEC) is issued by _____.
- 27) IEC number is _____.
- 28) Export declaration forms prescribed as per as per Sec 7(1),(3) of FEMA 1999 are classified basically according to: _____.
- 29) Trade samples / Publicity material supplied (exported) free of cost, Personal effects of travelers whether accompanied or not Goods or Software not valued over US\$ 25,000 with a simple declaration from the exporter are exempt from _____.
- 30) The stipulation that every exporter should realize export proceeds and remit to India is _____.
- 31) Under normal circumstances, full value of export proceeds is to be realized within 9 months but exports to Warehouses can be realized within _____ months from the date of shipment subject to RBI approval.
- 32) All status holder exporters & Units set up under EHTPs, BTPs schemes & 100% Export Oriented Units are permitted _____ months for realization of export proceeds.
- 33) The amount representing the full export value of the goods exported can be received through normal Banking channels and _____.
- 34) Payment for exports can be received in the form of precious metals i.e. Gold / Silver / Platinum by the Gem & Jewellery units in SEZs and EOUs in equivalent to value of jewellery exported on the condition that the sale contract provides for the same and _____.
- 35) The basic purpose is to provide credit at low cost so that exporters can reduce their cost of production and price their products at _____.

- 36) Important Instructions on Export Finance are; a) Processing fresh borrowers in 45 days from the date of receipt of application; b) Proposals for any facility on ad-hoc basis should be finalized within 15 days; c) Existing proposals that require renewal should be dealt within 30 days; d) All proposals for requirements for pre-shipment and post-shipment stages should be considered at the same time as a 'Package Deal'.
- 37) Export finance proposals should not be outrightly rejected by the dealing office. The rejections should carry the approvals of the _____.
- 38) Any loan, advance or any other credit granted to an exporter for financing the purchase, processing, manufacturing or packing of goods prior to shipment or any amount released after Shipment can be called as:
- 39) Export Oriented Units (EOUs)/Units in Free Trade Zones/ Export Processing Zones (EPZs) and Special Economic Zones (SEZs) & Exporters with good track records can be granted _____ facility in Packing credit advances.
- 40) Banks are permitted to extend PCFC for exports to ACU countries:
- 41) The choice of currency for PCFC as per RBI guidelines _____.
- 42) A ceiling rate has been prescribed by RBI for rupee export credit linked to Prime Lending Rates of individual banks available to their domestic borrowers. Currently the ceiling is _____.
- 43) Recently RBI has increased interest subvention to 3% to select Export sectors. This means the interest rate:
- 44) In cases where exporters have not complied with the terms and conditions, the advance will attract commercial lending rate _____.
- 45) While Sub-suppliers can be granted packing Credit, _____ facility is not available to them.
- 46) _____ can be accepted in payment for exports & banks may grant export credit at concessive interest rate to exporters of good track record till the realisation of proceeds, after satisfying themselves that it is against an export order.
- 47) PC to Software Exporters is allowed for _____.
- 48) The FEDAI prescribed normal transit period for foreign currency bills:
- 49) Discounting of Export Bills after shipment can initially be allowed for 6 months from the date of shipment. Period can be extended up to _____ for genuine reasons.
- 50) Advances against Consignment exports can be up to a period of 180 days normally but in deserving cases, for exports in CIS and East European countries, up to a maximum of _____ can be allowed:
- 51) In case of Advance against Consignment Exports against Gems / precious stones, packing credit advances be adjusted as soon as export takes place, by transfer of the outstanding balance to a _____ which in turn, should be adjusted as soon as the relative proceeds are received from abroad but not later than 180 days.
- 52) Advancing against Retention money relating to services portion of an Export contract is:
- 53) In advances against Retention money, where the retention money is payable within a period of one year from date of shipment according to the terms of the contract, banks should charge prescribed concessive rate of interest up to a maximum period of _____ days.
- 54) Post-shipment credit is normally liquidated by the proceeds of export bills received from abroad in respect of goods exported/services rendered. However, it can also be repaid / prepaid out of balances in _____ as also from proceeds of any other un-financed (collection) bills.
- 55) Bills adjusted out of EEFC balances need not be followed up nor reported in XOS as per RBI's latest guidelines.
- 56) In the _____ for exporters, the 'in-principle' limits will be sanctioned for a period of 3 years with a provision for automatic renewal subject to fulfillment of the terms and conditions of sanction:
- 57) _____ will be given preference for grant of packing credit in foreign currency (PCFC).
- 58) Banks would consider waiver of collaterals and exemption from ECGC guarantee schemes on the basis of card holder's creditworthiness and track record for _____.
- 59) Gold Card scheme is not be applicable to those exporters who are blacklisted by ECGC or included in RBI's defaulter's list / caution list or making losses for the past 3 years or having overdue export bills in excess of _____ of the previous year's turnover.
- 60) In Gold card scheme, a stand-by limit of the assessed limit is to be additionally made available to facilitate urgent credit needs for executing sudden orders. In the case of exporters of seasonal commodities, the peak and off-peak levels may be appropriately specified:
- 61) Firms and companies dealing in purchase / sale of rough or cut and polished diamonds, with track record of at least 3 years in import or export of diamonds and having an average annual turnover of Rs. 5 crore or above during preceding 3 licensing year are permitted to transact their business through _____ accounts.
- 62) _____ is a professional approach to debt management / administration to minimize chances of bad debts.
- 63) Forfeiting is a mechanism of financing _____ receivables.
- 64) Crystallization of the export bills aims to shift the _____ risk back to exporters.
- 65) As per FEDAI's latest guidelines, the mandatory period of 30 days for crystallization of export bills be done away with and authorized dealers be given freedom to decide on the period for crystallization which may be linked to _____ of different types of exporter clients, operational aspects etc.
- 66) Authorized dealers may freely open letters of credit and allow remittances for import of goods on behalf of their customers holding _____ unless they are included in the negative list requiring license under the Foreign Trade Policy in force.
- 67) Applications by persons, firms and companies for making payments, exceeding _____ or its equivalent, towards imports into India must be made on appropriate Form A-1.
- 68) Import bills and documents should be received from the banker of the supplier by the banker of the importer in India. AD banks should not, therefore, make remittances where import bills have been received directly by the importers from the overseas supplier, except where the value of import bill does not exceed:
- 69) Exceptions to the rule that documents should not be directly received (Bill value above USD 300,000) include bills received by:

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- 70) At the request of importer clients, AD banks may receive bills direct from the overseas supplier as above, provided the AD bank is fully satisfied about the financial standing / status and track record of the importer customer after obtaining:
- 71) If the amount of advance remittance exceeds _____, an unconditional, irrevocable standby Letter of Credit or a guarantee from an international bank of repute situated outside India or a guarantee of an AD bank in India, if such a guarantee is issued against the counter-guarantee of an international bank of repute situated outside India, is to be obtained.
- 72) In cases where the importer (other than a Public Sector Company or a Department / Undertaking of the Government of India / State Governments) is unable to obtain bank guarantee from overseas suppliers and the AD bank is satisfied about the track record and bona fides of the importer, the requirement of the bank guarantee / standby Letter of Credit may not be insisted upon for advance remittances up to _____ provided the bank's policy framed by the bank's Board of Directors permits the same.
- 73) A Public Sector Company or a Department / Undertaking of the Central/State Government/s which is not in a position to obtain a guarantee from an international bank of repute against an advance payment, is required to obtain a specific waiver for the bank guarantee from the _____ before making advance remittance exceeding USD 300,000.
- 74) In the case of Advances against imports, physical import of goods into India is made within six months (three years in case of capital goods) from the _____ and the importer gives an undertaking to furnish documentary evidence of import within fifteen days from the close of the relevant period.
- 75) In the event of non-import of goods, AD bank should ensure that the amount of advance remittance is _____ for any other purposes for which release of exchange is permissible.
- 76) AD banks may allow payment of interest on usance bills or overdue interest for a period of less than _____ from the date of shipment at the rates prescribed in the RBI Master Circular on trade credits.
- 77) In terms of the extant regulations, remittances against imports should be completed not later than six months from the date of shipment, except in cases where amounts are withheld towards:
- 78) Deferred payment arrangements, including suppliers and buyers credit, providing for payments beyond a period of six months from date of shipment up to a period of less than three years, are treated as _____ for which the procedural guidelines are laid down in a separate RBI Master Circular.
- 79) Remittances against import of books may be allowed _____, provided, interest payment, if any, is as per RBI guidelines.
- 80) In case of all imports, where value of foreign exchange remitted/paid for import into India exceeds _____, it is obligatory on the part of the Authorised Dealers through whom the relative remittance was made, to ensure that the importer submits evidence of Imports.
- 81) Where imports are made in non-physical form, i.e., software or data through internet/data channels and drawings and designs through e-mail/fax, a _____ that

- the software / data / drawing / design has been received by the importer, may be obtained where applicable (in terms of amount).
- 82) In respect of imports on D/A basis, AD banks should normally insist on production of _____ at the time of effecting remittance of import bill.
- 83) Unless under any investigation, Bills of entries/other evidence of shipment should be inspected by internal inspectors or auditors (including external auditors appointed by AD banks) & should be preserved by AD banks for a period of _____ from the date of its verification.
- 84) In case an importer does not furnish any documentary evidence of import as required under RBI guidelines, within _____ from the date of remittance involving foreign exchange exceeding USD100,000, the AD bank should rigorously follow-up for the next 3 months, including issuing registered letters to the importer.
- 85) Details of transactions where the amount of remittance exceeds _____ should only be included in the half yearly BEF statement (June & December) which is to be submitted within 15 days from the close of the half-year to which it relates.
- 86) The remittance against imports should be completed within 6 months from _____.
- 87) _____ is directly extended by the overseas supplier to the importer in India.
- 88) Suppliers credit for more than six months and less than 3 years is named as _____.
- 89) Any Credit extended beyond _____ comes under the category of External Commercial borrowings for the purpose of regulations:
- 90) Banks can approve proposals for Supplier's credit for a period beyond six months from date of Shipment and up to a maturity of one year for all permissible imports, for value up to _____ per import transaction.
- 91) Buyer's credit is arranged from a bank or financial institute _____ by the importer.
- 92) Banks can approve proposals for Buyer's credit for a period beyond six months from date of Shipment and up to a maturity of one year for all permissible imports, for value up to _____ per import transaction.
- 93) If the import is for Capital goods, Banks can approve proposals for Buyer's credit for a period beyond six months from date of Shipment and up to a maturity of _____ year for all permissible imports within their permitted levels.
- 94) As per FEDAI, transit period for foreign currency bills where there is no TT reimbursement is _____ days.
- 95) All import bills under LC are to be crystallized on the _____ of receipt of documents in the bank.
- 96) All Import Usance Bills under LC should crystallized on the _____.
- 97) _____ or _____ rate (if any) will be applied for the purpose of crystallization.
- 98) These days, Correspondent banking has become easier as all the banks can use a common messaging arrangement called _____.
- 99) If Indian Overseas Bank maintains a US Dollar account with Citibank, New York, a GB pound account with Midland bank, London and a Bahraini dinar account with Bank of Bahrain and Kuwait, all the three accounts are said to be _____ accounts of Indian Overseas bank.
- 100) Accounts maintained by international banks in India & denominated in Indian rupee are termed as _____ a/cs.

