December 2008

Syllabus 2008

Time Allowed : 3 Hours Full Marks : 100

The figures in the margin on the right side indicate full marks.

Please answer all bits of a question at one place.

SECTION I (60 Marks)

Answer *Question No. 1* which is compulsory and any two from the rest in this section.

1. (a) In each of the cases given below one out of four is correct. Indicate the correct answer (= 1 mark) and give your working/reasons briefly (= 1 mark): 2x5

(i) The Beta co–efficient of equity stock of ECOBOARD LTD. is 1.6. The risk–free rate of return is 12% and the required rate of return is 18% on the market portfolio. If the dividend expected during the coming year is Rs. 2.50 and the growth rate of dividend and earnings is 8%, at what price the stock of Ecoboard Ltd. can be sold (based on the CAPM)? (0)

A. Rs. 18.38
B. Rs. 15.60
C. Rs. 12.50
D. None of A, B, C

(ii) ANKITA LTD. issued right shares that increased the market value of the shares of the company by Rs. 160 crore. The existing Base year average (old Base year Avg.) is Rs. 900 crore. If the aggregate market value of all the shares included in the index before the right issue is Rs. 1,800 crore, the new Base year average will be (0)

A. Rs. 782.50 crore
B. Rs. 980.00 crore
C. Rs. 911.17 crore
D. Insufficient information

(iii) In September 30, 2008, a six–month Put on VINTEX LTD's stock with an exercise price of Rs. 75 sold for Rs. 6.82. The stock price was Rs. 70.00. The risk–free rate was 6% per annum. How much would you be willing to pay for a CALL on Vintex Ltd.'s stock with same maturity and exercise price? (0)
[Given: PVIF (6%, ½ year) = 0.9709]

A. Rs. 13.72
B. Rs. 8.50
C. Rs. 4.00
D. Rs. 3.20

(iv) MISS ARTITHI can earn a return of 20 per cent by investing in equity shares on her own. Now she is considering a recently announced Equity based mutual fund scheme in which initial expenses and annual recurring expenses are 5 per cent and 1.5 per cent respectively. How much should the mutual fund earn to provide Miss Artithi, a return of (0)

20 per cent?
A. 18.43%
B. 22.55%
C. 21.50%
D. Insufficient data

(v) MR. ROHIT is willing to purchase a 5 years Rs. 1000 par value PSU bond having a coupon rate of 9%. His required rate of return is 10%. How much Mr. Rohit should pay to purchase the bond if it matures at par? (0)
[Given: PVIFA (10%, 5 years) = 3.791 and PVIF (10%, 5 years) = 0.621]
A. Rs. 965.49
B. Rs. 962.19
C. Rs. 850.47
D. Rs. 805.30

(b) Choose the most appropriate one from the stated options and write it down. (Only indicate A, B, C, D as you think correct): 1x10

(i) An option of allocating shares in excess of the shares included in the public issue is called (0)
A. Call option
B. Compound option
C. Green shoe option
D. Follow on offer

(ii) The legislations governing the securities market are (0)
A. The SEBI Act, 1992 and the Companies Act, 1956
B. The Securities Contracts (Regulation) Act, 1956
C. Depositories Act, 1996
D. All of the above.

(iii) The members of IRDA, other than Chairman of IRDA are appointed by (0)
A. The Chairman of IRDA
B. Government of India
C. The ROC
D. RBI

(iv) In put–call parity, the pay–offs of buying stock can be replicated by (0)
A. Buying a call and buying a put option
B. Buying a call and writing a put option
C. Writing a call and buying a put option
D. Writing a call and writing a put option

(v) Security Market Line (SML) shows the relationship between return on the stock and (0)
A. Return on market portfolio
B. Beta of the stock
C. Risk–free rate of return
D. Variance of the stock returns

(vi) SEBI (Disclosure and Investor Protection) Guidelines, 2000 are not applicable to (0)

A. All public issues by unlisted companies
B. Public sector banks
C. Infrastructure companies
D. Both (B) and (C) above.

(vii) Sharpe's measure of the portfolio performance is based on (0)
A. Systematic risk of the portfolio
B. Unsystematic risk of the portfolio
C. Total risk of the portfolio
D. Market risk of the portfolio

(viii) As per SEBI's guidelines, a mutual fund should be estimated as a (0)
A. Public Limited Company
B. Trust
C. Private Limited Company
D. None of the above.

(ix) If the director of a company who has access to inside information is unable to use this information to make supernormal profit, it is a sign of (0)
A. Weak form of efficient market hypothesis
B. Semi–strong form of efficient market hypothesis
C. Strong form of efficient market hypothesis
D. Incompetence of the director.

