

MAY 2008

Paper 2 – Management Accounting and Financial Analysis
Answer question No. 1 and any four from the rest

Question No.1(a)

12 Marks

DL Services is in the business of providing home services like plumbing, sewerage line cleaning etc. There is a proposal before the company to purchase a mechanized sewerage cleaning line for a sum of Rs.20 Lacs. The life of the machine is 10 years. The present system of the company is to use manual labour for the job. You are provided the following information –

| | |
|-------------------------|--|
| Cost of Machine | Rs.20 Lacs |
| Depreciation | 20% p.a. Straight line method |
| Operating Cost | Rs.5 Lacs p.a. |
| Present System | |
| – Manual Labour | 200 persons |
| – Cost of Manual Labour | Rs.10,000 (Ten Thousand) per person p.a. |

The Company has an after tax cost of funds of 10% per annum. The applicable rate of tax inclusive of Surcharge and Cess is 35%.

Based on the above you are required to –

- (i) State whether it is advisable to purchase the machine.
- (ii) Compute the savings / additional cost as applicable, if the machine is purchased.

Question No.1(b)

8 Marks

P Ltd invested on 1.4.2006 in equity shares as below –

| Company | Number of Shares | Cost (Rs.) |
|---------|--------------------|------------|
| M Ltd | 1000 (Rs.100 each) | 2,00,000 |
| N Ltd | 500 (Rs.10 each) | 1,50,000 |

In September 2006, M. Ltd. paid 10% dividend and in October 2006, N Ltd paid 30% dividend.

On 31.3.2007, market price of shares of M. Ltd. and N. Ltd. were Rs.220 and Rs.290 respectively.

P Ltd have been informed by their investment advisers that –

- (i) Dividends from M Ltd and N Ltd for the year ending 31.3.2008 are likely to be 20% and 35% respectively.
- (ii) Probabilities of market quotations as on 31.3.2008 are –

| Probability factor | Price of share of M Ltd | Price of share of N Ltd |
|--------------------|-------------------------|-------------------------|
| 0.2 | Rs.220 | Rs.290 |
| 0.5 | Rs.250 | Rs.310 |
| 0.3 | Rs.280 | Rs.330 |

You are required to:

- (i) Calculate the average return from the portfolio for the year ending 31.3.2007.
- (ii) Calculate the expected average return from the portfolio for the year 2007 – 08.
- (iii) Advise P Ltd of the comparative risk of two investments by calculating the standard deviation in each case.

Question No. 2(a)**10 Marks**

A Company has a choice of investments between several different Equity Oriented Funds. The Company has an amount of Rs.1 Crore to invest. The details of the mutual funds are as follows –

| Mutual Funds | A | B | C | D | E |
|--------------|-----|-----|-----|-----|-----|
| Beta | 1.6 | 1.0 | 0.9 | 2.0 | 0.6 |

Required:

- If the Company invests 20% of its investments in the first two mutual funds, and an equal amount in the mutual funds C,D, and E what is beta of the portfolio?
- If the company invests 15% of its investments in C, 15% in A, 10% in E and the balance in equal amount in the other two mutual funds, what is the beta of the portfolio?
- If the expected return of the market portfolio is 12% at a beta factor of 1.0, what will be the portfolios' expected return in both the situations given above?

Question No. 2(b)**10 Marks**

A holds the following portfolio –

| Share / Bond | Beta | Initial Price Rs. | Dividends Rs. | Market Price at the end of the year Rs. |
|--------------|------|-------------------|---------------|---|
| Epsilon Ltd | 0.8 | 25 | 2 | 50 |
| Sigma Ltd | 0.7 | 35 | 2 | 60 |
| Omega Ltd | 0.5 | 45 | 2 | 135 |
| GOI Bonds | 0.99 | 1000 | 140 | 1,005 |

Calculate:

- The expected rate of return on his portfolio using capital asset pricing method. (CAPM).
- The average return on his portfolio.

