

INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

11th November 2008

Subject CT2 – Finance and Financial Reporting

Time allowed: Three Hours (10.00 – 13.00 Hrs)

Total Marks: 100

INSTRUCTIONS TO THE CANDIDATES

1. *Please read the instructions on the front page of answer booklet and instructions to examinees sent along with hall ticket carefully and follow without exception*
2. *Mark allocations are shown in brackets.*
3. *Attempt all questions, beginning your answer to each question on a separate sheet. However, answers to objective type questions could be written on the same sheet.*
4. *In addition to this paper you will be provided with graph paper, if required.*

AT THE END OF THE EXAMINATION

Please return your answer book and this question paper to the supervisor separately.

- Q 1)** Stocks are valued at lower of cost or market value. This is the result of which accounting concept –
1. Materiality concept
 2. Cost concept
 3. Prudence concept
 4. Realization concept
- [2]
- Q 2)** Which of the following situation it is appropriate to buy a put option –
1. The value of the underlying security to rise
 2. The interest rate to fall
 3. A stock market boom
 4. The value of the underlying security to fall
- [2]
- Q 3)** Risk which cannot be eliminated by having a suitably diversified portfolio and is a risk of being exposed to the market is known as –
1. Credit Risk
 2. Systematic Risk
 3. Marketable Risk
 4. Specific Risk
- [2]
- Q 4)** All the claimants to a firm's income and value who are bound together by a complex web of contracts are called:
1. Shareholders
 2. Stakeholders
 3. Bondholders
 4. Employees
- [2]
- Q 5)** Increase in gearing results to a higher required return for equity holders, which is due to -
1. Risk of default increases due to increase in gearing.
 2. Risk of default decreases due to increase in gearing.
 3. Decrease in volatility of return due to increase in gearing.
 4. None of the above
- [2]
- Q 6)** A medium sized company in a low growth industry is considering to borrow loan capital that will result in to a highly geared company. Based on market expectations what is the likely impact to the share value of the company?
1. Share value is expected to diminish
 2. Share value is expected to increase
 3. There is no impact of gearing on share holders' returns.
 4. None of the above
- [2]

- Q 7)** Nita Ltd has a creditor's turnover of 42 days, debtor's turnover of 35 days and stock turnover of 20 days. Calculate, how long on average does each Rs. 1/- invested in working capital is tied up?
1. 27 days
 2. 13 days
 3. 97 days
 4. 55 days
- [2]
- Q 8)** The dividend yield for Surbhi Ltd in the current year is 9% against 4.5% a year ago. Which of the following statement is true with this increase?
1. Earning per share and dividend cover has remained constant. The share price has increased by 100% over the past year
 2. Earning per share and dividend cover has fallen by 50% over the past year. The share price has remained constant
 3. Earning per share and the share price has remained constant. Dividend cover has fallen by 50% over the past year
 4. Earning per share and the share price has increased by 100% over the past year. Dividend cover has remained the same
- [2]
- Q 9)** The auditor believes that the financial statement do not give a true and fair view and the effect is so material that a disclosure is required to the extent that financial statement may be misleading or incomplete in nature, the auditor should issue –
1. a disclaimer of opinion
 2. a qualified opinion
 3. an adverse opinion
 4. an unqualified opinion, but includes a reference to this matter in the audit report
- [2]
- Q 10)** An young Actuarial student is analyzing a project that has yearly positive and negative cash flows. The actuarial student has no other information other than that the project runs for three years and the cumulative cash flows of the project for three years are {-10,000, 10,400, 5}. Based on the given information what can be said of the internal rate of return on the project:
1. There are no negative solutions.
 2. There is a unique positive solution.
 3. There is no solution.
 4. None of the above.
- [2]
- Q 11)**
- a) Define the following terms –
1. Arbitrage (1/2)
 2. Chinese walls (1/2)
 3. Operational risk (1/2)
 4. Zero coupon yield curve (1/2)

b) Company ABC Ltd sends out the invoices to some customer for the following amount –

