## BE9-R4 : ACCOUNTING AND FINANCIAL MANAGEMENT SYSTEM

## Instructions :

1. Question 1 is compulsory. Attempt any four questions from 2 to 7.
2. Parts of the same question should be answered together and in the same sequence.

Time : 3 Hours
Total Marks : 100

1. (a) What are the major financial decisions which are taken by financial management ? Explain.
(b) What is the difference between Profitability Index and Net Present Value method ?
(c) Distinguish between working capital management and capital budgeting.
(d) What is meant by cost accounting ? Explain the difference between financial accounting and cost accounting.
(e) Explain the meaning and utility of margin of safety.
(f) Briefly explain the concept of materiality. Give examples.
(g) What are the major advantages of the Indirect method of reporting cash flow from operating activities ?
2. The following trial balance is extracted from the books of Mr. Ajay as at $31^{\text {st }}$ March, 2022.

| Particulars | Debit <br> balances | Particulars | Credit Balance |
| :---: | ---: | :---: | ---: |
| Opening Stock | 17,000 | Capital <br> Creditors | 95,000 |
| Purchases | 55,000 | 15,000 |  |
| Sales Returns | 5,000 | 10\% Bank Loan. (Taken <br> on Oct. 1, 2021) | 10,000 |
| Carriage Inward | 1,500 | Sales | $1,10,000$ |
| Carriage Outward | 2,000 | Purchases returns | 8,000 |
| Wages | 10,000 | Wages Outstanding | 2,000 |
| Salaries | 18,000 | Salaries outstanding | 3,000 |
| Furniture | 20,000 | Discount Received | 2,500 |
| Machinery | 70,000 |  |  |
| Cash in Hand and | 10,000 |  |  |
| at Bank | 18,000 |  |  |
| Sundry Debtors | 3,200 |  |  |
| Rent ,rates \& Taxes | 2,000 |  |  |
| Insurance | 1,000 |  |  |
| Bad Debts | 7,800 |  |  |
| Drawings | 3,000 |  |  |
| Sundry Expenses | 2,000 |  |  |
| Discount Allowed | $2,45,500$ |  |  |
|  |  |  |  |

## Additional Information :

1. Closing stock as at 31 st March, 2022 was ₹ 11,000
2. Goods withdrawn by the proprietor ₹ 1,000 , not yet adjusted.
3. Insurance prepaid at the end ₹ 500
4. Sundry expenses outstanding at the end ₹ 290
5. Charge depreciation on furniture and on machinery @ $10 \%$ per annum.
6. Write off further bad debts ₹ 1000 .
7. Create provision for bad and doubtful debts @ $3 \%$ of the Debtors.

Prepare Trading and profit and loss Account for the year ended 31 ${ }^{\text {st }}$ March, 2022 and balance sheet as on that date.
3. (a) The Reliance Company Ltd. sells its product $X$ at Rs. 500 p.u. Its variable cost is Rs. 280 p.u. whereas the fixed cost for the year is Rs. $2,20,000$.
You are required to calculate for the company the following :
(I) $\mathrm{P} / \mathrm{V}$ Ratio
(II) Sales in Rupees at breakeven point
(III) Sales units required to earn a target profit of Rs. 4,40,000
(IV) Profit at sales of Rs. 20,00,000
(b) Briefly explain the factors which influence the dividend policy of a company.
4. (a) The following data is provided to you for a $70 \%$ activity of a company :

Production at $70 \%$ capacity -3500 units.
Materials Rs. 100 p.u.
Labor
Rs. 40 p.u.
Expenses
Rs. 10 p.u.
Factory
Rs. 70,000 (40\% fixed)
Office expenses Rs. 35,000 ( $40 \%$ variable)
You are required to prepare budget at $80 \%$ and $100 \%$ activity.
(b) Calculate the cost of capital in each of the following cases :
(i) A company issues $10 \%$ non-redeemable preference shares at Rs. 105 ( $\mathrm{Fv}=100$ )
(ii) The current market price of share is Rs. 90 and the expected dividend at the end of current year is Rs. 4.50 with a growth rate of $8 \%$.
5. (a) A company is considering an investment proposal to install a new machinery.

The project will cost ₹ 50,000 with life of 5 years and no salvage value. The tax rate of the company is $55 \%$ and it uses straight line method of depreciation. The estimated cash flows before tax (CFBT) are ₹ 10,000 , ₹ 11,000 , ₹ 14,000 , ₹ 15,000 and ₹ 25,000 during years $1,2,3,4$ and 5 respectively. Compute :
(I) Average rate of return
(II) NPV at $10 \%$ discount rate
(III) Profitability Index at $10 \%$ discount rate.