INTERNATIONAL BANKING

(TEST - 03)

- 1) Dummy accounts maintained by banks in their books which mirror the transactions in their Nostro accounts & are meant for tracking the transactions and determining the actual position of their accounts with the foreign correspondent banks are called :
- 2) _____ is a computer based net work system and each member has access to all the other members. It operates on a secure network between India and USA only:
- 3) SWIFT messages are delivered in uniform Performa or formats. This reduces the chances of misinterpretation or confusion.
- 4) FEDWIRE is a system of inter bank settlement is operated by _____. It is one of the oldest systems in USA.
- 5) Rashid a NRI for last 10 years have returned back home with his bag and baggage with the intention to settle in India. Which accounts can be opened by him?
- 6) An illiterate NRI working in Kuwait on his temporary visit to India approaches your branch for opening an NRE account. How will you handle his request?
- 7) Balwant Gargi is an NRI maintaining accounts at your branch and seeks guidance regarding nomination facility.
- 8) Your branch has received an email from Mr Yash Mittal seeking to know on which of his accounts the 30% TDS will apply (on the interest income). Your reply will be _____.
- 9) What are the minimum and maximum periods for which FCNR deposits can be accepted:
- 10) Mrs. Laxmi Menon a NRI customer from Singapore has several term deposits with your branch. She wishes to nominate her three children for these deposits. Two of her sons are in UK and the third one in studying in India. What is your response?
- 11) Export House can retain foreign exchange in EEFC account up to _____ % of their earnings.
- 12) Your Bank has a FCNR deposit portfolio of 250 million US dollars. The accounts have varying maturities. As you are aware, the customers may seek withdrawal in USD, any other foreign currency or in INR. Who is bearing the in built Exchange risk in this case?
- 13) Under NRE deposit scheme _____ is / are repatriable.
- 14) Mr. Amar Singh is an NRI currently but is planning to return home. He has telephoned seeking to know the repatriation facility in RFC accounts if he opens one after returning to India. You can respond by stating _____.
- 15) Mrs Saldhana has returned to India after working abroad for 3 years. She has brought USD 35,000/- with her as savings. You will advise her to open a _____ account.
- 16) A PIO means a citizen of any country other than Bangladesh or Pakistan, if he had held _____.
- 17) A PIO also means a citizen of any country other than Bangladesh or Pakistan, if his parent/s or grand parent/s was/were _____.
- 18) A PIO can also mean a citizen of any country other than Bangladesh or Pakistan, if he /she is the spouse of a _____.
- 19) Joint A/c with Residents is permitted to Non-Residents in _____.
- 20) Income from FCNR /NRE deposits are exempted from _____.
- 21) Interest rate on fresh repatriable NRE term deposits of one to three years should not exceed the LIBOR / SWAP rates for US dollar of corresponding maturities plus _____.
- 22) Bank can permit overdraft in the account of the NRO account holder subject to _____ and compliance with the interest rate etc. directives.
- 23) Third party Loans / overdrafts to resident individuals / firms / companies in India may be granted against the security of NRO deposits subject to the condition that the loans shall be utilised only for meeting borrower's personal requirements and / or business purpose and not for carrying on _____.
- 24) Your NRI customer, Mr.Yash Mittal wants to know whether he can book a Cross currency Forward contract (FC in Euro) for his USD FCNR accounts of USD One million:
- 25) Mr.Yash Mittal wants to know whether he can book a Cross-currency Forward contract (FC in Saudi Riyals) for his USD FCNR accounts of USD One million. You would advise him that contracts once booked can not be cancelled and _____.
- 26) Mr. Mittal then wishes to know whether a dollar forward can be booked for balances in his NRE / NRO a/cs. The balance lying is about Rs10 crores.
- 27) _____ can be opened by a foreign national of non-Indian origin visiting India, with funds remitted from outside India through banking channel or by sale of foreign exchange brought by him to India.
- 28) The balance in the NRO account of Foreign nationals of non-Indian origin may be converted by the authorized dealer / bank into foreign currency for payment to the account holder at the time of his departure from India provided the account has been maintained for a period _____ and the account has not been credited with any local funds, other than interest accrued thereon:
- 29) In the case of premature withdrawal of NRE term deposits for conversion into Resident Foreign Currency (RFC) A/c, the bank should not levy _____.
- 30) Interest rates on NRE deposits for one to 3 years should not exceed the LIBOR/SWAP rates, as on the last working day of the previous month, for _____.
- 31) As per RBI guidelines the minimum maturity period of fresh NRE deposits will normally be one year and the maximum is the discretion of the bank. In case, a particular bank, from its Asset Liability Management point of view, wishes to accept deposits with maturity of more than 3 years, it may do so provided the interest rate on such long term deposits is not higher than that applicable to _____.

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- 32) For a NRO account holder, for remittance of sale proceeds of assets, both financial and immovable property acquired by way of inheritance/legacy or settlement, there is no lock-in-period and the permissible amount is _____.
- 33) There is no lock-in period for sale of residential property purchased by NRI/PIO out of foreign exchange. However, repatriation of sale proceeds of residential property purchased by NRI / PIO out of foreign exchange is restricted to not more than _____.
- 34) Remittance of current income like rent, dividend, pension, interest etc. of NRIs/PIO who do not maintain NRO Account is freely allowed, on the basis of appropriate certification by a Chartered Accountant certifying that the amount proposed to be remitted is eligible for remittance and that applicable taxes have been paid / provided for.
- 35) Authorized dealers have to obtain RBI permission to issue International Credit Cards to NRIs/PIO, without prior approval of RBI. Such transactions may be settled by inward remittance or out of balances held in the cardholder's FCNR/NRE/Non-Resident (Ordinary) Rupee accounts.
- 36) NRE Savings a/c are not eligible for nominations.
- 37) All transactions of Foreign exchange are governed by FEMA 1999. As per _____ of FEMA 1999, RBI is empowered to give directions in regard to Foreign Exchange transactions.
- 38) Under sec 11(3) of FEMA 1999, RBI may after giving reasonable opportunities for being heard, impose on the authorized person, a penalty which may extend to Rs10,000/- (Rs Ten thousand) for contravention of any direction given under FEMA or failure to file any return under this act. In case of continuing Contravention, an additional penalty which may extend up to Rs. _____ per day for which such contravention continues may be imposed.
- 39) Who announces foreign trade policy in India?
- 40) The latest Foreign Trade Policy covers the period:
- 41) Licenses for import of capital goods is issued by _____.
- 42) FEMA does not define _____.
- 43) A person who is a citizen of USA but is of Indian origin is called _____.
- 44) BHEL imports machinery under the Capital goods scheme often. This is an example of a _____ in balance of payment summary.
- 45) India has received a soft loan from Asian development bank at 0.5% interest per annum for USD 10 billion. ADB has released the first tranche of the loan being USD 2.5 billion. This transaction can be classified as _____.
- 46) An Indian resident, going abroad can carry Indian rupees in cash up to INR _____ to countries other than Nepal or Bhutan.
- 47) In India, exchange control is administered through FEMA 1999. FEMA replaced FERA. In FEMA, routine violations are subject to _____ penalty only.
- 48) NRI is defined in _____.
- 49) Resident is defined in _____.
- 50) Export House can retain foreign exchange in EEFC account up to _____ their earnings.
- 51) Condition that is required to be satisfied for a person to be considered as Resident in India under FEMA _____.
- 52) To accelerate growth in export of services so as to create a powerful and unique _____ brand instantly recognized and respected the world over, the earlier DFEC scheme for services has been revamped and recast into the _____.
- 53) ECGC of India Ltd is a corporation set up by the Government of India to encourage exporters & help the Exporting community and the financing bankers to mitigate the risks involved in their business of Exporting. The corporation does so by issue of financial guarantees in favour of banks, Policies in favour of the Exporters and offering _____.
- 54) Banks can obtain financial guarantees of the corporation on whole turnover basis. Banks have to report to ECGC on then & there basis each time a new Exporter is sanctioned with limits. The premium however can be paid on _____ basis.
- 55) Whole Turnover Packing Credits extended to _____ are covered in the financial guarantee.
- 56) ECGC will cover all eligible packing credits extended by the Bank under whole turnover Packing Credit guarantee provided the borrower is not in their specific approval list first report is sent when the facility is extended, the a/c is included in the monthly declarations, Premium is paid regularly and: _____.
- 57) Whole Turnover Packing Credit guarantee (WTPCG) is issued for a period of _____ and is subject to renewal by the Corporate Office of the concerned Bank.
- 58) Prior permission of the Corporation is to be taken if a packing credit has to be allowed to remain outstanding for more than _____.
- 59) In case a bank and the Corporation get in to an agreement, the procedures can be simplified and the Premium on the guarantee also negotiated. Under these circumstances the bank has to notify limits sanctioned to all its customers post facto but seek the approval of the Corporation prior to sanction of the limits if the limits exceed an "agreed upon value". This limit is called: _____.
- 60) Banks can obtain Whole Turnover post shipment policies also. The extent of cover available for a shipment covered under WTPSG where the exporter is holding a Standard ECGC policy also is: _____.
- 61) To be able to subscribe to WTPSG _____.
- 62) ECGC has seven types of financial guarantees to offer Export financing banks. Of these, the Guarantee which is related to mitigating losses if any incurred by a bank in India by taking up the business of confirming a Letter of credit and taking up the documents drawn there under is called _____.
- 63) A bank which is financing an overseas project provides a foreign currency loan to a contractor, it can protect itself from the risk of default by obtaining _____.