Risk free return is 14%

Question No. 3(a)**16 Marks**

The following is the Balance Sheet of a Private Limited Company as at 31.3.2008 –

| Capital & Liabilities | Rs. | Property & Assets | Rs. | Rs. |
|--|-----------|-------------------|----------|-----------|
| Share Capital: | | Fixed Asset: | | |
| Authorized: 8,000 Equity Shares of Rs.100 each | 8,00,000 | Cost | 6,00,000 | |
| 10,000 11% Cumulative Preference Shares of Rs.100 each | 10,00,000 | Less: Deprn. | 2,00,000 | 4,00,000 |
| Issued, Subscribed and Paid up: | | Current Assets: | | |
| 4,000 Equity Shares of Rs.100 each fully paid up | 4,00,000 | Stock in Trade | 2,00,000 | |
| Reserves | 1,00,000 | Sundry Debtors | 4,00,000 | |
| 15 % Unsecured Debentures | 2,00,000 | Cash & Bank | 1,00,000 | 7,00,000 |
| Trade Creditors & Creditors for Expenses | 4,00,000 | | | |
| Total | 11,00,000 | Total | | 11,00,000 |

The Company finds that a very profitable market exists for its products and with a little expansion, it could generate more sales at the present selling prices. The expansion calls for an investment of Rs.8,00,000 in Fixed Assets and Rs.2,00,000 in Current Assets. It is ascertained that the current annual profits in the region of Rs.3,00,000 will be enhanced by 50% due to the expansion.

The Debt–Equity ratio applicable generally to the industry in which the company is engaged is 2:1.

Please advise the management on the various methods available to it to meet the cost of financing the expansion, keeping in mind the interest of the equity shareholders.

Question No. 3(b)**4 Marks**

Explain the difference between a repo and a reverse repo transaction.

Question No. 4(a)**16 Marks**

Given below is the balance sheet of S. Ltd. as on 31.3.2008 –

| Liabilities | Rs.Lakhs | Assets | Rs.Lakhs |
|-------------------------------------|----------|---------------------|----------|
| Share capital: Shares of Rs.10 each | 100 | Land and Buildings | 40 |
| Reserves and Surplus | 40 | Plant and Machinery | 80 |
| Creditors | 30 | Investments | 10 |
| | | Stock | 20 |
| | | Debtors | 15 |
| | | Cash and Bank | 5 |
| | 170 | | 170 |

You are required to work out the value of the Company's shares on the basis of Net Assets Method and Profit Earning Capacity (capitalization) method and arrive at the fair price of the shares, by considering the following information –

- Profit for the current year Rs.64 lacs includes Rs.4 lakhs extraordinary income and Rs.1 lakh income from investments of Surplus funds are unlikely to recur.
- In subsequent years, additional advertisement expenses of Rs.5 lakhs are expected to be incurred each year.
- Market value of Land and Building and Plant and Machinery have been ascertained at Rs.96 Lakhs and Rs.100 Lakhs respectively. This will entail additional depreciation of Rs.6 Lakhs each year.
- Effective income tax rate is 30%
- The capitalization rate applicable to similar business is 15%

Question No. 4(b)**4 Marks**

Comment briefly on the social cost benefit analysis in relation to evaluation of an industrial project.

Question No. 5(a)**8 Marks**

M Ltd belongs to a risk class for which the capitalization rate is 10%. It has 25,000 outstanding shares and the current market price is Rs.100. It expects a net profit of Rs.2,50,000 for the year and the board is considering dividend of Rs.5 per share.

M Ltd requires to raise Rs.5,00,000 for an approved investment expenditure.

Show, how does the MM approach affect the value of M. Ltd. if dividends are paid or not paid.

Question No. 5(b)**8 Marks**

A Company is considering hedging its foreign exchange risk. It has made a purchase on 1st January 2008, for which it has to make a payment of US \$ 50,000 on September 30, 2008. The present exchange rate is 1 US \$ = Rs.40. It can purchase forward 1 US \$ at Rs.39. The Company will have to make an upfront premium of 2% of the forward amount purchased. The cost of funds to the company is 10% p.a. and the rate of corporate tax is 50%. Ignore taxation.

Consider the following situations and compute the profit or loss the company will make if it hedges its foreign exchange risk –

- If the exchange rate on 30th September 2008 is Rs.42 per US \$.

(ii) If the exchange rate on 30th September 2008 is Rs.38 per US \$.

Question No. 5(c)

4 Marks

Briefly explain what is refinancing, indicating any two institutions which offer this facility.

Question No. 6

(4 Marks each)

- (a) Write short notes on Venture Capital Financing.
- (b) Write short notes on Inter bank participation certificate.
- (c) Write short notes on distinction between money market and capital market.
- (d) Write short notes on Credit cards as part of consumer finance.
- (e) Stock Lending Scheme