INSTITUTE OF ACTUARIES OF INDIA

EXAMINATIONS

11th November 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) Which of the following statement is TRUE for a straight line method of Depreciation –

a. It is generally used wherever the equal allocation of cost provides a reasonably fair measure of the company's service.
b. The annual depreciation charge represents a fixed percentage of the net book value brought forward.
c. The net book value can never get nil, as it can only be reduced by a proportion each year.
d. It is very difficult to calculate and conceptually complex to understand.

[2]

Q. 2) The main items covered by a company's "Articles of Association" are all except for any one of those listed below –

a. The issue of shares, the rights attaching to each class of shares.
b. The procedure for general meetings and for altering the authorized share capital.
c. The procedure for appointment of statutory auditors and for removal of the same after expiry of tenure.
d. The procedure for winding up the company.

[2]

Q. 3) A company renews its bank overdraft facility at the beginning of July'2007 for eight months. The company went overdrawn in August'07 by an amount that was less than the overdraft facility. The Chief Financial Manager (CFO) gave the bank manager a cash forecast that indicates that the overdraft facility is likely to be repaid in September'07.

Which of the following is the earliest that the bank would be permitted to demand settlement of the amount borrowed on overdraft?

a. February 2008
b. Never, so long the company remains within agreed overdraft limits.
c. September 2007
d. Immediately

[2]

Q. 4) Which of the following is NOT correct?
"Variation Margin":

a. Is made on a daily basis.
b. Ensures that the credit risk of the clearing house is controlled.
c. Is an additional cushion against potential losses from future adverse price movements.
d. Is the initial deposit paid to the clearing house by the buyer and seller of a future and the writer of an option.

[2]

Q. 5) A company is undertaking a construction project that will take six years to complete and will involve the company borrowing at regular intervals for the first two years. Which of the following strategies using derivatives is appropriate in this situation?

a. Sell short interest rate future contracts.
b. Buy short interest rate future contracts.
c. Sell long bond future contracts.
d. Buy long bond future contracts.

[2]

Q. 6) A key difference between the net present value technique and the internal rate of return technique for capital budgeting is that:

a. The net present value is easier to calculate.
b. That they use different cash flows.
c. That they have different reinvestment rate assumptions.
d. That they are relevant to the shareholders.

[2]

Q. 7) The debt collection period may increase (decrease) between one period and another for a number of reasons except for any one of those mentioned below –

a. If credit is given to unsatisfactory customers.
b. Earlier the business had a zero debt collection period.
c. Credit terms to an existing customer changes.
d. If there is no consistent follow – ups of overdue debts.

[2]

Q. 8) The current ratio of a company depends upon a number of factors listed below except for any one of the following –

a. The volatility of the working capital requirement.
b. The nature of company's business.
c. The imminence of current liabilities.
d. The long term investments of the company.

[2]

Q. 9) Which accounting concept states that "the lowest reasonable figure should be stated for profit or for any of the assets and the highest reasonable figure should be stated for any liabilities, without including deliberate margins, when there is uncertainty"?

a. Materiality concept
b. Prudence concept
c. Realization concept
d. Accruals concept

[2]

Q. 10) Which of the following would NOT be included in a firm's capital structure?

a. Retained earnings
b. Dividends
c. Capital Surplus
d. Convertible Debentures

[2]

Q. 11) a) Define the following –

a. Capital Cover
b. Certificate of deposit
c. Hedging
d. Liquidity preference (2)

b) Tech new equipment costing Rs 4,25,000 is sold by "Technology High" to a customer for Rs 6,00,000, to be spread b y means of a credit sale agreement over nine months. Taking into account interest and collection costs of Rs 45,000, Technology High is to be paid a total of Rs 6,45,000, i.e. Rs 71,667 per month, commencing with delivery of goods on 1st November 2008. Technology High prepares accounts on 31st December annually. How much profit will be taken upon the customer's agreement in 2008 (assuming he pay's 2 installments, one on 1st November'2008 and on 1st December'2008) and how much in 2009, the final payment being made on 1st July'2009? (6)

[8]

Q. 12) a) What are the three main adjustments that have to be made to accounting profit to arrive at taxable profit?

b) Discuss three uses of corporate tax system.

[6]

Q. 13) Discuss five factors that influence a company's decision on the level of dividend that might be appropriate.

[5]

Q. 14) a) Define Systematic Risk and Specific Risk.

b) Distinguish between systematic risk and specific risk and explain their relevance to capital project appraisal.

