INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

13th May 2010

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) A business made a loss during the financial year just ended but has more cash at the end of the year than it did at the beginning. Which of the following could be a reason for this?

A. Dividends were lower this year than last year.
B. Some fixed assets were sold during the year.
C. Debtors took longer to pay this year than last.
D. Creditors were lower at the end of this year.

[2]

Q. 2) Soham Son's conducted a financial analysis of its restaurant business, the analysis did not improve the actual fortunes of the business, and it may not be able to achieve any one of the following issues:-

A. Improve the profitability of this project.
B. Delineate the risks involved in the project.
C. Highlights the salient factors that lead to the greatest uncertainty.
D. Possibly suggest methods by which the risks might be reduced.

[2]

Q. 3) The needs and the objectives of these shareholders will NOT vary according to which one of the following factor:

A. Attitude towards risk.
B. Time preference and consumption needs.
C. Balance between the need for income and capital growth.
D. Attitude towards growth

[2]

Q. 4) Please read the following statements with respect to Put Option carefully and answer the question below.

I. – The buyer of the option has the right but not the obligation to sell the underlying asset at a specific point in the future at a specific price.
II. – The buyer of the option has the obligation but not the right to sell the underlying asset at a specific point in the future at a specific price.
III. – The seller of the option has the right but not the obligation to sell the underlying asset at a specific point in the future at a specific price.
IV. – The seller of the option has the obligation but not the right to sell the underlying asset at a specific point in the future at a specific price.

Which of the following is correct?

A. II and III only are correct
B. I and IV only are correct
C. I and III only are correct
D. All are incorrect

[2]

Q. 5) The decision made from a Payback Method may not be the optimum decision for maximizing the Profit or Returns because:

A. It ignores income beyond the payback period
B. The payback period is difficult to calculate
C. The returns in later years are uncertain
D. Of the emphasis placed on the interest factor

[2]

Q. 6) A reduction in risk in the context of a Capital Project Appraisal will lead to:-

A. Increase in the Risk Discount Rate and decrease in the Net Present Value
B. No change in the Risk Discount Rate and increase in the Net Present Value
C. Decrease in the Risk Discount Rate and increase in the Net Present Value
D. Decrease in the Risk Discount Rate and decrease in the Net Present Value

[2]

Q. 7) Which of the following is Not a definition of return on capital employed:-

A. $= \dfrac{\text{Net Profit before interest and tax}}{\text{Share Capital + Reserves + Long term debt}}$

B. $= \dfrac{\text{Net Profit before interest and tax}}{\text{Share Capital + Reserves + Long term debt – Intangible Assets}}$

C. $= \dfrac{\text{Net Profit before interest and tax}}{\text{Market Value of (Share Capital + Loan capital) + Reserves}}$

D. $= \dfrac{\text{Total Assets – Intangible Assets.}}{\text{Share Capital + Reserves + Long term debt}}$

[2]

Q. 8) Low margins relative to other firms in the industry will not indicate which of the following things :-

A. A more down market product range.
B. Subnormal profits are being made, so that the firm will exit the industry in the long run.
C. An attempt to increase market share.
D. An attempt to increase product awareness.

[2]

Q. 9) The share premium account is not used for which one of the following purposes: -

A. Any profit or loss on the issue of loan stock.
B. Preliminary expenses of forming a company.
C. Expenses & commissions incurred in any issue of debentures.
D. Expenses & commissions incurred in any issue of shares.

[2]

Q. 10) Which of the following in respect of Monte Carlo Simulation Model is not correct?

A. It involves creating a model, into which all the variabilities and correlations of the input criteria are entered.
B. They are likely to be performed at an early stage in the capital appraisal process.
C. The model runs a large number of simulations to obtain a spread of results.
D. It is complex and expensive.

[2]

Q. 11) (a) Define the following:-

i. Beta Value
ii. Covenant
iii. Introduction
iv. Underwriting (2)

(b) In principle, agency cost is incurred to deal with the conflict of interest that arise between various stakeholders. This has led to significant costs associated with monitoring and protecting individual interests. Whereas if, all stakeholders agree to work together in the best interests of the entity, they would benefit significantly without incurring this agency based costs.

Explain, why it would be difficult if not impossible, to eliminate these agency costs. (4)

(c) Vaibhav Industries is looking at setting up a new textile division & also expanding its current printing division, what is the role of financial management in an organization, why is it important, why is it difficult? (2)

[8]

Q. 12) (a) Define chargeable gain in the context of capital gains tax. Calculate the capital gains tax using the following information:

Sale Price of a Property	Rs.30,00,000
Purchase Price of the Property	Rs. 6,00,000
Sale Costs	Rs. 3,00,000
Property Development Costs	Rs. 4,00,000
Individual Allowance	Rs. 1,00,000
Capital Gains Tax Rate	25%
Index at the time of Sale	200
Index at the time of Purchase	125

The property development costs are incurred at the time of purchase itself and the sale cost is totally incurred at the time of sale. (4)

(b) Explain the basic principles of Double Taxation Relief. (2)

[6]

Q. 13) Secure Life Insurance Company has been in operation in the Indian Insurance Industry for the last fifteen years. Currently the company's shares are not listed on any market.