<u>Name of customer</u>	<u>Amount</u>	<u>Date</u>
• Sheena Private Ltd	Rs. 20,000/-	1 st Jan 2007
• Presha Private Ltd	Rs. 15,000/-	16 th Jan 2007
• Zehnab Private Ltd	Rs. 50,000/-	1 st Mar 2007
• Vanita Private Ltd	Rs. 25,000/-	1 st May 2007
• Sophia Private Ltd	Rs. 5,000/-	1 st June 2007

At the same time it sends a copy of these invoices to its factor, Peera Ltd, in return for a fixed percentage (%) i.e. 90% of invoice amount. Company ABC Ltd receives the money from its customers on following dates –

<u>Name of customer</u>	<u>Amount</u>	<u>Date</u>
• Sheena Private Ltd	Rs. 5,000/-	31 st Jan 2007
• Presha Private Ltd	Rs. 10,000/-	28 th Feb 2007
• Presha Private Ltd	Rs. 5,000/-	31 st Mar 2007
• Zehnab Private Ltd	Rs. 20,000/-	31 st Mar 2007
• Sheena Private Ltd	Rs. 15,000/-	31 st Mar 2007
• Zehnab Private Ltd	Rs. 20,000/-	30 th Apr 2007
• Vanita Private Ltd	Rs. 20,000/-	30 th Apr 2007
• Zehnab Private Ltd	Rs. 10,000/-	30 th June 2007
• Sophia Private Ltd	Rs. 5,000/-	30 th June 2007
• Vanita Private Ltd	Rs. 5,000/-	30 th June 2007

Company ABC Ltd then sends the money to Peera Ltd. Upto 30th June 2007, simple interest @ 3% per month has been incurred on the loan amount from Peera Ltd. Demonstrate with the help of calculations, how will Peera Ltd settle its accounts with ABC Ltd upto 30th June 2007 under the scheme of RECOURSE FACTORING.

[Assume 100% of invoice amount for the calculation of interest amount]

(6)
[8]

Q 12)

a) Define chargeable gain in the context of capital gains tax. Using the information given below calculate the capital gains tax.

Sale Price of a property:	Rs. 120,000
Purchase price of a property:	Rs. 60, 000
Sale costs:	Rs. 12, 000
Property development costs:	Rs. 20,000
Individual Allowance:	Rs. 25, 000

Ignoring any indexation calculate the capital gains tax at the rate of 20%. The above said property is sold in the span of 2 years. In the Indian context is it possible for the individual to claim any exemption against the transaction if the proceedings are invested in another property. (3)

- b) A&A is an accounting firm is helping ABC plc in calculating the taxable profits and hence the tax liability of ABC plc. What are the various adjustments that are to be made by A&A for arriving the taxable profits from the Accounting Profits of ABC plc? (3)
[6]

Q 13)

- a) What is a scrip issue? (1)
- b) Discuss the impact of scrip issue on share price of a company. (3)
- c) With an aid of an example explain how interest swaps work. Give the possible uses of the interest rate swaps. (5)
[9]

Q 14) An individual investor is planning to buy a unit linked insurance plan that offers two funds a debt fund and an equity fund. Debt fund invests in risk-free bonds and equity fund invest in stocks of BSE 300. The risk-free rate is 6% p.a., beta of the equity fund is 1.2 and equity risk premium derived from the market is 7% p.a.