- 64) ECGC extends financial guarantees to Banks which finance exports. They also issue individual policies to exporters separately. An exporter who has an annual turnover up to Rs. 50 lacs is eligible for _____ policy.
- 65) Large exporters who contribute a sum not less than Rs 10,00,000 PA can obtain cover under _____ from ECGC.
- 66) Indian firms who offer services to foreign parties can cover their risks under _____.
- 67) Exporters who have large exposures towards a single buyer are advised to take _____ policy from ECGC to cover default from the buyer's side.
- 68) Standard policy holders are those whose turnover (annual) is above Rs.50,00,000. If your bank obtains a whole turnover post shipment guarantee and covers this exporter's shipment under the same, ECGC will extend you the benefit of _____.
- 69) Export production finance guarantee is recommended in the case of export finance where the exporter seeks _____.
- 70) Export credit at the pre shipment stage can be extended to exporters in _____.
- 71) PCFC can be granted to exports meant for: _____.
- 72) PCFC once availed has to be normally closed before as PCFC is available only for cash exports.
- 73) If no export takes place within the stipulated / extended period, PCFC outstanding are to be converted in to rupee liability at _____.
- 74) If an exporter has availed PCFC against an order, but wishes to substitute the order: _____.
- 75) PCFC can be extended in any trade able currency irrespective of the currency of the order. Further, exporters can book forward contracts to cover the exposure in the Currency of Contract & also substitute _____.
- 76) Diamond dollar account (DDA) scheme is available for companies dealing in purchase & sale of rough / cut diamond if they have a good track record of at least three years in business of diamonds and Annual turnover of at least _____ in preceding three licensing years.
- 77) Under DDA account, PCFC granted to a DDA holder can be extinguished from _____.
- 78) In case an export order for which the PCFC is taken is cancelled or not executed, the exporter can extinguish the PCFC by buying the foreign currency from bank but has to pay interest as applicable to: _____.
- 79) In Forex dealing "Overnight limit" refers to: _____.
- 80) Maximum loss limit for adverse movements (in positions held) fixed per dealer or per transaction or Currency before quitting with a loss. (normally fed in Computers to ensure automatic sign off from the deal) are called _____.
- 81) Forward Contracts written by banks dealing in Foreign exchange specifically for their Customers are: _____.
- 82) Future Contracts & Forward Contracts are two names for same derivative products: _____.
- 83) In the case of Forward Contracts, margins may not be compulsory. They are also not _____.
- 84) The future Contracts are reported to have been first traded in _____.
- 85) The Expert Group formed in 1992 under Shri _____ examined the issues related to products available in Indian markets for Forex risk management: _____.
- 86) The Committee on Capital Account Convertibility formed in March 2006 is headed by _____.
- 87) Export marketing Fund administered by EXIM Bank is a _____.
- 88) EXIM Bank also provides the receivable financing services of _____ to exporting community / banks: _____.
- 89) Foreign Exchange Rates in India are determined by: _____.
- 90) In Balance of Trade, trade deficit stands for: _____.
- 91) Foreign Currency denominated accounts of Indian banks which are maintained abroad with respective correspondent banks (our accounts with them) are called _____.
- 92) Rupee accounts of foreign banks in India are called _____ accounts.
- 93) An Indian resident, going abroad can carry Indian rupees in cash up to INR _____ to countries other than Nepal or Bhutan: _____.
- 94) Foreign exchange purchased by a resident Indian for approved purposes should be used within _____ days or surrendered back to AD banks: _____.
- 95) Any person resident in India who had gone out of India on a temporary visit, may bring into India at the time of his return from any place outside India (other than from Nepal and Bhutan), currency notes of Government of India and Reserve Bank notes up to an amount _____.
- 96) In Export finance, the Insurance policy obtained should be 110% of _____ value: _____.
- 97) Currency Declaration Form (CDF) is not necessary the aggregate value of the foreign exchange in the form of currency notes, bank notes or travelers' cheques brought in by such person at any one time does not exceed _____ or its equivalent and/or the aggregate value of foreign currency notes brought in by such person at any one time does not exceed _____ or its equivalent: _____.
- 98) AD bank are permitted to allow advance remittance _____ and without bank guarantee or standby letter of credit, by an importer (other than a Public Sector Company or a Department / Undertaking of the Government of India / State Government/s), for import of rough diamonds into India from approved mining companies: _____.
- 99) Interest on usance bills or overdue interest for a period of less than three years from the date of shipment should not exceed RBI prescribed rates. The current all-in-cost ceilings are as under; Maturity period up to one year; All-in-cost ceilings _____ over 6 months LIBOR or applicable benchmark; Maturity period more than one year but less than three years; All-in-cost ceilings _____ over 6 months LIBOR or applicable benchmark: _____.
- 100) Short-term credit either by way of suppliers' credit or buyers' credit is not available for _____.

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ANSWER : TEST - 01

- 1) Cross Rate mechanism.
- 2) Ready or Cash basis
- 3) Spot
- 4) Premium
- 5) TT Buying
- 6) Stronger
- 7) S.S.Tarapore
- 8) 01/09/2004
- 9) Funds
- 10) Higher than
- 11) Back office
- 12) Indirect rate
- 13) Buy low Sell high
- 14) Purchase transaction on which TT buying rate will be applied
- 15) TT buying rate
- 16) The currency is expected to be cheaper in future
- 17) Exporters
- 18) Direct Rate
- 19) Bills buying rate for the respective forward term
- 20) Purchases
- 21) Operational Risk
- 22) Exchange Risk
- 23) Transaction exposure
- 24) Translation Exposure
- 25) Fixing foreign exchange open position limits.
- 26) Overnight limits
- 27) Mismatched
- 28) Country risk
- 29) Country risk management
- 30) Country risk
- 31) 50%
- 32) ECGC
- 33) Home
- 34) Revaluation
- 35) Exchange
- 36) Operational
- 37) Operational Risks
- 38) Underlying product / Security
- 39) Risk Management
- 40) Forward Contracts, Futures, Options / Swaps etc
- 41) Forward contract
- 42) Forward purchase contract
- 43) Forward Sale Contract
- 44) Futures
- 45) Futures contracts
- 46) Option
- 47) European
- 48) American
- 49) Call option
- 50) Put
- 51) Option Holder or Option Owner
- 52) Option Writer
- 53) Exercise
- 54) American Call Option
- 55) Both American & European
- 56) Swap
- 57) Currency Swap
- 58) Currency Swap
- 59) Avoiding exchange risk on their open positions
- 60) Swap differential
- 61) Interest Swap
- 62) Coupon Swap
- 63) Basis Swap
- 64) CAR 9%
- 65) Option Contracts
- 66) Hedge
- 67) O.P.Sodhani
- 68) Are left to the choice of the customer;
- 69) Once the issue price has been finalized
- 70) ICC Paris
- 71) 01-07-2007
- 72) 21 days
- 73) A credit which can be transferred by the beneficiary
- 74) Opening bank
- 75) 10%
- 76) Issuing bank
- 77) Negotiating bank
- 78) Clean bills of lading
- 79) No, in letter of credit operations, all parties deal with documents and not in goods
- 80) Cost, insurance & Freight or CIF
- 81) Short bill of lading
- 82) Red clause letter of credit
- 83) 27th January—succeeding day (Negotiating Bank has to certify that 26th was a Bank holiday as per UCPDC 600
- 84) Stand by letter of credit
- 85) Stand by Letters of credit
- 86) Documents will be negotiated as in such cases the amount can be varied up to 10% less or more
- 87) Difference being more than 5%(tolerance) of the stated quantity, documents cannot be accepted
- 88) Green clause letter of credit
- 89) Ex-Works
- 90) Yes, they can split the value and transfer to both the exporters
- 91) The advising bank is not under any obligation to negotiate the documents.
- 92) No, not acceptable because if the LC is silent, the insurance has to be taken in the currency of the LC.
- 93) Which is the country where the goods were originated
- 94) Free carrier allowance (FCA)
- 95) Restricted letter of credit
- 96) Cost of Goods & Insurance
- 97) Straight bill of Lading
- 98) 21 days from date of shipment i.e. date of bill of lading
- 99) Bank is not liable as it does not assume any liability for the consequences arising out of delay in transit due to actions beyond its control
- 100) +/- 5%

ANSWER : TEST - 02

- 1) 5 banking days
- 2) Shipment date shall not get extended automatically
- 3) If it is not presented to the bank for negotiation within 21 days of date of shipment, it will become stale
- 4) 10 days
- 5) RBI & FEDAI guidelines
- 6) Bank can claim the money from opening bank. Under UCPDC provisions the bank has to see the regularity of the documents and is not responsible for their genuineness
- 7) If the credit is silent, both the partial as well as trans-shipment are allowed
- 8) Transferable letter of credit
- 9) Back to Back letter of credit
- 10) 5 banking days
- 11) 5
- 12) They should have a I/E number, should not be on the RBI's exporters caution list or ECGC Specific approval list
- 13) Original Letter of Credit
- 14) Cost of insurance and freight is to be borne by the importer
- 15) Claused bill of lading
- 16) GR/SDF forms
- 17) SDF form
- 18) Softex
- 19) Pre-shipment advance
- 20) FOB basis
- 21) 6 months
- 22) GR form
- 23) No of days left to the discretion of the concerned bank depending on their risk perception of the customer / transaction as per FEDAI's latest guidelines
- 24) Credit facilities against receivables to Export customers against goods already shipped
- 25) Export bills outstanding for more than six months
- 26) DGFT, Ministry of Commerce
- 27) Life time number
- 28) Mode of Transport
- 29) Export declaration formalities
- 30) Statutory obligation
- 31) 15 months
- 32) 9 months
- 33) Foreign currency notes / TC from buyers during their visit to India / Payment from Buyer's FCNR / NRE / ICC
- 34) Approximate value of the precious metals is indicated in the relevant GR / SDF / PP Forms.
- 35) Competitive terms in the international market.
- 36) All of the above are correct
- 37) Next higher authority.
- 38) Packing Credit advance.
- 39) Running account
- 40) True
- 41) Any convertible currency
- 42) BPLR - 2.5%
- 43) Interest charged plus subvention should be within the ceiling limit of BPLR-2.5%, subject to floor rate of 7%
- 44) ab initio.
- 45) Running Account
- 46) Foreign Cheques, drafts, etc.
- 47) a) Software Services, b) Project Services, c) Software Products and Packages, d) IT services.
- 48) 25 days
- 49) One year
- 50) One year
- 51) Special (post-shipment) account
- 52) Not allowed
- 53) Ninety
- 54) Exchange Earners Foreign Currency Account (EEFC A/C)
- 55) False
- 56) GOLD CARD Scheme
- 57) Gold Cardholders
- 58) Gold card holder Exporters
- 59) 10 per cent
- 60) Not less than 20 per cent
- 61) Diamond dollar (limited to five accounts)
- 62) Factoring
- 63) Export
- 64) Exchange Risk
- 65) Risk perception
- 66) Valid Import / Export Code numbers
- 67) USD 500
- 68) USD 300,000.
- 69) Wholly-owned Indian subsidiaries of foreign companies from their principals, Status Holder Exporters, 100% EOUs / Units in Free Trade Zones, PSUs, Bills received by all limited companies
- 70) Report on each individual overseas supplier from an overseas banker or reputed credit agency.
- 71) USD 500,000 or its equivalent
- 72) USD One million or equivalent
- 73) Ministry of Finance, Government of India
- 74) Date of remittance
- 75) Repatriated to India / utilised
- 76) Three years
- 77) Guarantee of performance under normal circumstances.
- 78) Trade credits
- 79) Without restriction as to time limit
- 80) USD 100,000 or its equivalent
- 81) Certificate from a Chartered Accountant
- 82) Evidence of Shipment
- 83) One year
- 84) 3 months
- 85) USD 100,000
- 86) Date of shipment
- 87) Supplier's credit
- 88) Trade Credit
- 89) Three years
- 90) USD 20 million
- 91) Outside the Country
- 92) USD 20 million
- 93) Three years
- 94) 25
- 95) 10th day
- 96) 10th days from due date.
- 97) Bills selling or Forward Contract rate
- 98) SWIFT
- 99) Nostro
- 100) VOSTRO

