

# INSTITUTE OF ACTUARIES OF INDIA

## EXAMINATIONS

28<sup>th</sup> October 2009

**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 is NOT required as part of a listed company's accounting statement: -
- A. Cashflow statement
  - B. Statement of change in equity
  - C. Chairman's report
  - D. Income statement and Balance Sheet
- [2]
- Q 2)** Which of the following statements is NOT true when determining the key effects of the capital markets on a firm's decision making process: -
- A. Abundance in supply of capital will lead to focus attention on methods of raising capital
  - B. Mergers and takeovers create threats and opportunities to be exploited.
  - C. "Externalities" require manager to determine the appropriate role of organizations.
  - D. Sound investment decisions require accurate measurement of the cost of capital
- [2]
- Q 3)** A company renews its bank overdraft facility at the beginning of April'2009 for four months. The company went overdrawn in May'09 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 June'09.
- Which of the following is the earliest that the bank would be permitted to demand settlement of the amount borrowed on overdraft?
- A. July 2009
  - B. Immediately
  - C. June 2009
  - D. Never, so long the company remains within agreed overdraft limits
- [2]
- Q 4)** Which of the following is NOT correct?
- For all investors:
- A. Preference share usually do not carry any voting rights if their dividends are paid.
  - B. Marketability of preference shares is similar to loan capital marketability.
  - C. Preference shares rank below the loan capital if the company is wound up.
  - D. Preference shares offer a lower after-tax return than loan capital at all times.
- [2]
- Q 5)** Which of the following definition is NOT correct?
- A. A forward contract is a non-standardized, tradable contract to trade an asset at a fixed price at a fixed date in the future.
  - B. A future contract is a standardized, tradable contract to trade an asset at a fixed price at a fixed date in the future.

- C. An option gives an investor the right, but not the obligation, to buy or sell a specified asset on a specified future date.
- D. A swap is a contract between two parties under which they agree to exchange a series of payments according to a prearranged formula.

[2]

Q 6) CAPM is only valid within a special set of assumptions, which of the following assumptions is not TRUE for CAPM to hold good: -

- A. Investors are rational
- B. Volatility of returns is a good measure of risk
- C. Investors can borrow or lend unlimited amounts of a risk-free asset at the constant risk-free rate.
- D. The market is inefficient

[2]

Q 7) 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 8) The following information has been extracted from the recent financials of Upswing Ltd, a quoted company.

(In Crores of Rupees)

Earnings before interest and tax	40.0
Interest	4.0
Tax	9.0
<u>Share Capital (Rs. 10 shares, fully paid)</u>	
Book Values	50.0
Market Values	175.0
<u>Debenture Stock</u>	
Book Values	4.0
Market Values	6.0

Earnings per share of Upswing Ltd is:

- A. Rs.6.75
- B. Rs.5.40
- C. Rs.4.50
- D. Rs.1.54

[2]

- Q 9)** Which of the following ratio is considered to assess the likely growth prospects of the company and that the company is a low risk investment : -
- A. Earning Per Share
  - B. Diluted Earning Per Share
  - C. Price Earning ratio
  - D. Dividend Yield
- [2]**
- Q 10)** Which of the following is NOT true examples of risk mitigates:
- A. In certain circumstances the only way to avoid the risk may be by proceeding with the project.
  - B. By engaging a sub – contractor on a fixed price contract
  - C. Project might be undertaken as a part of a syndicate rather than in isolation
  - D. Conducting further research and feasibility study.
- [2]**
- Q 11)** (a) Define the following -
- A. Benchmark (0.5)
  - B. Index Linked gilt (0.5)
  - C. Arbitrage (0.5)
  - D. Long position (0.5)
- (b) List the agency costs incurred by the shareholders? (2)
- (c) What are the advantages and disadvantages of hire purchase agreement and credit sale agreement from the point of view of buyer? (4)
- [8]**
- Q 12)** (a) Briefly describe how accounting profit is calculated? (1.5)
- (b) What are the three main adjustments made to accounting profits in order to arrive at taxable profits? (1.5)
- (c) Which of the following items would be subject to capital gain tax? (Justify your answer).
- (i) The sale of a house that Mr. Hitesh bought for his uncle to live in.
  - (ii) The sale of Mr. Hitesh's car (a vintage Rolls Royce).
  - (iii) The transfer of Mr. Hitesh's holiday home to his wife.
- [6]**