[10]

Q. 15) a) Describe the three main groups of ratios. (3)

b) List all the ratio's which are a sub set of the above groups of ratio's. (2)

[5]

Q. 16) a) Define what is “notes to the accounts”. (1)

b) List the items which are covered by the “notes to the accounts”. (2)

c) Explain what is share premium account and list the purpose for which it can be used. (3)

[6]

Q. 17) "Create New" (CN) is a venture capital company, financed entirely by equity. The current market capitalization of CN is Rs.120 crores and the beta coefficient is 2.2.

The directors of CN believe that the high beta coefficient has depressed the market capitalization and so they wish to invest in some new lines of business.

The directors have decided that all major investments will be evaluated in terms of their net present value (NPV) and that NPV will be determined in a relevant and meaningful manner. Unfortunately, they cannot agree on the application of the best way to calculate NPV.

The directors are considering an investment that will reduce the CN’s beta. They intend to borrow Rs.40 crores at an interest rate of 9%. They intend to invest the whole amount in a new project that is significantly different from the present business. This project is in a business area where companies traditionally have beta coefficients of approximately 1.3, although the directors feel that the business is so different from the existing industry that there is an even greater diversification effect.

The directors are considering evaluating the NPV of the investment in terms of the CN’s present cost of equity, although two members of the board believe that this rate is theoretically incorrect. One board member believes that the cost of equity will be affected by the investment and that it should be used in place of the present rate and another believes that the weighted average cost of capital, revised to allow for the fresh investment and the new borrowing, should be used.

The risk free rate of return is 6%. The market risk premium is 8%. CN’s effective tax rate is 30%.

(i) Use the Capital Asset Pricing Model (CAPM) to:

(a) Calculate CN’s present cost of equity
(b) Estimate CN’s ungeared beta, assuming that it proceeds with the investment
(c) Estimate CN’s geared beta, assuming it proceeds with the investment
(d) Determine CN’s weighted average cost of capital to proceed with the investment, using the results of your other calculations and estimates. (8)

(ii) Use the Capital Asset Pricing Model (CAPM) to:

(a) Discuss the appropriateness of the directors’ decision to determine the NPV of the proposed investment in terms of one or other of the measures of the company’s cost of capital.

(b) State, with reasons, whether there is a more appropriate rate that should be used instead. (6)

(iii) Explain why the directors are mistaken in their belief that their investment in this new project is even more worthwhile to the shareholders because of the additional diversification effect that it carries. (6)

[20]

Q. 18) (a)

(i) A company holds a freehold land which cost Rs 1,00,000 and buildings which costs Rs 4,20,000 which has a useful life of 25 years and were 10 years old on 31st Dec'2009.

On 1st Jan'2010 the land was revalued at Rs 1,80,000 and the buildings at Rs 5,20,000. The new estimated useful life of land & buildings is 20 years.

Calculate the revaluation reserve and depreciation for the current year i.e. calendar year 2010. (2)

(ii) How would the revaluation reserve be reflected in income statement & balance sheet under traditional accounting and "fair value" accounting. (2)

(b) R Ltd (holding company) paid Rs 3,40,000 cash for 1,00,000 of the 1,25,000 Rs 2 ordinary shares of J Ltd (subsidiary company) on 1st January 2006, when the balance sheet of J Ltd was as follows :-

"J Ltd" Balance sheet at 1st January 2006 –

	Rs (Fig '000)		Rs (Fig '000)
Ordinary Share Capital	250	Non current assets	
Reserves	85	Freehold land & buildings	120
7% Debentures	100	Plant & machinery	146
Current Liabilities	85	Current Assets	254
	520		520

"R Ltd" and "J Ltd" Balance sheet at 31st December 2009 –

	Rs (Fig '000)			Rs (Fig '000)	
	R Ltd	J Ltd		R Ltd	J Ltd
Ordinary Share Capital	500	250	Non current assets		
Reserves	480	150	Freehold land & building	150	120
10% Unsecured loan stock	120	-	Plant & Machinery	250	180
			Share in J Ltd	340	-
7% Debentures	-	100	Current Assets	510	300
Current Liabilities	150	100			
	1250	600		1250	600

i. Ascertain the goodwill cost of control paid by company "R Ltd" to company "J Ltd". (2)

ii. Compute the holding company ("R Ltd") share of the undistributed post acquisition profits of the subsidiary company ("J Ltd") share. (2)

iii. Define minority interest and calculate minority interest in the net assets of "J Ltd". (2)

iv. Draw up the consolidated balance sheet of "R Ltd" as on 31st December'2009. (6)

(c) The wordings of the standard audit report can be modified if the auditor wishes to highlight areas of uncertainty or is unable to express an unqualified opinion, describe the different categories of auditor's report with different degrees of qualification. (4)

[20]

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