## M.Sc. ACTUARIAL SCIENCE

Term-End Examination<br>June, 2011

## MIA-004 F2F : FINANCE AND FINANCIAL REPORTING

## Time : 3 hours

Maximum Marks : 100
Note: (i) The question is divided into three sections.
(ii) Section - A : Multiple choice questions.
(iii) Section-B : Short questions.
(iv) Section - C : Long questions.

SECTION - A
Attempt all the questions :
$10 \times 2=20$

1. 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. Which of the following ratio is considered to assess the likely growth prospects of a 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
3. Stocks/Inventories are valued at lower costs or net realisable value/market value. This is the result of which accounting concept ?
(a) Materiality Concept
(b) Cost Concept
(c) Prudence Concept
(d) Realization Concept
4. Which of the following might be classified as a systematic Risk ?
(a) A major customer could switch to a different supplier
(b) A major product could be deemed to be unsafe.
(c) Interest rates might decrease.
(d) The chief finance officer could be fraudulent.
5. Which of the following best explains the use of maximisation of shareholders wealth as the basis for finance theory ?
(a) All shareholders are greedy
(b) It provides a single, clear criterion against which success or failure can be measured.
(c) The shareholders require a return for investing
(d) The shareholders require protection from the Director's ambitions.
6. Which of the following is responsible for ensuring that the Financial statement published by a company give a true and fair view ?
(a) the board of directors
(b) the chief accountant
(c) the external auditor
(d) the finance director
7. Which of the following is NOT a true example of risk mitigation :
(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.
8. 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.
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 :
(a) a disclaimer of opinion
(b) a qualified opinion
(c) an adverse opinion
(d) an unqualified opinion, but includes a reference to this matter in the audit report.
10. Which of the following situation it is appropriate to buy a put option?
(a) The value of the underlying security to rise
(b) The interest rate to fall
(c) A stock market boom
(d) The value of the underlying security to fall.

## SECTION - B

Attempt any 8 questions from question No. 11 to question No. 20 :
$8 \times 5=40$
11. (a) Explain the following accounting concept: $1+1=2$
(i) Business Entity Concept
(ii) Realisation Concept
(b) What are the points that need to be considered when applying the accounting concept together ?

## 12. Distinguish between Systematic Risk and Specific 5 Risk and explain their relevance to capital project appraisal.

## 13. Explain why a small business should take great care in managing its overdraft?

14. Describe the purpose of cash flow statement.
15. Explain why Eurobonds tend to offer investors a higher rate of return than traditional loan stock?
16. (a) Explain the implications for the weighted average cost of capital if a company's debtequity ratio decreases.
$21 / 2+2^{1 / 2}=5$
(b) Explain how this will affect the company's strategy for investing in capital projects ?
17. (a) Outline what is meant by the payback ..... 2 period?
(b) Under what circumstances would you ..... 3consider using the pay back periodapproach to evaluate a project ?
18. Describe five factors that influence a company's ..... 5 decision on the level of dividend that might be appropriate.
19. (a) What are the three main adjustments that ..... 3 have to be made to accounting profit to arrive at taxable profit ?
(b) Discuss the concept of hedging. ..... 2
20. Define the following :
(a) Associated undertaking ..... 1.5
(b) Minority interest ..... 1.5
(c) Holding company ..... 1
(d) Subsidiary company ..... 1

## SECTION - C

Attempt any 2 questions from question No. 21 to question No. 24 :
$2 \times 20=40$
21. The Income Statement for the year ending $31^{\text {st }}$ December 2007 and the balance sheet as at $31^{\text {st }}$ December 2006 are shown below for company PQR, a Russian Manufacturer.

| Income Statement for 2007 |  |  |
| :---: | :---: | :---: |
|  |  | 000 (Rs.) |
| Sales |  | 4000 |
| Cost of sales |  |  |
| Purchases | 1300 |  |
| Less increase in Inventories | (100) |  |
| Depreciation | 500 | (1700) |
| Gross profit |  | 2300 |
| Expenses: |  |  |
| Rent | 500 |  |
| Salaries | 200 |  |
|  |  | (700) |
| Operating profit |  | 1600 |
| Long term loan interest |  | (48) |
| Pre-tax profit |  | 1552 |
| Tax |  | (512) |
| Earning for the year attributable to equity holders |  | 1040 |

During the year dividends totalling Rs. 300,000 were paid to ordinary shareholders.
P.T.O.