- Q 13)** KiteAir is a large multinational airlines based out of India. The company operates in both domestic and international sectors. It has both passengers as well as cargo traffic. The company has been currently financed by a mixture of equity and debt finance.
- KiteAir has huge expansion plans and plans to buy about 10 new carriers in the next year to manage its increasing need of cargo operations. On the other hand, the airline is currently having serious cash flow problems due to the reduction in passenger traffic.
- The management feels that the passenger traffic problem is a temporary phenomenon and the traffic will improve over the coming years.
- a) The company is considering the following sources of financing:  
Rights Issue, Convertible Unsecured Loan Stock and Eurobonds. Describe the main characteristics and discuss the suitability of these sources of financing. (6)
- b) What further factors does the airline needs to consider before making their decision. (4)
- [10]**
- Q 14)** Infra limited is quoted on the US Stock exchange and has raised new finance for the second time in last 5 years. The company made announcement of another right issue, an investor decides that he is no longer willing to commit fresh funds to the company. Calculate what proportion of the company he will own and the value of that holding (assuming no unexpected share price movements) if he does nothing at all during the right issue. The details are as follows:
- Stock Price = \$5 per share  
Right details = a one for 4 shares at \$ 4 per share  
Current holdings = investor holds 5 million shares representing 1% of the company. (5)
- Q 15)** a) Explain two most common variations of the definition of asset cover ratio. (1)
- b) List the problems of interpreting company accounts under the following headings:
- i) Subjectivity  
ii) Appropriateness of figures used  
iii) Comparisons between firms  
iv) Accuracy of figures. (4)
- [5]**
- Q 16)** a) Explain the following accounting concepts:
- i) Business Entity Concept (1)  
ii) Realisation Concept (1)  
iii) Accruals Concept (1)
- b) What are the points that need to be considered when bringing the accounting concepts together? (3)
- [6]**

- Q 17)** A reputed telecom company is considering entering an overseas market. This will be its first international venture. The company has estimated the potential cash flows under a number of different scenarios as follows:

The company has estimated the potential cash flows for the above options as below:

Option	(a)	(b)	(c)
Year 1	- 500	- 500	- 500
Year 2	+175	+150	+100
Year 3	+200	+175	+100
Year 4	+225	+200	+75
Year 5	+225	+225	+50
Probability of Occurrence	30%	60%	10%

The initial negative cash flow is towards the setting up of infrastructure – towers, administrative systems and other capital costs. The regular positive cash flows are the net amounts of income over expenditure. The income is from the various call schemes and the expenditure involves sales promotion, salary and other costs.

You are also given the following information about the company and the equity market:

Risk-free rate of return	2%
Equity risk premium for equity markets	4%
Beta of company's equity shares	1.25
Market price per share	1.50

The company currently has sufficient cash resources to undertake the project.

- Explain how the risk discount rate to be used when valuing this project should be chosen. (4)
- The company currently has no debt. Calculate the Weighted Average Cost of Capital (WACC) of the company. Give two advantages and two disadvantages of calculating the NPV using WACC. (4)
- Calculate the net present value under each scenario and the expected net present value of the project using the WACC and assume that the cash flows occur midway through each year. State the formulae used. (5)
- Suggest any two sensitivity tests that could be performed on the data that might give useful analytical information. (2)
- List an advantage and disadvantage of constructing a stochastic investment model for the above plan of the company (2)
- Discuss the considerations which should be taken into account when deciding whether the project should proceed. (3)

**[20]**

**Q 18) a)** Describe the impact of each of the following transactions on the balance sheet items:

- (i) Dividend Declaration (1)  
 (ii) Rights Issue (1)  
 (iii) Increase in Receivables (1)  
 (iv) Share Buy Back (1)

**b)** Calculate Reserves from the below information:

Fixed Assets - Rs.2000; Current Liabilities - Rs.500; Investments – Rs.1200; Current Assets – Rs.2500; Goodwill – Rs.2000; Share Capital – Rs.1500

Explain the significance of goodwill in above data. (4)

**c)** The balance sheet as on 31 – 03 -2009 and 31 – 03 – 2008 of Sachdev Industries limited are given below: -

			Rs in Lakhs 31-03-2009	Rs in Lakhs 31-03-2008
Fixed Assets (Cost)	1500	1400		
Less: Depreciation	<u>(800)</u>	<u>(700)</u>	700	700
Investments			500	600
Stock			324	510
Debtors			430	500
Bank Balance			<u>350</u>	<u>260</u>
Total Assets			<u>2,304</u>	<u>2,570</u>
Share Capital			300	300
Reserves			474	230
12% Secured Debentures 2013			700	600
Creditors			280	486
Provision for Taxation			280	498
Provision for Dividends			<u>270</u>	<u>456</u>
Total Liabilities			<u>2,304</u>	<u>2,570</u>

During Financial year 2008 - 09, the following transactions took place: -

? Sales	20,00,00,000
? Raw materials and wages	8,24,00,000
? Office expenses	3,10,00,000
? Net Return on long term investment	12%
? Tax charge on 2008 - 09	2,22,00,000
? Purchase of machinery on 31 -03 – 09	1,00,00,000
? Issue of further Debentures on 2 – 4 – 08	1,00,00,000

Prepare the Profit and Loss Account and Cash flow statement for the financial year 2008 – 09. (12)

[20]

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