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ANSWER : TEST - 03

- 1) Mirror accounts.
 2) SWIFT
 3) True
 4) Federal Reserve Bank of USA
 5) Resident Foreign Currency
 6) Branch will open the NRE account with foreign currency after compliance of formalities.
 7) Nomination is possible in all NRI accounts (NRE / FCNR / NRO)
 8) Non-resident ordinary accounts
 9) 12 & 60 months
 10) She can nominate NRI sons but only one nomination per account
 11) 100%
 12) Your Bank
 13) The amount of interest as well as principal
 14) Principal and interest both can be repatriated
 15) RFC account
 16) Indian passport at any point of time
 17) Citizens of India (undivided India), or
 18) Non-resident Indian / PIO.
 19) NRO accounts
 20) Indian income tax
 21) Discretion of the Bank
 22) Their commercial judgment
 23) Agricultural / plantation activities or real estate business, or for re-lending.
 24) Can be booked
 25) Can book in other FCNR currencies such as Euro, GBP, Yen, Can \$ or Aus \$ only
 26) He can book forward for his NRE balances.
 27) NRO account (current/savings)
 28) Not exceeding six months
 29) Any penalty for premature withdrawal.
 30) US dollar of corresponding maturity :
 31) 3 years NRE deposits.
 32) USD One million per financial year
 33) Two such properties
 34) True
 35) False
 36) False
 37) Sec 11 (1)
 38) 2,000
 39) Ministry of Commerce & Industry
 40) 2015-20
 41) Directorate General of Foreign Trade
 42) Balance of trade / Balance of payment
 43) Person of Indian origin
 44) Current Account transaction
 45) Capital Account transaction
 46) 25,000
 47) Monetary
 48) Income Tax Act
 49) FEMA
 50) 100% (now all Exchange earners can retain up to 100%)
 51) He should have been in India for more than 182 days during the previous financial year
 52) 'Served from India' scheme.
 53) Factoring services
 54) Monthly
 55) Service exporters, Construction companies, Manufacturing, Trade exports
 56) Facility is extended in terms of RBI guidelines
 57) One year
 58) 360 days
 59) Pre-approved limit
 60) 90%
 61) Bank has to offer minimum 25 accounts & Remit a premium of Rs 5,00,000 lacs per annum
 62) Transfer Guarantee
 63) Export Performance Guarantee
 64) Small exporter's policy
 65) Exports turnover Policy
 66) Services policy
 67) Buyer's exposure policy
 68) Higher coverage at 90%
 69) Exporter seeks full finance of the order (FOB) plus export incentives
 70) In INR/ Currency of Order or any other traded currency as per Exporter's request
 71) Any Country including ACU countries
 72) 180 days
 73) TT selling rate
 74) Permissible irrespective of the currency / commodity of the new order if the bank is satisfied
 75) Existing Contracts for new contracts
 76) Rs 5 crores & above
 77) Funds out of EEFC accounts, Funds held by another DDA holder
 78) ECNOS (Export credit not otherwise specified)
 79) Maximum amount a bank can keep overnight when the markets in its time zone are closed
 80) Stop loss limits
 81) Over the Counter products
 82) False
 83) Marked to market:
 84) Chicago Mercantile Exchange in 1992
 85) O.P. Sodhani
 86) S.S. Tarapore
 87) A Component of the World bank loan to India for industrial exports
 88) Factoring & Forfaiting
 89) Market Forces of demand/supply
 90) Excess of imports over exports
 91) Nostro account
 92) Vostro
 93) 7,500
 94) 180 days
 95) Not exceeding Rs. 25,000/- per person.
 96) CIF Value.
 97) USD 10,000, USD 5,000
 98) Without any limit
 99) 50 basis points, 125 basis points
 100) Merchanting trade or intermediary trade transactions.

ASSET LIABILITY MANAGEMENT

- 1) The process of adjusting portfolios of Assets and Liabilities of a bank keeping its corporate objectives, Liquidity & Interest Rate risks and RBI guidelines in view is called:
- 2) ALM in a banking is now the responsibility of _____:
- 3) Advances is an _____ in a bank's balance sheet:
- 4) Minimum capital required to be maintained by a bank in India is prescribed by _____:
- 5) Investment made by a bank in a subsidiary is considered as an _____ in balance sheet:
- 6) The most important item on the asset side of a bank's balance sheet:
- 7) Depreciation on bank's property is included in _____ in a bank's balance sheet:
- 8) ALM is concerned with strategic balance sheet management to control Liquidity and _____ risk:
- 9) _____ gives guidelines to banks for ALM.
- 10) Net interest Margin (NIM) is measured and used for the purpose of stabilizing asset liability management of banks, the other parameter is:
- 11) Net interest income (NII) is calculated using the formula:
- 12) N.I.M. is calculated by using the formula:
- 13) Economic Equity Ratio is used to assess sustenance capacity of the bank. It is calculated using the formula:
- 14) In the process of A.L.M., price matching is used to assess whether an institution is in a position to benefit for raising interest rates through "Positive Gap". Positive Gap means:
- 15) Negative Gap means:
- 16) Objective of Asset Liability Management is _____:
- 17) Liquidity is affected by _____:
- 18) Liquidity in Banking business is required to service withdrawals of deposits, and _____:
- 19) Liquidity of a bank determines its ability to accommodate increasing assets in the face of _____:
- 20) If a bank does not match its Inflows / Outflows, it has to borrow from the markets to meet its commitments. Price of liquidity (such borrowings) depends on general Market conditions & _____ of risks involved in lending to the bank.
- 21) Measuring and managing the funding requirement is achieved through _____, Maturity ladders, measuring liquidity over the chosen time frame and using certain assumptions:
- 22) Efficient liquidity management is the ability to meet the:
- 23) Three types of Liquidity Risk:
- 24) The risk of large outflows of funds from a banking institution due to unanticipated withdrawals or non-renewal of deposits is called:
- 25) Fraud causing substantial loss which comes to the notice of Depositors/Markets can cause _____:
- 26) Risk of having to compensate for non-receipt of expected cash flows by a bank is called:
- 27) 'Time risk' is caused due to:
- 28) The risk associated with crystallization (Invocation / Non-payment) of contingent liabilities in a bank is called:
- 29) Stock Approach and Flow Approach are two methods of measuring _____:
- 30) The level of assets and liabilities as on a particular date are considered, to measure and manage liquidity of a bank, in _____ approach of measuring Liquidity:
- 31) In the Stock Approach to liquidity management CORE DEPOSITS refers to:
- 32) In liquidity analysis, ratio of Prime assets to Total assets is used. Here prime asset means:
- 33) A bank's ability to withstand a net funding requirements in a bank specific or general market liquidity crisis depends on:
- 34) A bank has to ensure that it has diverse sources of liabilities & borrowing and also develop contacts to be able to quickly and effectively sell assets as a part of its Liquidity management. This strategy is known as:
- 35) In banks with international presence, management should concern itself with _____:
- 36) Operational freedom to the banks to decide on pricing of assets and liabilities has been result of:
- 37) Exposure of bank's financial condition to volatility in the rate of interest is called:
- 38) The interest rate risk is viewed from the following perspectives:
- 39) Measuring the impact of the changes in the interest rate through the Nil of a bank is known as _____ perspective.
- 40) The Traditional Gap Analysis leading to the measurement of Interest rate risk is a _____ approach:
- 41) Modern techniques of Interest Rate Risk measurement are:
- 42) Changes in the interest rate affect the value of the bank's _____:
- 43) As per discounted Cash flow methodology, rising interest rates will cause value of future Cash flows to:
- 44) Basis Risk is a type of _____ risk:
- 45) Gap risk is also known as:
- 46) A bank is having Rs 500 Cröre liabilities @ 7% of one year maturity to fund Rs 500 Crore assets @ 9% with 2 year maturity. The bank is exposed to:
- 47) If the interest rate on assets is priced more than liabilities within the same period, the bank is called:
- 48) Effect of increasing interest rates on the net interest income of Asset sensitive bank:
- 49) A bank is said to be liability sensitive if the interest rate is reset more rapidly on:
- 50) The risk that the interest rate of different assets and liabilities change in different magnitudes is called:
- 51) The risk of change in the yield of assets as against cost of liabilities is called:
- 52) Embedded option risk to a bank arises when the following happens:
- 53) Yield curve is a line graph drawn using the following data of a particular instrument:
- 54) The loss that may be incurred due to selling of a bond before its maturity date is due to _____:
- 55) The market price of 10 year 7% G-Sec, when yield of similar instruments rises to 8% is _____:
- 56) In order to decrease reinvestment risk, banks try to match _____ of their assets and liabilities:
- 57) Earnings Perspective focuses the impact of changes in the interest rates on the _____:
- 58) Analysis of a bank's vulnerability mainly from the perspective of shareholder is known as:

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- 59) _____ perspective analysis brings out the impact of past interest rate (interest rate at which contracts are already entered in to) on the future performance of a bank:
- 60) While analyzing interest rate risk using Re-pricing schedules, Assets and Liabilities are grouped according to maturity dates. For saving deposits, which are not having fixed maturity are grouped as per RBI guidelines which are _____:
- 61) The impact of interest rate change on the Economic value of an asset / liability is measured by:
- 62) Effect of changes in interest rates on future business levels of a bank is captured in the following methods:
- 63) As per RBI guidelines on Capital Adequacy, Indian Banks are allowed _____:
- 64) RBI guidelines prescribe that Banks should adopt the _____ for interest rate risk management in addition to the TGA (Traditional Gap analysis):
- 65) As per RBI's ALM guidelines, SB & CA deposits are to be classified in to Core & Volatile portions. 10% of SB and 15% of CD are to be treated volatile and classified in to 1-14 days bucket and balance 90% of SB and 85% of CD are to be placed in:
- 66) Revaluation reserves (at a discount of 55%) is element of _____ capital as per Basel III norms:
- 67) Banks are allowed to include the 'General Provisions on Standard Assets' and 'provisions held for country exposures' in Tier II capital up to a maximum of _____ per cent of the total risk-weighted assets:
- 68) 'Floating Provisions', may be treated as a part of Tier II capital within the overall ceiling of 1.25 % of RWA. This is provided these provisions have not been netted from:
- 69) If provisions created on a/c of depreciation in the 'Available for Sale' or 'Held for Trading' category of Investments are in excess of the required amount, it should be credited to the P & L a/c and an equivalent amount (net of taxes and Statutory Reserves) appropriated to:
- 70) Investment Reserves are Eligible for inclusion under Tier II Eligibility is within the _____ total Risk Weighted Assets prescribed for General Provisions / Loss Reserves:
- 71) In the case of public sector banks VRS related Deferred Revenue Expenditure will attract _____ risk weight for capital adequacy purpose:
- 72) As per RBI guidelines on ALM, to capture the maturity structure of cash in flows and out flows, _____ statement is prepared:
- 73) As per RBI guidelines, the following senior official shall head the asset, liability committee:
- 74) As per RBI guidelines, the negative gap between assets & liabilities over next 15-20 days should not normally exceed:
- 75) Statement of short-term dynamic liquidity is prepared to monitor the liquidity position over the time horizon:
- 76) ALM system prescribed by Reserve Bank of India rests on the three pillars:
- 77) For a security to be included in 'Trading book' the holding period should not be more than _____:
- 78) As per RBI guidelines, banks prepare two separate maturity profiles, one for measuring liquidity and another for measuring Interest rate sensitivity. Capital is placed in different _____:
- 79) In Interest rate sensitivity profile, Capital is in the last bucket i.e. _____:
- 80) In Liquidity profile, Capital is in the last bucket i.e. _____:
- 81) As per RBI guidelines, while preparing asset liability management statement, overdue liabilities are placed under the following maturity bucket:
- 82) As per RBI guidelines on ALM, inter-office adjustments are placed in _____ time bucket:
- 83) As per RBI guidelines on ALM, the interest rate sensitivity of Current a/c deposits is:
- 84) Banks can place undrawn balances in Cash credit limits in time buckets based on past behavior but in a bucket within the first _____ only:
- 85) _____ appears in the Non-sensitive bucket for interest rate sensitivity:
- 86) As per RBI latest guidelines on ALM, there are _____ time buckets in the Structural liquidity ladder to be constructed for measuring Liquidity risk:
- 87) As per latest ALM guidelines, the first time bucket in the Liquidity ladder is _____:
- 88) RBI guidelines stipulate that the negative gap in the second time bucket (2-7 days) should not be more than _____ of the _____:
- 89) Innovative Capital raising instruments are classified as Tier-01 or Tier-II capital due to their _____ nature:
- 90) In the maturity ladder constructed for Interest rate sensitivity, there are 8 buckets. Banks have to arrive at the core portion of their SB and classify it as "Non-sensitive" which is the last bucket. The balance portion of SB, which is treated as sensitive should be placed in _____ bucket:
- 91) Statement of Structural Liquidity is to be prepared daily but submitted on _____ basis to RBI:
- 92) As per RBI, Banks should prepare Statement of Structural Liquidity on _____ basis, for internal guidance and Liquidity management:
- 93) Call Risk is the risk of Crystallization of Off-Balance sheet liabilities such as, Letters of Credit, Letters of Guarantees & _____:
- 94) The three major dimensions for managing the Liquidity Risk through the Flow approach are:
- 95) The Interest rate risk which arises even in a perfectly matched gap due to differing movements in the interest rates of Assets and Liabilities is called:
- 96) A bank with a positive Interest position i.e. having more assets on which it earns interest than Liabilities on which it pays interest will experience a _____ in Nil if there is reduction in Interest rates:
- 97) Price Risk occurs in Fixed Income securities if they are _____ before maturity:
- 98) Investments that are subject to Market risks have to viewed both from _____ & _____ perspectives:
- 99) Marking to Market processes will bring transparency as the _____ losses will be exposed:
- 100) A Yield curve is a line which plots the yield of different _____ of that particular instrument:

RISK MANAGEMENT

- 1) Rate of return, net of risks in the business is called:
- 2) From the risk management point of view banking business lines are grouped under the following heads:
- 3) The advances and deposits arising from commercial & retail banking are classified under the following head:
- 4) All the assets and liabilities in banking book are normally:
- 5) Accrual system of accounting is used in banking book and the assets are not _____:
- 6) The banking book is not exposed to the _____ risk:
- 7) The risk arising due to failure or deficiencies in Information systems is a type of:
- 8) When a 'credit default swap' system is applied to portfolio of obligation, it is called:
- 9) The risk level of a portfolio of assets will be:
- 10) Some risks in banking business are managed at transaction level and aggregate level; whereas few risks are managed at aggregate level only. Identify the risks managed at aggregate level only:
- 11) The main drawback of Sensitivity based risk measurement methodology is:
- 12) The most comprehensive quantitative risk measurement method is:
- 13) The 'Exchanges' such as stock exchanges, commodity exchange are useful in mitigating the following types of risk:
- 14) A bank has a policy to charge 2% penalty for prepayment of housing loans. The bank is trying to cover the following risk:
- 15) Banks take property mortgage as security to mitigate _____ risk.
- 16) An example of zero risk investment is:
- 17) Risk of failure of entire banking system is called:
- 18) Systemic risk to the banking system is result of:
- 19) Basel committee on banking supervision is formed in the year 1974 subsequent to the Herstatt incident and the first Basel Accord was published in:
- 20) The main focus of first Basel accord was which addressed the Credit Risk:
- 21) The 1996 amendment to Basel accord has brought in the following component of risk is calculating capital required by banks:
- 22) As per 1996 amendment to Basel accord:
- 23) The International Convergence of Capital Measurement and Capital Standards is a revised framework released by Basel committee on banking supervision & is popularly known as:
- 24) Significant features of Basel II accord are introduction of Operational risk charge for capital and:
- 25) The three pillar as per Basel 2 accord are _____ & _____:
- 26) The most comprehensive and sophisticated operational risk measurement approach is:
- 27) As per Basel-II guidelines, a bank is allowed to take insurance to cover operational risk and there by reduce operational risk charge on capital, subject to a maximum of:
- 28) The purpose of scenario analysis is operational risk management is to evaluate its exposure to high security events to evaluate potential losses from _____:
- 29) Banks in India have to now migrate to Basel-II standards by _____ if it is an Indian bank with overseas presence or a Foreign Bank in India and _____ if it is an Indian Bank without overseas presence:
- 30) The method of calculating capital requirement for Credit Risk of a bank by assigning different risk weights to each Credit exposure is known as:
- 31) Quantitative measures of Risks can be based on:
- 32) _____ is a common statistical measure of dispersion around the average of any random variable such as Earnings, Mark to market valuations, Market values, Losses due to Default. It is the Standard deviation of the values of these random variables. It is a measure of both upside and downside variations around a given variable.
- 33) Historical Volatility is calculated historical data over a given period while as Implicit volatility is calculated using _____ where available:
- 34) In the Square root of time rule, Volatility over a period of Time (Time horizon) is Daily volatility multiplied by _____:
- 35) Risk pricing takes the three factors of _____ & _____ in to consideration along with the Cost of the deployable funds:
- 36) Under Foundation IRB approach to calculate capital charge for Credit risk, of the required parameters, _____ is provided by the bank:
- 37) As per Basel II, under Advanced IRB approach for measurement of Credit Risk to calculate the capital requirements, the historical data is required for a period of _____:
- 38) _____ measure gives the proportion of the exposure that will be lost if a default on loan occurs:
- 39) Advanced Measurement Approach (AMA) is for measuring _____ risk under Basel II:
- 40) Basel II has prescribed Alpha as _____ percent of average gross income over three years as Operational risk charge on capital under Basic indicator approach:
- 41) Basel II has recommended the technique of _____ to capture the Event risk to the banking business:
- 42) The key element of pillar 3 in Basel II accord is:
- 43) Simplified standardized approach depends on determining the:
- 44) Basel II accord has prescribed the _____% Capital change for NPAs:
- 45) If a bank is investing or trading on its own behalf, it is said to be taking _____:
- 46) Under standardized approach for measurement of operational risk, beta factor for corporate finance is _____ and is highest amongst the three groups of Beta:
- 47) Minimum Capital Adequacy is 8% as per Basel-II norms. However, our local supervisor i.e. RBI has exercised its powers and quoted a slightly stronger Capital adequacy of _____% for all banks in India:
- 48) RBI has put in place Real time gross settlement system (RTGS) which serves mitigate the following risk:
- 49) The situation where a specific asset faces lack of trading liquidity is known as:
- 50) McCauley's duration of a bond is defined as:
- 51) The bond prices can be estimated using modified duration. The formula for calculating % change in price of a bond is:
- 52) Correlation method, Historical simulation, Monte Carlo simulation are methods used to calculate:
- 53) VaR is calculated using the parameters of _____:
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- 54) The method of calculating VaR using a sample of randomly generated price scenarios is called:
- 55) VaR is defined as the predicted worst-case loss at a specific confidence level over certain period of time under:
- 56) The drawback in using VaR as a measure of loss prediction is that it predicts losses that can occur under ___ market conditions only:
- 57) Comparison of predicted VaR with actual performance of the portfolio under study post facto is known as:
- 58) Basel II has introduced capital change on the following type of risk for the first time:
- 59) Negligence on the part of employees is classified as the following type of operational risk:
- 60) External fraud is classified as the following type of operational risk:
- 61) When a Bank guarantee is invoked, the ___ risk has materialized:
- 62) The board of directors has overall responsibility for management of risks for the bank. It decides the level credit risk for the bank as a whole keeping in view:
- 63) The risk of a firm's credit rating worsening is known as:
- 64) The simplest of methods to calculate capital charge due to operational risk is:
- 65) When a Portfolio is well diversified to achieve the minimum possible level of risk, the portfolio risk is equal to:
- 66) A bank in its drive to market retail loans, has disbursed 50% of its loans to housing purpose as against industry average of 20%. It has exposed in portfolio to the following risk:
- 67) Non-performance of its obligations due to refusal or inability of a party to contract leads to the risk of:
- 68) The type of credit risk where non-performance by a borrower or counter party because of restrictions imposed by a sovereign is known as _____:
- 69) As per principle of credit pricing based on credit rating, a borrower rated 'B' shall be charged more interest compared to another borrower rated 'A' due to:
- 70) Under standardized approach for measurement of operational risk, beta factor for income from Retail banking is:
- 71) Change in the rating of a borrower over a period of time when rated in the same standard or model is called:
- 72) The probability of a company entering bankruptcy within next 12 months period is forecast by the following technique:
- 73) The model developed by J.P. Morgan for evaluating credit risk is known as:
- 74) The model based on actuarial calculation of expected default rates and unexpected losses from default, known as credit risk is developed by:
- 75) Under standardized approach for measurement of operational risk, Beta factor for commercial banking is:
- 76) The process of reducing or transferring credit risk is known as:
- 77) The process of issuing financial securities against future cash flows is known as:
- 78) When credit risks from the loan portfolio is un-bundled into a commodity and traded in the market separately, they are called:
- 79) In a credit derivative transaction the underlying assets are with:
- 80) In a credit derivative transaction, the risk is transferred to:
- 81) In a credit derivative transaction, when a specified credit event such as default, loan pre-payment etc. occurs, the loss incurred is paid by:
- 82) _____ is a measure that captures only the possible losses ignoring profit potential:
- 83) Pricing should take in to account, Cost of Deployable funds, Operating expenses, Loss probabilities and _____:
- 84) Under Basel-II, in the second pillar of Supervisory Review process, the Supervisor should prescribe _____ whenever it identifies that a Bank's internal processes are weak:
- 85) The Disclosures to be made under the Basel-II, third pillar of Market Disclosures are classified as:
- 86) Method of calculation of Risk in Credit exposures and _____ are the two major differences between Basel-I & Basel-II norms:
- 87) _____ is measures the likelihood that the borrower will default over a given horizon of time:
- 88) _____ measures the proportion of loss in the event of a default:
- 89) Maturity measures the remaining _____ of the exposure:
- 90) PD, LGD, EAD & EM are the four parameters measured to arrive at the Capital charge for Credit risk in the _____ approach to Credit risk:
- 91) The internal rating Based method (IRB) can be the Foundation IRB method or the Advanced IRB method depending on who provides the inputs of PD, LGD, EAD & EM:
- 92) Historical data to be taken in to consideration for arriving at PD, LGD, EAD & EM in the Foundation IRB method is only ___ years while as it is _____ in the Advanced IRB method:
- 93) Simplified Standardized Approach or SSA collects in one place the simplest approach to :
- 94) In SSA for calculating Risk weighted assets, all Corporate Exposures are assigned with the uniform rating of :
- 95) BCBS undertook _____ to assess the impact of the Basel pillars especially Basel-01 :
- 96) _____ is undertaken to compare the actual results (or market events / price movements) with those predicted by Quantitative models used to measuring risks:
- 97) Recently SENSEX crashed in India, many investors could not cut their losses and sell out in some cases as there were no buyers for the shares held by them. The risk faced by them was the:
- 98) Sensitivity captures the deviation in the market price due to movements in a _____. For example, it measures the impact of Prices of Bonds due to a change in the interest rate:
- 99) Duration (Also called Maculay's Duration) is the _____ that the Investor should hold a bond to receive the entire present value of the future cash flows from that bond:
- 100) _____ is the change in the value due to a One basis point (0.01%) change in the market yield:

TREASURY MANAGEMENT

- 1) Meeting reserve requirements of banking SLR / CRR, Merchant banking services to corporate customers and integrated risk management are the key functions of:
- 2) An Indian bank can borrow from the overseas market for treasury management purpose, 25% of Tier- 1 capital, subject to a ceiling of:
- 3) A bank operating in foreign exchange market has purchased US \$ 2.5 million and sold US \$ 2.00 million. The difference of \$ 0.5 million is known as:
- 4) A treasury department is generally organized as three distinct units as Front office, Middle Office & Back office. In this the Front office or dealing room's function is:
- 5) In the treasury department, risk management is handled by:
- 6) Confirming the correctness of the trades, following up and ensuring timely settlements etc are the functions of _____ office in a Treasury set up.
- 7) Taking advantage of different prices of securities in different market at a given point of time is known as:
- 8) According to the third consultative paper on Basel II a) Cause based, b) Effect based and c) Event based are the three classifications of _____:
- 9) Building up of large volume of business on relatively small capital is known as:
- 10) A derivative instrument which is a combination of spot and forward contracts and is used to convert cash flows in one currency to other is called a _____:
- 11) Placement of funds in money market instruments beyond overnight & not exceeding 14 days is known as:
- 12) The minimum cash reserve ratio (CRR) is:
- 13) The interest rate at which RBI lends money to banks under open market operations is called:
- 14) Payment for treasury bills is made and received through:
- 15) Certificate of deposit is a short-term debt instrument issued by:
- 16) Systemic risk is the risk of _____:
- 17) Premature closing of a Loan results in _____:
- 18) As per RBI guidelines, commercial paper can be issued by a company, if it has minimum credit rating of P2 from CRISIL or Equivalent rating, has sanctioned working capital and a Tangible net worth of:
- 19) Government raises short-term debt from the market through:
- 20) Certificate of deposit (CD) a short term money market instrument is different from FDR' in respect of the following aspects basically because it is a:
- 21) Banks extend loans against their deposits but they can not do so against their _____:
- 22) RBI controls the liquidity in the monetary system through buying/selling of money market instrument. This is known as:
- 23) The bonds issued by RBI under market stabilization scheme, which do not form a part of Government debt is known as:
- 24) Time taken to liquidate a security is open market is known as _____:
- 25) For the purpose meeting statutory liquidity reserves stipulations, banks can maintain balance in the form of following assets:
- 26) For allowing flexibility and giving time to banks to compile date on CRR, they are allowed to calculate CRR on the basis of DTL with a lag of one week and daily CRR balances may fall by a maximum of:
- 27) Domestic equivalent of SWIFT, a communication network among banks & FIs:
- 28) The computer based settlement system, which helps in instant settlement of inter-bank payments is _____:
- 29) Banks impose trading limits on dealers as a risk management strategy. The nature of limits imposed are:
- 30) Yield on a bond is dependant on:
- 31) 'Duration' of a bond is a measure of bond's risk. It tells us:
- 32) Duration is expressed in number of years, as a measure of interest rate sensitivity of a bond, longer the duration _____:
- 33) If the duration of a bond with YTM of $r\%$ is t , modified duration is given by formula:
- 34) The main purpose of banks investing in derivative product is:
- 35) In case of trading of options, unlimited risk is taken by:
- 36) In the following type of Options, the underlying security will have to be delivered on the expiry of maturity period only.
- 37) The most popular bench mark rate for Indian money market for one day call rates is:
- 38) Bankers and other market participants are required to execute ISDA master agreement (drafted by FIMMDA) before entering into the following kind of contracts:
- 39) In the context of money market in India, MIBOR refers to:
- 40) Principal only swap, Interest only swap & P+I swap are variants of:
- 41) The process of converting conventional loans into tradable securities is called:
- 42) The process of utilizing different interest rates between two economies, through raising funds in low cost economy and lending in high cost economy is called:
- 43) The right of depositor to take back money from a fixed deposit by canceling it before original maturity date is an example of:
- 44) The bonds issued by a bank by converting loans through the process of securitization are called:
- 45) The derivative instruments which help in separating and transferring the credit risk from a normal loans:
- 46) The purpose of calculating transfer prices in a banks is:
- 47) The ratio of interest rate sensitive assets to rate sensitive liabilities is called:
- 48) What is a foreign exchange forward transaction?
- 49) In an option contract, where the buyer of a contract has the right but not the obligation to sell a currency at a predetermined price during the contract period is called _____:
- 50) Duration of a five year Zero Coupon Bond is:
- 51) Any option to sell defaulted securities at agreed value to a third party in exchange for a series of fixed cash flows:

- 52) The simultaneous purchasing and selling of different securities so that the composition of portfolio can be changed without significant cost is called _____:
- 53) _____ is essential in validating the VaR estimates:
- 54) The difference between rate for buying and selling of foreign currency (Bid and Offer rates) is known as _____:
- 55) The minimum and maximum Cash Reserve Ratio (CRR) that Reserve Bank of India can prescribe under Section 42 of RBI Act, 1934 is _____:
- 56) A corporate has issued Debenture for a tenor of 5 years with following features: Coupon payable half yearly for first year at 6.5% per annum, 2nd and 3rd year at 7.5% p.a. and 4th & 5th year at 8% p.a. This Debenture's coupon payment feature implies that it is a _____:
- 57) Yield to Maturity (YTM) of a Bond is also called _____:
- 58) Bond Volatility is inversely related to _____:
- 59) _____ is the benefit that accrues to traders playing in different markets simultaneously where markets are imperfect i.e. simultaneous buying and selling in two different markets to take advantage of the rate differential:
- 60) India, China, Brazil, Thailand etc with fast developing economies are called as _____:
- 61) _____ is selling a security that is yet to be purchased. Recently SEBI has allowed FIs and mutual funds to undertake this activity:
- 62) Currency bought and sold with settlement on the same day are called _____:
- 63) A _____ is a combination of a Spot and a Forward transaction:
- 64) Forward rates are arrived at on the basis of the interest rate differential of two currencies added or deducted from the spot prices. The premium or the Discount quoted in the markets reflect these differentials:
- 65) ABC bank has bought USD the spot market against INR and sold USD against INR six months delivery. This is an example of a _____ deal:
- 66) Cash or Ready transactions are those which are settled on the same day. They are also called _____:
- 67) Banks invest their Foreign Exchange surpluses in _____:
- 68) Clearances from Treasury is sought before the Credit departments sanction big ticket Foreign currency loans:
- 69) Rediscounting of Foreign bills is a _____ advance:
- 70) Overnight placement of funds with another Bank or Institution is termed as _____:
- 71) All floating rate interest quotations should have a clearly defined _____:
- 72) SGL account or Security General Ledger account where all Banks' security accounts for their Government Securities in electronic form is maintained by _____:
- 73) CRRs to be maintained on Bank's Demand & Term liabilities except on the items which are _____ and _____:
- 74) Paid up Capital, Reserves, Retained profits, Claims received from DICGC, ECGC are some of the liabilities of a Bank that are _____ from CRR calculation:
- 75) CRR has to be calculated on the basis of DTL with a tag of _____:
- 76) CRR has to be maintained as _____:
- 77) SLR has to be maintained in _____:
- 78) One of the objectives of RBI Policy is that _____ rates should move within the Repo-reverse Repo corridor:
- 79) Collateralized Borrowing & Lending (CBLO) is a Money market instrument designed and maintained by _____:
- 80) A Basis point is _____:
- 81) Bankers' Acceptance Facility is a facility where the bankers _____ bills drawn on the borrower:
- 82) Only _____ repos are conducted now by RBI:
- 83) Negotiated Dealing system (NDS) is a screen based dealing system for all Government securities and is conducted by _____:
- 84) All Inter Bank money markets deals have to be necessarily conducted through _____ and reported to _____:
- 85) Institute of Banking Research & Development of Technology promoted by RBI has developed _____ which has become the backbone of domestic financial communications in the SFMS form:
- 86) The three approaches to Value-at-Risk modeling are:
- 87) In _____ approach to VaR, sensitivity of various components is taken in to consideration:
- 88) In _____ approach, a number of scenarios are generated at random and their impact on the stock / index / currency under study examined:
- 89) Historical data about the item under study are gathered and probability of loss worked out in the _____ approach to VaR:
- 90) The concept of _____ is widely used in Investment business, though it is applicable in all cases where interest rate risk exists:
- 91) Yield to Maturity also known as Internal rate of Return of a bond is the _____ rate of return of that bond:
- 92) If we are given the prevailing price of a Bond in the market and its coupon rate and date of maturity, we will be in a position to calculate the _____:
- 93) The Bond prices are inversely related to the _____:
- 94) Cost of Carry refers to the _____ of funds locked in any transaction:
- 95) The ability of a firm / Company / Individual to borrow funds or build positions based on its capital know as _____:
- 96) In an Option transaction, the Option writer delivers only the difference between the Strike Price and the Spot price to the Option holder:
- 97) Payment of the difference between the Option Strike price and the Market price on the date of settlement is known as the _____:
- 98) Swaps are mainly of two types:
- 99) There are various types of Swaps. A coupon swap refers to exchanging of _____:
- 100) Currency futures are exchange traded derivatives in India and are available in the variants:

BALANCE SHEET MANAGEMENT

- 1) As per RBI guidelines, when did the Indian banks with overseas presence and foreign banks in India migrate to Basel-II guidelines?
- 2) As per RBI guidelines, the Indian banks without overseas presence migrated to Basel-II by _____:
- 3) For calculating the capital charge for Credit risk under standardized approach, an unrated bank will be assigned the following risk weight:
- 4) Under Basel II, Standardized approach for arriving at capital charge for credit risk, the SME and Retail loans are assigned the risk weight of:
- 5) If a portfolio exposure is to individuals or small business and is sufficiently diversified and the exposure is of low value, it can be classified as _____ as per Basel II:
- 6) In calculating the capital charge for credit risk, Credit Conversion Factor (CCF) is used for the purpose of:
- 7) The basic difference between Foundation and Advanced IRB approach for calculating capital charge for Credit risk is:
- 8) The following category of securities / investments does NOT form part of the trading book:
- 9) A bank's Gold loan account has turned NPA. It was found that the jewels held were fake and not of gold and the loan officer being negligent has failed to detect the same. The bank has faced loss due to _____:
- 10) There is stock market crash and consequently, value of equity portfolio of the bank has dropped substantially. This refers to:
- 11) M/s Modern Bank is having Rs. 500 Crore investments in Government securities. The capital required to be maintained by the bank for market risk, on holding this investment is:
- 12) Under Basel II, as per Basic Indicator Approach for calculation of Capital charge for operation risk, Average of 3 years' gross income is considered but if annual Gross Income is negative or zero, it should be:
- 13) Bank's internal Operational risk measurement system is used in the following method of calculating the operational risk:
- 14) The concept of Expected Loss (EL) and Un-expected Loss (UL) are used in calculating capital charge on the following type of risk:
- 15) Under the Standardized approach for calculating Operational risk, a Bank's business line is divided in to _____ categories. Capital charge for each line is calculated using the beta factor given by BIS. Three years' average of the _____ is used for arriving at final capital charge required:
- 16) Under Basel II, Pillar 3, banks are required to give critical information / disclosures to public once in:
- 17) Basel II "Market Disclosure" guidelines provide _____ areas in which a bank should publish on semi-annual basis:
- 18) A borrower is required to pay part of Principal and accrued interest every month as per loan agreement. He is promptly paying interest every month, but not paying principal for the past four months. The account will be classified as:
- 19) The provisioning requirement for Doubtful II class of asset and Loss Asset is the same at:
- 20) At present Bankers in India are not allowed to raise _____ capital as per RBI regulations:
- 21) As per Basel II, Tier-3 capital is allowed to meet the following category of risk _____:
- 22) The currency of issue for the innovative capital raising instruments recently permitted by RBI is _____:
- 23) The claims of the investors in the Innovative Instruments (in case of winding up of the issuing bank or any such contingency) is superior to the claims of equity holders but:
- 24) The present minimum CRAR ratio prescribed by RBI for Private sector banks is _____:
- 25) RBI has given Exposure norms for Individuals, Groups and certain sectors (Capital markets) for preventing Banks from exposing themselves to _____:
- 26) The Reserve Bank of India has issued instructions and guidance notes to banks regarding credit rating of the borrower accounts. In the credit rating models so envisaged, rating migration refers to:
- 27) Capital charge for the Retail of businesses of a bank is calculated by multiplying gross income by this line of business by its beta factor of:
- 28) Emerging Market countries include:
- 29) A short-term debt paper (Usance Promissory note) with a minimum Rs 5 Lakhs, Issued by rated companies, (Minimum P2 of CRISIL or Equivalent) for a minimum 7 days, Maximum One year in India is called _____:
- 30) From Balance sheet perspective, Credit Derivatives are:
- 31) RBI has directed the banks in India to use the _____ method for allocating Capital for operational risk:
- 32) _____ is the process of assigning Risk type to various business functions, units and processes and analyzing them to study the same for further action:
- 33) If ABC Bank buys USD 1 million in spot market against INR and sell USD 1 million in one month forward and buy INR, the transaction can be called as:
- 34) RBI has directed banks to adopt the Basic Indicator Method for arriving at the capital Charge (allocation) for Operational Risk. The basic indicator that is chosen for this method is _____:
- 35) Over night positions are normally _____ than Day light positions:
- 36) Simple Sensitivity test, Scenario Analysis, Maximum loss, Extreme value theory are some of the techniques for _____:
- 37) Checking out shocks that may affect a number of market risk factors simultaneously in an extreme event is called _____:
- 38) Assets which come up often for re-pricing cause interest rate risks. One way to reduce this risk is to match it with _____:
- 39) In a Foreign Exchange Forward purchase Contract; the Counter-party can be any _____:
- 40) The two types of swaps are _____:
- 41) Stress testing helps dealers to assess Market risk in:
- 42) In _____ case, the positions taken in the derivative markets by their sole employee in their Singapore office Mr. Nick Lee son led to the bank becoming insolvent and collapsing altogether. The risk that the bank faced here was the _____ that either there were no control/limits in the dealer's operations or that he violated them and there was no back office tracking his deals to assess for risks:
- 43) A Transaction where the cash flows from an underlying asset are debundled and issued as financial securities is called _____:
- 44) In the Beta values for Operational risk measurement in the Standardized approach, the Beta for Retail banking at _____ is lower than beta at _____ for Corporate Finance:
- 45) The risk weight to be attached to the exposure on GOI, RBI by banks in India is:
- 46) If your bank is holding 65% stake in a listed Company and feels that if it decides to sell, the Price will fall in the market and there may be no buyers, the type of the risk it is facing is called _____:
- 47) Herstatt Risk is another name for _____:
- 48) _____ is the most common means of hedging transactions in foreign currency in Indian markets:
- 49) NSE / BSE are India's premiere Stock exchanges. They have eliminated the _____ Risk from the Equity Capital markets:
- 50) The difference between rate for buying and selling of foreign currency (Bid and offer rates) is known as _____:
- 51) SCBs are _____ from maintaining CRR on Credit balances in ACU (US\$) Accounts, & Demand and Time Liabilities in respect of their Offshore Banking Units (OBU's):

- 52) _____ are securities eligible for REPOS and REVERSE REPOS :
- 53) Provisioning requirement for an advance facility under Doubtful-I category (Code 31):
- 54) Capital charge Credit risk under Internal Rating based (IRB) approach is a function of probability of (PD). Loss given default given (LGD). Exposure at default (ED) and _____:
- 55) Provisioning requirement for an advance facility under Doubtful-III category, denoted by code 33:
- 56) Instruments that are not marked to market may represent:
- 57) ICICI bank has declared that they will be incurring MTM losses (Mark to Market) in the case of their Credit derivatives such as :
- 58) The losses declared by Societe Generale on account of the derivative transactions entered in to by their rogue trader Jerome Kerviel can be classified as _____ risk:
- 59) As per RBI guidelines, Banks are required to ensure that their formal Stress testing frameworks, are operational from _____:
- 60) _____ & _____ are the two aspects of Stress Testing:
- 61) _____ assess the impact of change in *one variable* (for example, a shift in the yield curve, movement in the foreign exchange rates, a big movement in the equity index etc.) on the bank's financial position:
- 62) Scenario tests include _____ moves in a number of variables (for example, equity prices, oil prices, foreign exchange rates, interest rates, liquidity etc.) based on a single event experienced in the past:
- 63) Within Market Risk Capital charge requirements are the measurements of Capital charge for interest rate related instruments. These are called Specific Risk charges. As per RBI given table, the specific Risk charge for Investments in Government securities and Government guaranteed securities is _____:
- 64) Specific charge for RBI approved securities not guaranteed by Government or Investments in Non-Approved securities guaranteed by Government is:
- 65) Specific charge on investment in mortgage based securities is _____:
- 66) The three categories of Capital charge which are aggregated to arrive at the total Capital charge required for Market Risk are:
- 67) Forex & Gold Open positions attract a Capital charge of _____ while arriving at the overall Capital charge for Market Risk:
- 68) Within the Market Risk capital calculations, Capital charge for specific risk on Equity positions will be _____:
- 69) Specific risk capital charge on Equities should be computed on the banks' _____ equity positions (i.e. the sum of all long equity positions and of all short equity positions – short equity position is, however, not allowed for banks in India):
- 70) The general market risk charge on the gross equity positions is _____ according to RBI guidelines:
- 71) Investments in shares and /units of VCFs have to be assigned a risk weight of _____ for measuring the credit risk during first three years when these are held under HTM category:
- 72) When investments in shares and /units of VCFs are held under or transferred to AFS, the capital charge for specific risk component of the market risk is fixed at _____ to reflect the risk weight of 150%:
- 73) The charge for general market risk component for investments in would be at 9% as in the case of other equities shares and /units of VCFs are held under or transferred to AFS is _____:
- 74) Foreign exchange open positions and gold open positions are at present risk weighted at _____:
- 75) Capital charge for foreign exchange and gold open position is _____ at present reflecting Basel Committee requirement:
- 76) While calculating exposure of a borrower for assignment of risk weight, banks may 'net-off' against the total o/s exposure of the borrower (a) Cash margins or deposits, (b) credit balances in current or other a/c not earmarked for specific purposes and free from any lien, (c) any assets where provisions for depreciation or for bad debts have been made and _____:
- 77) FX including Cross currency interest rate swaps, Forward contracts, Currency futures, Currency options purchased, and other contracts of a similar nature with an original maturity of _____ irrespective of the counterparty, may be assigned "zero" risk weight as per international practice:
- 78) In cases Off-balance sheet items such as Cross currency interest rate swaps, Forward contracts, Currency futures, Currency options purchased, and similar contracts beyond a maturity of 14 calendar days, banks have to apply a Credit conversion factor depending on the _____:
- 79) For calculating Capital charge for Operational Risk, Gross income of previous _____ positive years is averaged in the Basic Indicator Approach:
- 80) As per RBI guidelines, Gross income is defined as "Net interest income" plus "net non-interest income" and should be gross of certain specified items but can exclude income from insurance business:
- 81) As per RBI guidelines, extraordinary income if any can also be excluded while arriving at Gross Income in Basic Indicator approach:
- 82) As per RBI guidelines for Pillar 3-Market Disclosures, banks should make their annual disclosures both in their annual reports and on their websites:
- 83) Banks with capital funds of Rs.100 crore or more should make interim disclosures on the quantitative aspects, on a stand alone basis, on their respective websites as at end _____ each year:
- 84) All banks with capital funds of Rs. 500 crore or more, and their significant bank subsidiaries, must disclose their Tier 1 capital, total capital, total required capital and Tier 1 ratio and total capital adequacy ratio, on a _____ on their respective websites:
- 85) The disclosure on the websites should be made in a web page titled "Basel II Disclosures":
- 86) A _____ is an instrument that can be characterized best as an option to sell defaulted securities at par value to a third party in exchange for a series of fixed cash flows:
- 87) An additional margin held by lenders against Securities where prices are subject to Market Movements, over and above the normal margins is called _____:
- 88) Provisioning requirement for an advance facility under Doubtful-III category, denoted by code 33 is same as _____:
- 89) Risk weighted assets for operational risk are worked out as _____ as per RBI norms:
- 90) Your Bank has Income from both Retail Banking and Corporate Banking divisions. Income from which division attracts lesser Capital charge (beta):
- 91) A NPA which has security less than 10% will be straightaway categorized as:
- 92) NPAs in D-3 category require _____% provisioning:
- 93) _____ is essential in validating the VaR estimates:
- 94) Time taken to liquidate a security in open market is called _____:
- 95) The probability of a company entering bankruptcy within next 12 months period is forecast by the following technique:
- 96) Management and control of interest rate risk in a bank is the responsibility of _____:
- 97) Under Simplified Standardized approach (SSA), maximum risk weight for corporate is prescribed as _____:
- 98) The Off-Balance Sheet Items are treated as items that give rise to _____:
- 99) Commercial Banks in India (except LABs and RRBs) must achieve a Provisioning Coverage Ratio of _____ by _____:
- 100) Basel Committee has announced enhancements to Basel-II norms. As per RBI guidelines, Banks have to achieve these standards by _____:

