## B.COM (A\&F). DEGREE EXAMINATION NOVEMBER 2022 <br> ACCOUNTING AND FINANCE THIRD SEMESTER

| COURSE | $:$ | MAJOR - CORE |
| :--- | :--- | :--- |
| PAPER | $:$ | FINANCIAL MANAGEMENT |
| TIME | $:$ | 3 HOURS |

## SECTION - A

## ANSWER ALL QUESTIONS:

MAX. MARKS: 100

1. Define Financial Management.
2. What is cost of capital?
3. Define the term working capital.
4. Explain the different types of leases.
5. Write a short note on IRR method.
6. The expected cash inflows are as follows:

| Year | 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cash inflow (Rs) | 3,000 | 4,500 | 6,000 | 8,000 | 10,000 |

Discount rate is $16 \%$ find out the present value of cash inflows using P.V. table.
7. Find out degree of operating leverage from the following data:

| EBIT(2005) | Rs.40,000 | Sales(2005) | 20,000 units |
| :---: | :---: | :---: | :---: |
| EBIT(2006) | Rs.50,000 | Sales(2006) | 28,000 units |

8. A project has an initial investment of Rs.2,00,000. It will produce cash flows after tax of Rs.50,000 per annum for six years. Compute the payback period for the project.
9. Hensman Ltd. earns Rs. 15 per share. The company is capitalized at a rate of $12 \%$ and has a return on investment of $18 \%$. According to Walter's formula, what should be the price per share at $60 \%$ dividend pay out ratio?
10. A person is required to pay five equal annual payments of Rs.10,000 each in his deposit account that pays $10 \%$ interest per year. Find out future value of annuity at the end of 5 years.

## SECTION - B

ANSWER ANY FIVE QUESTIONS:
11. Find out the present values of the following:
(a) An annuity of Rs.1,520 starting after 1 year for 6 years at the interest rate of $12 \%$
(b) An annuity of Rs. 11,000 starting in 7 years' time lasting for 7 years at a discount rate of $10 \%$.
12. X Ltd is considering the purchase of a new machine to replace a machine which has been in operation in the factory for the last 5 years.
Ignoring interest but considering tax at $50 \%$ of net earnings, suggest which of the two alternatives should be preferred.
The following are the details:

|  | Old machine | New machine |
| :--- | :--- | :--- |
| Purchase price | Rs.40,000 | Rs.60,000 |
| Estimated life of machine | 10 years | 10 years |
| Machine running hours p.a | 2,000 | 2,000 |
| Units per hour | 24 | 36 |
| Wages per annum | 3 | 5.25 |
| Power per annum | 2,000 | 4,500 |
| Consumable stores p.a | 6,000 | 7,500 |
| All other charges p.a | 8,000 | 9,000 |
| Material cost per unit | 0.50 | 0.50 |
| Selling price per unit | 1.25 | 1.25 |

You may assume that the above information regarding sales and cost of sales will hold good throughout the economic life of each of the machines. Depreciation has to be charged according to straight line method. Calculate accounting rate of return.
13. Shajita has entered into an agreement that will fetch her Rs. 60,000 p.a. for the next 4 years. She wants to know the present value of the future inflows at $20 \%$ discount rate.
14. A firm has sales of Rs. $15,00,000$, variable cost of Rs. $9,00,000$, fixed cost of Rs.3,00,000 and debt of Rs. $8,00,000$ at $8 \%$
(i) Calculate its operating, financial and combined leverages.
(ii) If the firm decides to double its EBIT, how much of a rise in sales would be needed on a percentage basis?
15. The total available budget for accompany is 20 crore and the total cost of the projects is Rs. 25 crore. The projects listed below have been ranked in order of profitability. There is a possibility of submitting $X$ project where cost is assumed to be Rs. 13 crore and it has the profitability of 1.40.

| Project | Cost (Rs. in crore) | P.I |
| :---: | :---: | :---: |
| A | 6 | 1.50 |
| B | 5 | 1.25 |
| C | 7 | 1.20 |
| D | 2 | 1.15 |
| E | 5 | 1.10 |
|  | 25 |  |