Note : Discount factors at $10 \%$ are $0.909,0.826,0.751,0.683$ and 0.621 for the years $1,2,3,4$ and 5 respectively.
(b) How overheads are allocated apportioned and absorbed ?
6. Three companies A Ltd., B Ltd. and C Ltd. are similar in all respects except financial leverage.
Their current capital structures are as follows :

|  | A Ltd. <br> ₹ | $\begin{aligned} & \text { B Ltd. } \\ & \text { ₹ } \end{aligned}$ | $\underset{₹}{\text { C Ltd. }}$ |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Equity Share Capital (in ₹ } 100 \text { shares) } \\ & 9 \% \text { Preference capital } \\ & 8 \% \text { Debentures } \end{aligned}$ | $10,00,000$ | $\begin{aligned} & \hline \text { 5,00,000 } \\ & \text { 5,00,000 } \\ & \text {------------- } \end{aligned}$ | $\begin{aligned} & \hline \text { 5,00,000 } \\ & ------------ \\ & 5,00,000 \end{aligned}$ |
| Total capital | 10,00,000 | 10,00,000 | 10,00,000 |

The present value of EBIT of each of the three companies is ₹ $2,40,000$. Calculate EPS and the financial leverage for all these companies assuming that current corporate tax is $40 \%$.
7. Reyansh Paint Co.'s comparative financial statements for the years ending December 31, 2020 and 2019 are as follows. The market price of Reyansh paint Co.'s common stock was ₹ 30 on December 31, 2019 and ₹ 25 on December 31, 2020.

Reyansh Paint Co.
Comparative Income Statement
For the years ended December 31, 2020 and 2019

|  | 2020 | 2019 |
| :---: | :---: | :---: |
| Sales <br> Sales returns and allowance | $5,125,000$ <br> 125,000 | $3,257,600$ <br> 57,600 |
| Net sales | $5,000,000$ | $3,200,000$ |
| Cost of goods sold | $3,400,000$ | $2,080,000$ |
| Gross profit | $1,600,000$ | $1,120,000$ |
| Selling expenses | 650,000 | 464,000 |
| Administrative expenses | 325,000 | 224,000 |
|  |  |  |
| Total operating expenses | 975,000 | 688,000 |
|  |  |  |
| Income from operations | 625,000 | 432,000 |
| Other income | 25,000 | 19,200 |
|  | 650,000 | 451,200 |
|  | 105,000 | 64,000 |
| Other expense (interest) |  |  |
|  | 545,000 | 387,200 |
| Income before income tax | 300,000 | 176,000 |
| Income tax expense | $\mathbf{2 4 5 , 0 0 0}$ | $\mathbf{2 1 1 , 2 0 0}$ |
| Net Income |  |  |

Reyansh Paint Co.
Comparative Retained Earnings Statement For the years Ended December 31, 2020 and 2019

|  | 2020 | 2019 |
| :---: | :---: | :---: |
| Retained earnings, January 1 | 723,000 | 581,800 |
| Add net income for year | 245,000 | 211,200 |
| Total | 968,000 | 793,000 |
| Deduct dividends : <br> On preferred stock <br> On common stock |  |  |
|  | 40,000 | 40,000 |
|  | 45,000 | 30,000 |
| Total | 85,000 | 70,000 |
| Retained earnings, <br> December 31 | 883,000 | 723,000 |

## Reyansh Paint Co.

Comparative Balance Sheet
December 31, 2020 and 2019

|  | Dec. 31, 2020 | Dec. 31, 2019 |
| :---: | :---: | :---: |
| Assets <br> Current assets : <br> Cash <br> Temporary investment <br> Accounts receivable <br> Inventories <br> Prepaid expenses | $\begin{gathered} 175,000 \\ 150,000 \\ 425,000 \\ 720,000 \\ 30,000 \end{gathered}$ | $\begin{gathered} 125,000 \\ 50,000 \\ 325,000 \\ 480,000 \\ 20,000 \end{gathered}$ |
| Total current assets <br> Long term investments Property, plant, equipment | $\begin{gathered} 1,500,000 \\ 250,000 \\ 2,093,000 \end{gathered}$ | $\begin{gathered} 1,000,000 \\ 225,000 \\ 1,948,000 \end{gathered}$ |
| Total assets <br> Liabilities <br> Current liabilities | $\begin{gathered} 3,843,000 \\ 750,000 \end{gathered}$ | $\begin{gathered} 3,173,000 \\ 650,000 \end{gathered}$ |
| Long-term liabilities : <br> Mortgage Loan payable Bonds payable | $\begin{aligned} & 410,000 \\ & 800,000 \end{aligned}$ | 800,000 |
| Total long-term liabilities | 1,210,000 | 800,000 |
| Total liabilities | 1,960,000 | 1,450,000 |
| Stockholders' Equity : <br> Preferred 8\% stock, Rs. 100 par <br> Common Stock, Rs. 10 par Retained earning |  |  |
| Total stockholders' equity | 1,883,000 | 1,723,000 |
| Total liabilities and stockholders' equity | 3,843,000 | 3,173,000 |

## Instructions :

Determine the following measures for 2020 :
(i) Working capital
(ii) Current ratio
(iii) Quick ratio
(iv) Accounts receivable turnover
(v) Inventory turnover
(vi) Number of days 'sales' in receivables
(vii) Ratio of net sales to assets
(viii) Price - earnings ratio
(ix) Dividends per share

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