ANSWER

ASSET LIABILITY MANAGEMENT

- 1) Asset Liability Management
- 2) ALCO-Assets and Liability committee
- 3) Asset
- 4) Reserve Bank of India
- 5) Investments
- 6) Advances
- 7) Operating expenses
- 8) Interest rate risk
- 9) RBI
- 10) Economic Equity Ratio
- 11) Interest Income – Interest Expenses
- 12) Nil / Average Total Assets
- 13) Shareholder Funds / Total Assets
- 14) Assets > Liabilities
- 15) Liabilities > Assets
- 16) Ensuring profitability & liquidity
- 17) Quality of assets & Nature of assets and liabilities (whether liquid or illiquid)
- 18) Honor existing loan commitments
- 19) Of decreasing liabilities
- 20) Market perception
- 21) Alternate scenario analysis.
- 22) Contractual obligations
- 23) Call Risk, Time risk, Funding Risk
- 24) Funding risk
- 25) Funding risk
- 26) Time risk
- 27) Temporary problems in recovery/inflows
- 28) Call risk
- 29) Liquidity Risk
- 30) Stock approach
- 31) Deposits from public in normal course of business
- 32) Cash balances with bank and balance with other banks
- 33) Contingency planning
- 34) Managing Market Access
- 35) Management structure & Liquidity strategy for each currency
- 36) Deregulation of financial system
- 37) Interest Rate Risk
- 38) Earnings Perspective, Economic Value perspective
- 39) Earnings Perspective
- 40) Earnings Perspective
- 41) Duration Gap Analysis (DGA), Simulation method & Value at Risk over time
- 42) Assets
- 43) Fall
- 44) Interest rate risk
- 45) Mismatch risk
- 46) Gap Risk
- 47) Asset sensitive
- 48) Positive
- 49) All Liabilities
- 50) Basis risk
- 51) Net Interest Position Risk
- 52) Pre-payment of loans or Pre mature withdrawal of deposits
- 53) Yields and Maturity Period
- 54) Price risk
- 55) Decreases
- 56) Duration
- 57) Overall net income
- 58) Economic Value Perspective
- 59) Embedded losses perspective
- 60) 90% in the time bucket of 1 -3 years & 10% in 1-14 days
- 61) Duration
- 62) Dynamic simulation
- 63) Tier I & Tier-II capital only
- 64) Duration Gap analysis (DGA)
- 65) 1-3 years bucket
- 66) Tier II capital
- 67) 1.25%
- 68) Gross NPAs to arrive at net NPAs
- 69) Investment Reserve Account.
- 70) Overall ceiling of 1.25 %
- 71) 100%
- 72) Statement of structural liquidity
- 73) CMD, CEO or ED
- 74) 20% of outflows during the period
- 75) 1-90 days
- 76) ALM Information system, ALM Organization & ALM Processes
- 77) 90 days
- 78) Maturity buckets in these profiles
- 79) Interest Non-sensitive
- 80) Over 5 years
- 81) 1-14 days
- 82) 1-14 days bucket
- 83) Non-sensitive
- 84) 12 months
- 85) Cash
- 86) Ten
- 87) Next day
- 88) 10%, Total Outflow in that bucket
- 89) Long term
- 90) 3-6 months
- 91) Fortnightly
- 92) Daily
- 93) Swaps & Options
- 94) (a) Measuring & Managing Net funding requirements, (b) Market access & (c) Contingency planning
- 95) Basis Risk
- 96) Reduction
- 97) Sold
- 98) Economic value & Earnings perspectives
- 99) Embedded losses
- 100) Maturities

ANSWER RISK MANAGEMENT

- 1) Risk adjusted rate of return
- 2) Banking book, Trading book, Off-balance sheet exposures
- 3) Banking book
- 4) Held till maturity
- 5) Marked to market
- 6) Market risk
- 7) Operational risk
- 8) Portfolio swap
- 9) Less than the average risk
- 10) Liquidity risk
- 11) It considers only one market parameter
- 12) Value at Risk (VaR)
- 13) Counter-party risk
- 14) Embedded option risk
- 15) Credit risk
- 16) National savings certificate
- 17) Systemic risk
- 18) High inter-relation among bank's transactions
- 19) 1988
- 20) Linking capital required to credit exposure
- 21) Market risk
- 22) Introduced capital change due to market risk arising from trading book, introduced facility of Tier-3 capital dedicated to cover the capital requirements for Market risk
- 23) Based II
- 24) Prominence to internal risk measurement systems by banks
- 25) Minimum capital requirement, Supervisory review process & Market discipline
- 26) Advanced measurement approach
- 27) 20%
- 28) Multiple simultaneous risk loss events
- 29) 31-03-2008 & 31-03-2009
- 30) Standardized approach
- 31) Sensitivity, Volatility and Downside potential
- 32) Volatility
- 33) Option prices
- 34) Square root of time
- 35) Operating expenses, Loss probabilities & Capital charge
- 36) Probability of default
- 37) Seven Years
- 38) Loss given the default (LGD)
- 39) Operational risk
- 40) 15%
- 41) Stress testing
- 42) Disclosure
- 43) Risk weighted assets
- 44) 150%
- 45) Proprietary positions
- 46) 18%
- 47) 9%
- 48) Settlement risk
- 49) Assets liquidation risk
- 50) Centre of gravity of future cash flows
- 51) Modified duration x yield change
- 52) Value at Risk (VaR)
- 53) Holding period, Confidence levels & Time historical time horizon
- 54) Monte Carlo simulation
- 55) Normal trading conditions
- 56) Normal market conditions
- 57) Back testing
- 58) Operational risk
- 59) Cause based
- 60) Event based
- 61) Call risk
- 62) Profit objective & Capital planning
- 63) Credit spread risk
- 64) Basic indicator approach
- 65) Risk in the economy in which it is operating
- 66) Concentration risk
- 67) Counter party
- 68) Country risk
- 69) Higher probability of default
- 70) 12%
- 71) Rating migration
- 72) Alt man's Z score
- 73) Credit metrics
- 74) Credit Swiss
- 75) 15%
- 76) Risk mitigation
- 77) Securitization
- 78) Credit derivatives
- 79) Original lender
- 80) Protection seller
- 81) Protection seller
- 82) Downside potential
- 83) Capital Charge
- 84) Differential Capital
- 85) Core Disclosures and Supplementary disclosures
- 86) Introduction of Operational risk
- 87) Probability of Default
- 88) Loss given the Default
- 89) Economic Maturity
- 90) Internal rating based approach
- 91) True
- 92) Five & Seven
- 93) Calculating Risk weighted Assets
- 94) 100%
- 95) Quantitative Impact Surveys
- 96) Back testing
- 97) Liquidation Risk
- 98) Single parameter
- 99) Time
- 100) Basis point value or BPV

ANSWER BALANCE SHEET MANAGEMENT

- 1) 31-03-2008
- 2) 31-03-2009
- 3) 100%
- 4) 75%
- 5) Retail lending
- 6) Estimating the off-balance sheet commitments likely to materialize
- 7) The source of input data i.e. Bank itself versus supervisor (RBI in India)
- 8) Held to Maturity (HTM)
- 9) Operational Risk
- 10) Market Risk
- 11) Zero
- 12) Excluded while calculating the average.
- 13) Advanced Measurement Approach
- 14) Operational Risk
- 15) Eight (8), Capital charge
- 16) 6 months
- 17) Thirteen (13)
- 18) Sub-standard Asset
- 19) 100%.
- 20) Tier III
- 21) Market risk
- 22) Indian rupees or Foreign Currency with RBI approval on case to case basis
- 23) Subordinate to all other Creditors
- 24) Nine (9) %
- 25) Concentration risk.
- 26) Migration of borrowing accounts from one rating to another.
- 27) Twelve (12) %
- 28) India, China, Thailand
- 29) Commercial paper
- 30) Off balance sheet items
- 31) Basic Indicator approach
- 32) Risk mapping
- 33) SWAP transaction
- 34) Average of the annual gross income of the previous three years where positive
- 35) Lower
- 36) Stress testing of a trading book portfolio.
- 37) Scenario Analysis
- 38) Reprice-able liabilities
- 39) Exporter
- 40) Currency, Interest
- 41) Abnormal situations
- 42) Barclays bank of UK, Operational risk.
- 43) Securitization
- 44) 12%, 18%
- 45) Zero
- 46) Asset liquidation risk
- 47) Settlement Risk.
- 48) Forward Contracts
- 49) Counter-party Risk
- 50) Spread
- 51) Exempted
- 52) All SLR transferable Government of India dated Securities / Treasury Bills.
- 53) 20% of RVS + 100% of shortfall in security
- 54) Effective Maturity
- 55) Same as loss asset
- 56) Embedded Losses
- 57) Credit Default Swaps & Credit linked Notes
- 58) Operational Risk
- 59) March 31, 2008.
- 60) Sensitivity Analysis & Scenario analysis
- 61) Sensitivity tests.
- 62) Simultaneous
- 63) 0%
- 64) 1.8%
- 65) 4.5%
- 66) (1) Interest rate risk (General Market plus Specific), (2) Equity related Risks (General Market plus Specific), (3) Foreign Exchange & Gold open positions
- 67) 9% (Nine)
- 68) 11.25%
- 69) Gross.
- 70) 9% (Nine).
- 71) 150%
- 72) 13.5%-please note that this is for Specific risk
- 73) 9% (Nine) please note that this is for General risk
- 74) 100%.
- 75) 9% as Risk weight is 100%.
- 76) Claims received from DICGC/ ECGC pending adjustment, & subsidies of Government sponsored schemes kept in separate accounts.
- 77) 14 calendar days or less.
- 78) Maturity period
- 79) True
- 80) True
- 81) True
- 82) True
- 83) September
- 84) Quarterly basis.
- 85) True
- 86) Credit default swap
- 87) Haircut
- 88) The provision for Loss asset -100%
- 89) Capital for operational risk $\times 100/9$ (100/9 because RBI stipulates 9% as Minimum Capital adequacy)
- 90) Retail Division at 12%
- 91) Loss Asset
- 92) 100%
- 93) Back Testing
- 94) Defeasance period
- 95) Altman's Z score
- 96) ALCO
- 97) 100%
- 98) Contingency Risk
- 99) 70%, September 2010
- 100) 31-March-2010