(x) The following are the common assumptions to both APT and CAPM: (0)
A. Investors have homogenous beliefs
B. The markets are perfect
C. Investors are risk–averse utility maximizers
D. All of (A), (B) and (C) above.

2. (a) Under what circumstances can a company registered as a collective investment management company raise funds from the public. 3 (0)

(b) Explain the difference between forward contract and future contract. 4 (0)

(c) Mr. Marin Kumar an investor is evaluating the prospects of investing in two companies SP ARK LTD. and AMRIT LTD. The projections of returns for the stocks of the two companies along with their probabilities are as follows: 6+2+4+1 (0)

Economic Scenario	Probabilities	Returns associated with		
		Spark Ltd.	Amrit Ltd.	Market Index
Boom	0.45	43%	34%	26%
Growth	0.25	23%	27%	10%
Stagnation	0.20	18%	16%	3%
Slump	0.10	8%	4%	–6%

The risk–free rate of return is 9%.
Requirements:

(i) Calculate Ex–ante betas for both the companies

(ii) Calculate excess return provided by both the companies

(iii) Calculate the proportion of systematic risk and unsystematic risk for both the Companies.

(iv) State whether the stock of Spark Ltd. and Amrit Ltd., is underpriced or overpriced?

3. (a) What are the principle weakness of Indian Stock Market? 3 (0)

(b) Enumerate the main features of Venture Capital Financing. 4 (0)

(c) SUN MUTUAL FUND (approved Mutual Fund) sponsored an open ended equity oriented scheme "LT Opportunity Fund". There were three plans namely 'A' —Dividend Reinvestment Plan, 'B' —Bonus Plan and 'C' —Growth Plan. 4+5+4 (0)

At the time of New Fund Offer on 1.4.1998 Mr. Hari, Mr. Saxena and Mrs. Rawat invested Rs. 1,00,000 each and choosen plans 'B', 'C' and A respectively. The face value of the units was Rs. 10 each. The detailed history of the fund is as follows:

Date	Dividend (%)	Bonus ratio	Net Asset	Value per unit	(F.V. Rs. 10)
			Plan A	Plan B	Plan C
28.07.2002	20	—	30.70	31.40	33.42
31.3.2003	70	5 : 4	58.42	31.05	70.05
30.10.2006	40	—	42.18	25.02	56.15
15.01.2007	25	—	46.45	29.10	64.28
31.01.2007	—	1 : 3	42.18	20.05	60.12
24.02.2008	40	1 : 4	48.10	19.95	72.40
31.03.2008	—	—	53.75	22.98	82.07

On 31st March, 2008 all three investors redeemed all the balance units.
You are required to calculate the annual rate return for Mr. Hari, Mr. Saxena and Mrs. Rawat after taking into consideration the following information:

(i) Long–term capital gain is exempt from Income–tax.
(ii) Short–term capital gain is subject to 10% Income–tax.
(iii) Security Transaction Tax @ 0.2% only on sale/redemption of units.

Ignore Education Cess and Service Tax.

Note: You may use the formula $\frac{1}{(1+r)^n}$ for determining PVIF [at r (rate of return), n years].

4. (a) Write short notes on the following: 3x2

(i) Green Shoe Option (0)

(ii) Services of Merchant Banks. (0)

(b) On September1, 2008 the stock of AMREX LTD. (AL) was trading at Rs. 120 and call option exercisable in three months times had an exercise rate of Rs. 112. The standard deviation of the continuously compounded stock price change for Amrex Ltd. is estimated to be 30% per year. The annualized Treasury Bill rate corresponding to this option life is 7%. (5+4)+2 (0)

Required:

(i) Compute the value of a three (3) months call option on the stock of Amrex Ltd. using Black–scholes model.

(ii) What would be the value of put option for the same?

Extracted from the tables:

(1) Natural Logarithms: Ln (1.071429) = 0.068993, Ln (0.93333) = – 0.06900.

(2) Value of e^{-x}: $e^{0.02}$ = 09802 and $e^{-0.01}$ = 0.9900.

(3) Comulative standardized normal probability distribution : NCX.

When x ≥ 0 : N(o.6516) = 0.7427, N(0.5016) = 0.6921

When x ≤ 0 : N(–0.6516) = 0.2573, N(–0.5016) = 0.3079.

(c) The stock of APTECH LTD. (FV Rs. 10) quotes Rs. 920 to day on NSE and the 3 month futures price quotes at Rs. 950. The one month borrowing rate is given as 8% and the expected annual dividend yield is 15% p.a. payable before expiry. 3 (0)

Your are required to calculate the price of 3 month APTECH FUTURES.