Note : The Directors propose a total dividend of Rs. 3,40,000/-

| Balance sheet as at $31^{\text {st }}$ December 2006 |  |
| :---: | :---: |
|  | 000 (Rs.) |
| Assets |  |
| Non-Current Assets | 3,000 |
| Current Assets : |  |
| Inventories | 1,300 |
| Trade Receivables | 7,00 |
| Cash | 2,00 |
|  | 2,200 |
| Total Assets | 5,200 |
| Equity and liabilities |  |
| Equity : |  |
| Ordinary shares of 10P | 1,100 |
| Reserves | 1,800 |
| Total equity 2,900 <br>   |  |
| Non current liabilities |  |
| 12\% loan stock 2015 | 4,00 |
| Current liabilities |  |
| Taxation | 4,00 |
| Trade payables | 1,5,00 |
|  | 1,900 |
| Total liabilities | 2,300 |
| Total equity and liabilities | 5,200 |

During the year 2007, the following additional financial events occurred (fig. in Rs. 000's)
Trade payables increased ..... 300
Decrease in trade receivables ..... 100
Tax paid ..... 200
Purchase of non current assets ..... 500
The tax outstanding on the $31^{\text {st }}$ December 2006that was not paid during 2007 was carriedforward to the $31^{\text {st }}$ December 2007 balance sheet.In addition, one half of the sales recorded in 2007was for cash and one half was on credit terms.
(a) Prepare Balance sheet as on $31^{\text {st }}$ Dec. 2007 ..... 8
(b) Using appropriate ratios, comment on the ..... 12liquidity, efficiency and profitability of PQR.
22. You are the CEO of a large Australian Company that builds building. The details of a potential prestigious development site have been analysed and placed before you for a decision.
The cost and revenue details of developing the site and selling properties are estimated as follows :

| Plot 5 | Year |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| (All figures in \$ millions) | 0 | 1 | 2 | 3 | 4 |
| Initial cost of site | 30 | - | - | - | - |
| Raw material cost | - | 3 | 4 | 4 | 1 |
| labour and contractor cost | - | 2 | 4 | 5 | 2 |
| Tax due on profits | - | - | 1 | 2 | 3 |
| Revenue from selling properties | - | - | 5 | 23 | 43 |

All cash flows can be assumed to occur at the end of the year.
You are also given the following information about the company and the equity market in Australia :

Number of issued equity shares
Market price per share

300 million
\$ 1.50

Equity risk premium for equity markets $5 \%$
Corporation tax rate $30 \%$
Beta of company's equity share 1.2
The company currently has sufficient cash resources to undertake the projects.
(a) The company currently has no debts. Calculate the NPV of the project using the company's WACC.
(b) Give two advantages and two disadvantages of using the WACC for such calculations.
(c) Estimate the projects Internal Rate of Return (IRR).
(d) If the company were to alter its capital structure by borrowing $\$ 200$ million debt at a rate of $4 \%$ and using the proceeds to repay existing equity shares. What would be the company's new cost of capital and how would this affect the viability of the project.
(e) Suggest two sensitivity tests that could be performed on the data that might give useful analytical information.
(f) Describe how you might go about 5 conducting an "opportunity cost" analysis and a "shareholder value" analysis.
23. (a) What is the purpose of a balance sheet, ..... 4explain? Briefly explain what are the assets,liabilities and capital in balance sheet.
(b) Define "share premium account" and list 4 the purpose for which it can be used.
(c) The accounts of the post company at 12 December 31, 2003, are shown below :

| Account | Balance |
| :--- | ---: |
| Advertising Expense | 4,000 |
| Beginning retained Earning | 39,000 |
| Commission on sales | 8,000 |
| Ended Retained Earning | $?$ |
| Depreciation Expense | 4,000 |
| Dividends Declared | 16,000 |
| Insurance Expense | 4,000 |
| Interest Expense | 7,000 |
| Repairs and Maintenance | 2,000 |
| Sales | $2,59,000$ |
| Sales salaries | 10,000 |
| Cost of goods sold | $1,35,500$ |
| Income tax rate | $40 \%$ |

Prepare an Income statement for the year ended $31^{\text {st }}$ December 2003 where appropriate condense expenses into (1) selling expenses and (2) general and administrative expenses.
24. A friend of yours is considering buying ordinary shares in either Company A or B. Information provided below is as follows :

|  | $\frac{C}{c}$ Company A |  |  |
| :--- | ---: | ---: | ---: |
|  | Company B |  |  |
| Share price | 90 p | 95 p |  |
| Pre-tax profit | $4,20,000(£)$ | $3,20,000(£)$ |  |
| Net profit after tax | $3,60,000$ | $2,40,000$ |  |
| Dividends and Interest : |  |  |  |
| Preference shareholder | 60,000 | 40,000 |  |
| Ordinary Shareholder | 200,000 | 150,000 |  |
| Unsecured loan stock | 75,000 | 30,000 |  |
| Share Capital : |  |  |  |
| Preference shares | $1,000,000$ | 500,000 |  |
| Ordinary shares | $1,000,000$ | $1,500,000$ |  |
| Reserves | 500,000 | $1,000,000$ |  |
| Loan Capital | $1,500,000$ | 500,000 |  |

' A ' company has 1 million $£ 1$ preference shares which have a coupon of $6 \%, 4$ million 25 p ordinary shares and 1.5 million unsecured loan stock with a coupon of $5 \%$. Company B has $500,000 £ 1$ preference share with a coupon of $8 \%, 6$ million 25 p ordinary share and 500,000 unsecured loan stock with a coupon of $6 \%$.
(a) On the basis of this information calculate a number of investment ratios that might help to analyse the companies from an ordinary shareholders, point of view and state which company's ordinary share you advise your friend to invest in and why ?
(b) Explain, justifying your comments, why such a comparison might yield diluted result.
(c) What further information would you like and how would it help you to reach a decision?

