Del SLid is contemplating replacement of one of its machines which has become outdated and inefficient. Ifs financial manager has prepared a report of wo possible replacement machines. The details of each
machine are as follows
Initial Investment
Estimated useful life
Residual Value
Contribution per ammon
Fixed operating costs per annum

| Machine 1 | Machine 2 |
| :---: | :---: |
| ₹ $15,00,000$ | $₹ 16,00,000$ |
| 5 years | 5 years |
| ₹ $1,20,000$ | $₹ 1,00,000$ |
| $₹ 11,60,000$ | $₹ 12,00,000$ |
| $₹ 7,60,000$ | $₹ 6,90,000$ |

Depreciation has been calculated by straight line method and has been included in fixed operating costs. The expected cost of capital for this project is assumed as $12 \%$ p.a.
Required: Which machine is more beneficial.

| Year | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| PV@12\% | 0.893 | 0.797 | 0.712 | 0.636 |

no

## [English Version]

The figures in the margin indicate full marks.

## Group - A

Answer any four questions.

1. Discuss the importance of financial management.
2. Give an idea about 'Wealth maximisation' objective of financial management.
3. Mr. M is offered either to receive $₹ 10,000$ three years from now or $₹ 14,000$ five years from now. Which one Mr. M will accept?' Assume rate of discount is $10 \%$.
[Given present value of $₹ 1$ at $10 \%$ are 0.751 and 0.621 for 3 rd and 5 th year respectively.]
4. Explain working capital cycle'
5. Coltex Lid. issue a new $10 \%$ Debentures of ₹ 1,000 each to be redeemed at par. However, it will involve flotation cost of $4 \%$. The company is in the $35 \%$ tax bracket. You are required to ascertain the cost of debt.
6. The Iron Ore Lid consists of 4000 equity shares of $₹ 10$ each. Currently the: shares are quoted in the market at $₹ 200$ each. The earnings available to the equity shareholders at the end of the period $₹ 2,40,000$ The earnings are expected to grow a $7 \%$. What is the cost of equity capital?

# Group - B <br> Answer aty six questions 

7. (a) Write a shom note on Margmal Cost of Capital
(b) Differentiato between Operating Leverage and Financial Leverage
8. Calculate the degree of operating leverage, degrec of financial leverage and combined leverage from the following data
Sales 100000 umits (a) $₹$ 2 per unit $=₹ 2,00,000$; Variable cost per unit (a) 0.70 ; Fixed cost $=₹ 1,00,000$; Interest charges ₹ 3.000
9. (a) Explain 'Trading on Equity' with example.
(b) What do you mean by Optimum Capital Structure?
10. ABC Lid. sells its products on a gross profit of $20 \%$ on sales. The following information is extracted from its annual accounts for the current year ended 31st March, 2021.

| Sales at 3 months credit | $40,00,000$ |
| :--- | ---: |
| Raw materials | $12,00,000$ |
| Wages paid-average time lag 15 days | $9,60,000$ |
| Manufacturing expenses paid (one month arrear) | $12,00,000$ |
| Administration expenses paid (one month arrear) | $4,80,000$ |
| Sales promotion expenses (payable half yearly in advance) | $\mathbf{2 , 0 0 , 0 0 0}$ |

The company enjoys one month's credit from the suppliers of raw materials and maintains a 2 months stock of raw materials and one-and-half months stock of finished goods. The cash balance is maintained at $₹ 1,00,000$ as precautionary measure.
Assuming $10 \%$ margin, find out the working capital requirement of ABC Ltd.
11. Write short notes on
(a) Commercial Paper (b) Trade Credit as a source of short-term capital.
12. Raj and Co. Lid has an investment project, the particulars of which are given below:

Cost of the Asset $=₹ 1,80,000$
Installation charges $=₹ 20,000$
Effective working life $=10$ years
Esimated scrap value $=\boldsymbol{F} 40,000$
Annual profit before depreciation $=\boldsymbol{₹} 56,000$
Depreciation is charged under straight line method and the rate of tas is given as $40 \%$. Compute the pay-back period of the project and state its acceptability.
13. (a) Why is discounted cash flow method superior to non-discounted cash flow method in evaluation of an investment project?
(b) What is capital rationing?
14. The following figures are collected from the annual report of $A B C$ Ltd.

| Net Profit | ₹ 60 Lakhs |
| :--- | :---: |
| Outstanding $12 \%$ Preference Shares | ₹ 200 Lakhs |
| Number of cquity shares | 300000 |
| Retum on Investment | $20 \%$ |
| Cost of Capital (Ke) | $16 \%$ |

Compute the amount of dividend to keep the share price at ₹ 84 using Walter's Model.
15. X Ltd is contemplating replacement of one of its machines which has become outdated and inefficient. Its financial manager has prepared a report of two possible replacement machines. The details of each machine are as follows:

| Initial Investment | $₹ 15,00,000$ | $₹ 16,00,000$ |
| :--- | :---: | :---: |
| Estimated useful life | 5 years | 5 years |
| Residual Value | $₹ 1,20,000$ | $₹ 1,00,000$ |
| Contribution per annum | $₹ 11,60,000$ | $₹ 12,00,000$ |
| Fixed operating costs per annum | $₹ 7,60,000$ | $₹ 6,90,000$ |

Depreciation has been calculated by straight line method and has been included in fixed operating costs. The expected cost of capital for this project is assumed as $12 \%$ p.a.
Required: Which mactine is more beneficial.

| Year | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PV(a) $12 \%$ | 0.893 | 0.797 | 0.712 | 0.636 | 0.567 |