(a) List four reasons why Secure Life Insurance Company may seek a full stock exchange listing? (2)

(b) State any four methods for obtaining a quotation with an advantage and disadvantage for each of the methods. (6)

[8]

Q. 14) Pioneer Transports Ltd has a Debt: Equity ratio of 1:1. The risk-free rate of return is 8%, the equity risk premium derived from the market is 7% and the gross cost of debt is 4%. The company's beta is 1.25. The profits of the company are taxed at 30%. State any further assumptions you make.

(a) Calculate the weighted average cost of capital. (2)

(b) The company wishes to repay all the debt. What would be the required return to equity in such a situation? (3)

(c) The company decides against repaying all debt, but instead embarks on a rights issue in order to reduce its Debt: Equity ration to 1:2. Calculate the weighted average cost of capital after the rights issue. (3)

[8]

Q. 15) Meghan Stores Limited:-

Income statement for the year ended 31st December: -

	2009	2008
Sales	25,200	18,000
Cost of Goods Sold	(10,080)	(8,460)
Gross Profit	15,120	9,540
Distribution Cost	(1,512)	(540)
Administrative Expenses	(504)	(270)
Operating Profit	13,104	8,730
Finance Costs	(1,896)	(561)
Net profit before tax	11,208	8,169
Tax expenses	(3,060)	(2,298)
Profit for the year	8,148	5,871
Dividend Paid	6,000	3,000

Balance Sheet as at 31st December:-

	2009	2008
Assets		
Non Current Assets		
Property	15,000	15,000
Plant & Equipment	21,000	6,000
Current Assets		
Inventories	840	705
Trade Receivables	2100	1500
Cash at Bank	30	30
Total Assets	**38,970**	**23,235**
Equity & Liabilities		
Equity		
Share Capital	6,000	6,000
Retained Earnings	8,448	6,300
Non Current Liabilities		
Long Term Borrowings	20,802	8,025
Current Liabilities		
Trade Payables	720	570
Current Tax Payable	3,000	2,340
Total Liabilities	24,522	10,935
Total equity & liabilities	**38,970**	**23,235**

Analyse the last two years financial statements & discuss the profitability ratios for this company for last 2 years.

[0.5 X 8]=4

Q. 16) Draw up a table to compare an Investment banks, Building societies, Pension schemes, life insurance companies with respect to: -

A. Role
B. Source of funds
C. Application of funds

[3 X 2]=6

Q. 17) a) One of the state cricket associations in India is considering building a new cricket stadium to host IPL matches. They are planning to build the stadium together with a gymnasium, hospital and a school at the now unused industrial site, situated in the suburbs of the state's capital city.

i. Describe the steps necessary to effectively identify risks involved in the project? (6)

ii. Explain how a risk matrix can be used in the risk analysis process. (4)

b) Write down the formulas for an investment's NPV and rate of return. Prove that NPV is positive *only* if the rate of return exceeds the opportunity cost of capital. (4)

c) You are the manager of a specialty retailing firm which is considering two strategies for getting into the Malaysian retail market. Under the first strategy, the firm will make a small initial investment of $ 10 million and can expect to capture about 5% of the overall market share. Under the second strategy, the firm will make a much larger commitment of $ 40 million for advertising and promotion and can expect to capture about 10% of the market share. If the overall size of the market is $ 200 million, the firm's cost of capital is 12% and the typical life of a project in the firm is 15 years, what would the operating margin have to be for the firm to consider the second strategy? [You can assume that the firm leases its stores and has no depreciation or capital expenditures.] (6)

[20]

Q. 18) a) Explain the difficulties associated with depreciation of property, plant & equipment, in a company's financial statement. (2)

b) Chetek Ltd. Which depreciates its machinery @ 10% p.a. on the written down value method, provides you the following information :-

Machinery account as on 1st Jan 2007 :-	Rs 10,00,000
Accumulated Depreciation account :-	Rs 2,71,000

No depreciation is charged in the year of sale of machinery but full depreciation charge is being made for the year during which the machinery is purchased.

On 1st July' 2007, one new machinery was purchased for Rs. 1,60,000 and old machinery purchased on 1st July 2004 for Rs. 1,20,000 was discarded but could not be sold immediately. However, it was expected to realize Rs. 20,000/-.

Calculate the depreciation charge for 2007 & 2008 and net profit received from sale of non - current asset in 2007. (6)

c) Using the information below, prepare the cashflow statement of Rahul Enterprises for Year 2009.

During 2009, Rahul Enterprises had the following items of income & expenditure: -

	Rs.
Increase in finished stocks	40,500
Staff Cost	1,41,900
Dividend income from ABC company	12,600
Turnover	10,86,000
Tax paid	1,47,360
Increase in cash	71,340
Dividends paid	45,000
Increase in work in progress	6,300
Interest received on 3 month bank deposit	10,500
Interest paid on loan stock	16,500
2009 sales for which payment not yet received	2,13,000
Payments for 2008 sales received in 2009	1,89,000
2009 raw material purchases not yet paid for	1,11,000
2008 purchases paid for in 2009	1,20,000

The company bought 3 bank note printing machines in January'2009 for Rs 1,05,000/- each. The total depreciation charge for 2009 was Rs 67,350/-.

On first January'2009 the company had Rs 1,50,000/- in cash and Rs 2,94,000 in a 3 month bank deposit. By 31st December'2009 it had a Rs 2,21,340 in cash and Rs 2,85,000 in three month bank deposit.

Rahul Enterprises operating profit for 2009 was Rs 5,75, 550. (12)

[20]

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