Which projects, including X , should be acquired by the company?
16. From the following information, prepare a statement showing the estimated working capital requirements:
Budgeted sales -Rs.2,60,000 p.a
Analysis of cost and profit of each unit

| Particulars | Rs. |
| :--- | ---: |
| Raw materials | 3 |
| Labour | 4 |
| Overheads | 2 |
| Profit | 1 |
| Selling price per unit | 10 |

It is estimated that
(a) Pending use, raw materials are carried in stock for three weeks and finished goods for two weeks.
(b) Factory processing will take 3 weeks.
(c) Suppliers will give weeks credit and customers will require eight weeks credit It may be assumed that production and overheads accrue evenly throughout the year.
17. Du Preez Ltd. gives you the following information:

Earnings per share : Rs. 45
Cost of capital : 18\%
Return on investment : 18\%
Ascertain the market value per share using Gordon's Model, if the payout is (a) $30 \%$
(b) $60 \%$
(c) $90 \%$

## SECTION - C

ANSWER ANY TWO QUESTIONS:
18. Wilson Ltd. wishes to raise additional finance of Rs. 30 lakh for meeting its investment plans. It has Rs. $6,00,000$ in the form of retained earnings available for investment purposes. The following are the further details:
(i) Debt / Equity mix - $40 \%: 60 \%$
(ii) Cost of debt: upto Rs.5,00,000 - $12 \%$ (before tax)
beyond Rs.5,00,000 - 16 \% (before tax)
(iii) EPS - Rs. 5
(iv) Dividend payout - $60 \%$ of earnings
(v) Expected growth rate in dividend - 8\%
(vi) Current market price per share Rs. 50
(vii) Tax rate - $40 \%$

You are required to determine
(a) The pattern for raising the additional finance
(b) The post-tax average cost of additional debt
(c) The cost of retained earnings and cost of equity, and
(d) The overall weighted average after tax cost of additional finance.
19. Calculate operating, financial and combined leverages under situations $\mathrm{A}, \mathrm{B}$ and C from the following particulars:
Installed capacity $\quad-1,200$ units
Actual production and sales - 800 units
Selling price per unit - Rs. 15
Variable cost per unit - Rs. 10
Fixed cost: Situation A - Rs.1,000
Situation B - Rs.2,000
Situation C - Rs.3,000

| Capital structure | Financial plan -1 | Financial plan -2 | Financial plan -3 |
| :--- | ---: | ---: | ---: |
| Equity (Rs.) | 5,000 | 7,500 | 2,500 |
| Debt (cost $12 \%$ ) | 5000 | 2,500 | 7,500 |

20. X Ltd, is considering investing in a project requiring a capital outlay of Rs.8,00,000. Forecast for annual net incomes after depreciation but before tax are as follows:

| Year | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Profits (Rs) | $4,00,000$ | $4,00,000$ | $3,20,000$ | $3,20,000$ | $1,60,000$ |

Depreciation may be taken as $20 \%$ on original cost and taxation at $50 \%$ of net income.
You are required to evaluate the project according to each of the following methods: (a) payback method: (b) Rate of return on original investment method: (c) Rate of return on average investment method: (d) P.I. method: (e) Internal rate of return method.
21. Stewart Ltd. has 40,000 shares outstanding. The current market price of these shares is Rs. 15 each. The Board of directors of the company has recommended Rs. 2 per share as dividend. The rate of capitalization appropriate to the risk-class to which the company belongs is $20 \%$
(i) Based on MM approach, calculate the market price of the share of the company when the recommended dividend is (a) distributed and (b) declared.
(ii) How many new shares to be issued by the company at the end of the accounting year on the assumption that the net income for the year is Rs. $1,20,000$ and the investment budget is Rs.2,80,000 when (a) the above dividends are distributed and (b) dividends are not declared.
(iii) Show that market value of the shares at the end of the accounting year will remain the same whether dividends are distributed or not declared.
(iv) Is the MM approach realistic? What factors might mar its validity?

