## B.COM (A\&F). DEGREE EXAMINATION NOVEMBER 2023

ACCOUNTING AND FINANCE THIRD SEMESTER

| COURSE | $:$ | MAJOR - CORE |
| :--- | :--- | :--- |
| PAPER | $:$ | FINANCIAL MANAGEMENT |
| SUBJECT CODE | $:$ | 19AF/MC/FM34 |
| TIME | $:$ | 3 HOURS |

## SECTION - A

## ANSWER ALL QUESTIONS:

MAX. MARKS: 100

1. Define Financial Management.
2. Give the meaning of Operating and Financial leverage.
3. What do you mean by risk analysis in capital budgeting decisions?
4. Define working capital management and enumerate its types.
5. What is lease financing?
6. Calculate the cost of capital when X Ltd issues $12 \%$ Debentures of face value Rs. 100 each and realizes Rs. 95 per debenture. The debentures are redeemable after 10 years at a premium of $10 \%$
7. The following particulars are available: Sales Rs. 1,00,000 Variable Cost Rs. 70,000 Fixed Cost Rs. 20,000 Long term loans @ 10\% Rs. 50,000. Compute the combined leverage.
8. A project has an initial investment of Rs.200,000. It will produce cash flows after tax of Rs. 50,000 p.a for six years. Compute the pay back period for the project.
9. H Ltd earns Rs. 15 per share. The company is capitalised at a rate of 125 and has a return on investment of $18 \%$. According to Walter's formula, what should be the price per share @ $60 \%$ div payout ratio?
10. Calculate the future value of Rs. 40000 invested now for a period of 4 years at a time preference rate of $10 \%$.

> SECTION - B

## ANSWER ANY FIVE QUESTIONS:

11. Following is the information of Shri Aruna Industries Ltd. for the year 30th June 2021. Their plan is to sell 30,000 units in the year 2021-2022. The expected cost of goods sold is as under you are required to calculate the working capital requirements.

| Particulars | Rs |
| :--- | ---: |
| Raw materials | 100 |
| Manufacturing expenses | 30 |
| Selling, administration and financial <br> expenses | 20 |
| Selling price | 200 |

The duration at various stages of the operating cycle is expected to be as follows :
Raw material stage 2 months
Work-in-progress stage 1 month
Finished goods stage $1 / 2$ month
Debtors stage 1 month
If the monthly sales level is 2,500 units, estimate the gross working capital. Expected cash balance is $5 \%$ of the gross working capital, and work in progress is $25 \%$ complete with respect to manufacturing expenses.
12. The expected annual net operating income of a company (EBIT) is Rs.50000. The company has Rs. $200000,10 \%$ debentures. The equity capitalization rate(ke) of the company is $12.5 \%$. find the value of firm and overall cost of capital under net income approach.
13. The installed capacity of a factory is 700 units. The actual exploited capacity is 500 units. Selling price per unit Rs. 100 and variable cost is Rs. 60 per unit. Calculate operating leverage when (a) fixed costs are Rs. 5000 (b) fixed costs are Rs. 11,000 (c) fixed costs are Rs. 15,000
14. The following data relates to Yamina Ltd Earnings per share-Rs.14, Capitalisation Rate-Rs.15\%, Rate of Return-20\%. Determine the market price per share under Gordon's model if retention is (a) $40 \%$, (b) $60 \%$, (c) $20 \%$.
15. Project K requires an investment of Rs. 20 lakh and yields profits after tax and depreciation as follows.

| Year | 1 | 2 | 3 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Profit after Tax (Rs.) | $1,00,000$ | $1,50,000$ | $2,50,000$ | $2,60,000$ | $1,60,000$ |

At the end of $5^{\text {th }}$ year, the plant can be sold for Rs. $1,60,000$. You are required to calculate ARR.
16. From the following information extracted from the books of a manufacturing company, compute the operating cycle in days.
Period of Coverage: 365 days
Average period of credit allowed by suppliers: 16 days

| Particulars | Rs |
| :--- | ---: |
| Average total cost of debtors outstanding | $4,80,000$ |
| Raw materials consumption | $44,00,000$ |
| Total Production cost | $1,00,00,000$ |
| Total cost of sales | $1,05,00,000$ |
| Sales for the year | $1,60,00,000$ |
| Value of average stock maintained: Raw <br> materials | $3,20,000$ |
| Work in progress | $3,50,000$ |
| Finished goods | $2,60,000$ |

17. Mr. Anirudh deposits at the end of each year Rs. 1,000 , Rs.2,000, Rs.3,000, Rs.5,000, Rs. 10,000 in a Savings bank account for five years. The interest is $5 \%$. Find the future value of his deposits at the end of the fifth year.

## SECTION - C

ANSWER ANY TWO QUESTIONS:
18. Following is the information of Ashok Industries Ltd. for the year ending 31st Mar. 2017. You are required to calculate the working capital requirements from the following information:

| Particulars | Rs |
| :--- | :---: |
| Raw materials | 160 |
| Direct labour | 60 |
| Overheads | 120 |
| Total cost | 340 |
| Profit | 60 |
| Selling price | 400 |

Raw materials are held in stock on an average for 1 month period. Materials are in process on an average for $1 / 2$ month period. Finished goods are in stock on an average for 1 month period. Credit allowed by suppliers is 1 month period and credit allowed to debtors is 2 -month period. Time lag in payment of wages is $1 \frac{1}{2}$ weeks. Time lag in payment of overhead expenses is 1 month. $1 / 4$ th of the sales are made on cash basis. Cash in hand and at the bank is anticipated to be Rs. 50,000; and anticipated level of production amounts to $1,04,000$ units for a year of 52 weeks. You may assume that production is carried on evenly throughout the year and a time period of four weeks is equivalent to a month.
19. Assuming no taxes and given the earnings before interest and taxes(EBIT),interest (I) at $10 \%$ and equity capitalization rate $(\mathrm{Ke})$ below, calculate the total market value of each firm under net income approach:

| Firms | EBIT(RS) | I (RS) | Ke |
| :---: | :---: | :---: | :---: |
| Z | 200000 | 20000 | $12.0 \%$ |
| Y | 300000 | 60000 | $16.0 \%$ |
| Z | 500000 | 200000 | $15.0 \%$ |
| W | 600000 | 240000 | $18.0 \%$ |

Also determine the weighted average cost of capital (WACC) for each firm.
20. Project $M$ has an initial investment of Rs. 3 lakhs. Its cash flows for five years are Rs. 90,000 , Rs. $1,08,000$, Rs. 90,000 , Rs. 79,200 and Rs. 72,000 . Assuming a discount rate of $10 \%$ p.a., depreciation $20 \%$, compute discounted payback period, Net present value, profitability index and average rate of return.
21. A. Arun borrowed a five-year vehicle loan of Rs. 60,000 at $9 \%$ from his employer. He is required to repay as five equal instalments. How much he has to pay every year. Set up Amortization table.
B. Ajay \& Co. issued $10 \%$ debentures of Rs.5,00,000. It is to be redeemed after five years. How much should the company invest in a sinking fund earning $12 \%$ in order to be able to repay debentures?