SECTION II (40 Marks)

Answer Question No. 5 which is compulsory and any two from the rest in this section.

5. (a) Choose the most appropriate one from the stated options and write it down (only indicate A, B, C, D as you thing correct): 1x5

(i) Under the Companies Act, 1956, the first directors shall hold office upto (0)

A. The end of the statutory meeting

B. The end of the period as prescribed by the articles of the company

C. The end of three years from the date of appointment

D. Till the first Annual General Meeting.

(ii) Mr. Saxena is a director of SUVALAXMI LTD. which failed to file its annual return from the year 2005–06. The maximum period for which Mr. Saxena will be disqualified from becoming a director in any public limited company is (0)

A. 3 years

B. 5 years

C. 7 years

D. 10 years

(iii) Which of the following items requires special resolutions in a general meeting under the companies Act 1956? (0)

A. Issue of shares at discount

B. Adoption of Statutory Report

C. Appointment of Managing/whole–time Director

D. Reduction of Share Capital

(iv) The concept of Corporate Governance was initiated on the recommendations of (0)

A. The Report by the Confederation of Indian Industry (CII)
B. The Report by Dr. Y. V. Reddy
C. The Report by Mr. Kumar Mangalam Birla
D. The Report by Mr. Narayan Murthy.

(v) As per section 292A of the Companies Act, 1956 every public company having paid up of not less than ______ of rupees shall constitute a committee of the Board known as Audit Committee. (Fill in the gap from the below) (0)
A. Fifty lakh
B. Twenty-five crore
C. Five crore
D. Ten crore.

(b) State whether each of the following statements is True (T) or False (F): 1x5

(i) The qualification shares required to be taken up by a director must be purchased from the company. (0)

(ii) Increasing the voting rights of the shares held by the management can be considered as an act of oppression under the Companies Act 1956. (0)

(iii) Risk Management is not a linear process; it is the balancing of a number of interwoven elements. (0)

(iv) The Companies Act 1956 provides a positive definition of the term "Independent Director". (0)

(v) As per clause 49 of the listing agreement on Corporate Governance, the Audit Committee shall meet at least twice a year. (0)

6. (a) MISS VIVITHA is a director in 14 public limited companies on 30th November, 2008. This apart she is an alternate director in another public limited company. The following particulars are made available to you relating to her appointment as director in various companies in annual general meetings (AGM) held. 8 (0)

Name/Details of Company	Date of AGM
Daya Organics Ltd.	1st December, 2008
Vimala Plastics Ltd.	29th November, 2008
Balaji Vaishnav Association (a company registered under section 25 of the Companies Act, 1956)	30th November, 2008

Based on the provisions of the Companies Act, 1956, you are required to advise Miss. Vivitha, as to the options available to hear for accepting or refusing the aforesaid appointments.

(b) The Audit Committee of Yash Telecommunications Ltd., constituted under section 292A of the Companies Act, 1956 submitted to the Board of Directors, a report containing its recommendations. These recommendations were however not accepted by the Board. In this scenario, state your views on the followings: 7 (0)

(i) Can the Board adopt the stand of not accepting the Audit Committe’s recommendations?
(ii) If yes, the Board does not accept the recommendations, what should the Boards do?
(iii) How should the Chairman of the Audit Committee respond?

7. (a) HEMA BIOMEDICALS LTD is an existing profit making company with strong free reserves and having a huge real estate property. The Managing Director obtains reliable information that a group of undesirable persons are cornering the shares of the company, with a view to transfer them to their names and effect change in the composition of the Board of Directors. He apprehends that such change will be prejudicial to the public interest. 7 (0)
You are requested to advise the company with reference to the provisions of the Companies Act, 1956, as to how the company can block the aforesaid transfer of shares.

(b) Your help is sought in drafting the relevant portion of Directors' Responsibility statement forming part of Directors' Report. 4 (0)
Draft the same.

(c) State the additional requirements stipulated in clause 49 of the Listing Agreement which are silent in section 292A of the Companies Act, 1956. 4 (0)

8. (a) A group of shareholders in a public limited company, apprehend that the company's solvency is at stake, as the Board of Directors of the company is not managing the affairs in accordance with sound business principles. They seek your advise for obtaining directions for conducting a special audit. Briefly state the provisions of the Companies Act, 1956 in this regard. 4 (0)

(b) Briefly discuss the provisions of the Competition Act, 2002 relating to 2+2

(i) Power of Central Government to exempt. (0)

(ii) Restriction on disclosure of information. (0)

(c) What are the actions required in identifying suitable responses to Risk in the context of risk Management? 7 (0)