- i. What is the expected return from the market? (1)
- ii. What is the expected return from the equity fund and bond fund respectively? (2)
- iii. The individual customer is considering investing a Rs. 1400 in Bond Fund and Rs. 600 in Equity Fund. The investor now wants to compare this investment with other investment opportunities that are available in the market. What is the return that has to be used by this investor for comparison purposes? (2)
[5]

Q 15) Construct the balance sheet of PRIME Industries as on 31st March 2008 based on the information provided below –

Asset Cover = 1.6
Asset Gearing Ratio = 0.5
Quick Ratio = 0.75
Current Ratio = 2

Other information as on 31st March 2008 –

1. Current Liabilities is Rs. 60,000/-
2. 10% unsecured loan stock is Rs. 1,50,000/-
3. Intangible assets is Rs. 60,000/-
4. Current assets comprises of only cash and inventories
5. Loan capital and equity share capital constitutes equal proportion of balance sheet [5]

Q 16)

- a) Define the following terms –
1. Associated undertaking (1)
 2. Holding and subsidiary company (1)
 3. Minority Interest (1)

- b) W Ltd owns shares in three companies, X Ltd (25% shareholding), Y Ltd (70% shareholding), Z Ltd (40% shareholding). W Ltd has a contractual right to appoint 65% of the board of X Ltd. W Ltd has appointed 70% directors of Y Ltd using its voting rights. Which companies are associates of W Ltd and which are subsidiaries?

(3)
[6]**Q 17)**

- a) You work for a firm that has limited access to capital markets. As a consequence, it has only \$ 20 million available for new investments this year. The firm does have a ready supply of good projects, and you have listed all the projects.

Project	Initial Investment	NPV	IRR
I	\$ 10 million	\$ 3 million	21%
II	\$ 5 million	\$ 2.5 million	28%
III	\$ 15 million	\$ 4 million	19%
IV	\$ 10 million	\$ 4 million	24%
V	\$ 5 million	\$ 2 million	20%

i. Based upon the profitability index, which of these projects would you take?

ii. Based upon the IRR, which of these projects would you take?

iii. Why might the two approaches give you different answers?

(6)

- b) You are examining the viability of a capital investment that your firm is interested in.

The project will require an initial investment of Rs.500,000 and the projected revenues are Rs.400,000 a year for 5 years. The projected cost-of-goods-sold is 40% of revenues and the tax rate is 40%. The initial investment is primarily in plant and equipment and can be depreciated straight-line over 5 years (the salvage value is zero). The project makes use of other resources that your firm already owns:

Two employees of the firm, each with a salary of Rs.40,000 a year, who are currently employed by another division will be transferred to this project. The other division has no alternative use for them, but they are covered by a union contract which will prevent them from being fired for 3 years (during which they would be paid their current salary).

The project will use excess capacity in the current packaging plant. While this excess capacity has no alternative use now, it is estimated that the firm will have to invest Rs. 250,000 in a new packaging plant in year 4 as a consequence of this project using up excess capacity (instead of year 8 as originally planned).

The project will use a van currently owned by the firm. While the van is not currently being used, it can be rented out for Rs. 3000 a year for 5 years. The book value of the van is Rs.10,000 and it is being depreciated straight line (with 5 years remaining for depreciation).

The discount rate to be used for this project is 10%.

Should you go in for this capital investment?

(10)

- c) In capital project appraisals what are the other criteria the companies would want to consider in choosing one project for the other? Also mention any missing information that the company should be providing in making such comparisons. (5)
[21]

Q 18)

- a) What is the purpose of a balance sheet, explain? Briefly explain what are assets, liabilities and capital in balance sheet (4)
- b) The accounts of the Post Company at December 31, 2003, are shown below:

<u>Account</u>	<u>Balance</u>
Advertising Expense	Rs. 4,000
Beginning Retained Earnings	39,000
Commissions on Sales	8,000
Ending Retained Earnings	?
Depreciation Expense	4,000
Dividends Declared	16,000
Insurance Expense	4,000
Interest Expense	7,000
Repairs and Maintenance	2,000
Sales	259,000
Sales Salaries	10,000
Cost of Goods Sold	135,500
Income tax rate	40%

Prepare an income statement for the year ended December 31, 2003. Where appropriate, condense expenses into (1) selling expenses, and (2) general and administrative expenses. (10)

- c) i. Define “share premium account” and list the purpose for which it can be used? (3)
- ii. State the items which appear to be awkward in trial balance and explain the reasons why they are considered awkward (3)
[20]
