## LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600034

## B.B.A.DEGREE EXAMINATION -BUSINESS ADMINISTRATION <br> FIFTH SEMESTER - NOVEMBER 2018 <br> BU 5509- FINANCIAL MANAGEMENT

Date: 23-10-2018 $\square$ Max. : 100 Marks

## ANSWER ALL THE QUESTIONS

$(10 \times 2=20)$

1. What is Trading on equity ?
2. What is Composite leverage ?
3. Distinguish between profit and wealth maximization.
4. What is Doubling period ?
5. A company issues $10 \%$ debentures for Rs. $4,00,000$. Rate of tax is $55 \%$. Calculate the cost of debt (after tax), if the debentures are issued at Par.
6. What is Weighted Average Cost of capital ?
7. What is Capital Budget ?
8. Calculate the pay back period for a project which requires a cash outlay of Rs. $1,00,000$ and generates cash inflows of Rs.25,000 Rs.35,000,Rs.30,000 and Rs.25,000 in the first,second,third and fourth years respectively.
9. What is Operating cycle ?
10. A company has the following selected assets and liabilities. You are required to calculate working capital. Cash Rs. 1,35,000; Retained earnings Rs. 3,00,000; equity share capital Rs. 5,00,000; debtors Rs. 1,80,000; Inventory Rs. 3,33,000; Debentures Rs.3,00,000; Provision for taxation Rs. 1,71,000;

Expenses outstanding Rs.63,000; Land and building Rs. 9,00,000; Goodwill Rs.90,000; furniture Rs. 75,000; Creditors Rs. 1,17,000.

PART B
ANSWER ANY FOUR QUESTIONS:
11. What are the sources of short term financing? Explain them briefly.
12. What are the various factors influencing the pattern of capital structure?
13. From the given information you are required to calculate Operating Leverage Financial Leverage and Combined Leverage.

| Particulars | X | Y | Z |
| :--- | :---: | :---: | :---: |
| Out put (in Units) | $30,00,000$ | $7,50,000$ | $50,00,000$ |
| Fixed Cost Rs. | $35,00,000$ | $70,00,000$ | $7,50,000$ |
| Variable cost per unit (Rs.) | 1.00 | 7.50 | 0.10 |
| Interest Expenses (Rs.) | $2,50,000$ | $4,00,000$ | - |
| Selling price per unit (Rs.) | 3 | 25 | 0.50 |

14. Assuming no taxes and given the Earnings before Interest and Taxes (EBIT) Interest (I) at $10 \%$ and equity capitalization rate (Ke) below, calculate the total market value of each firm.

| Firms | EBIT (rs.) | I | Ke |
| :--- | :--- | ---: | :--- |
| A | $2,00,000$ | 20,000 | $12 \%$ |
| B | $3,00,000$ | 60,000 | $16 \%$ |
| D | $5,00,000$ | $2,00,000$ | $15 \%$ |
|  | $6,00,000$ | $2,40,000$ | $18 \%$ |

Also determine the weighted average cost of capital for each firm.
15. It is proposed to introduce a new machine to increase the production capacity of department $X$. two machines are available. Type A and type B. The following information is available.

| Details | A (Rs.) | B (Rs.) |
| :--- | :---: | :---: |
| Cost of machine | $3,50,000$ | $6,30,000$ |
| Estimated life (years) | 7 | 10 |
| Estimated savings in scrap p.a. | 20,000 | 32,000 |
| Additional cost of indirect materials p.a. | 10,000 | 16,000 |
| Estimated savings in wages: |  |  |
| Employees not required | 15 | 20 |
| Wages per employees per annum | 7,200 | 12,000 |
| Additional cost of maintenance p.a. | 24,000 | 36,000 |
| Additional cost of supervision p.a. |  |  |

The rate of taxation can be regarded as $50 \%$ of profits. Which machine can be recommended for purchase by using Pay Back period?
16. Calculate the operating cycle of a company which gives the following details relating to its operations:

Rs.

Raw materials consumption per annum
8,42,000

Annual cost of production
Annual- cost of sales
Average value of current assets held:
Raw materials
Work-in-progress
Finished goods
Debtors

1,24,000
72,000
1,22,000
2,60,000

The company gets 30 days credit from its suppliers. All sales made by the firm are on credit only. You may take one year as equal to 365 days.
17. Discuss the factors affecting the cost of capital.
18. Discuss the functions of the financial manager.
19. Aswathi Ltd desires to purchase a business and has consulted you, and one point on which you are asked to advise them is the average amount of working capital, which will be required in the first year's working. You are given the following estimates and are instructed to add $10 \%$ to your computed figure to allow for contingencies.

Figures for the year
Rs.

1. Average amount locked up in stock:

Stock of finished product 50,000
Stock of stores, material etc., 80,000
2. Average credit given:

Inland sales 6 weeks credit
Export sales $1 \frac{1}{2}$ weeks credit
31,20,000
7,80,000
3. Lag in payment of wages and other out standings:

| Wages | - | $1 \frac{1}{2}$ weeks | $26,00,000$ |
| :--- | :--- | :--- | ---: |
| Stores, materials etc. | - | $1 \frac{1}{2}$ months | $4,80,000$ |
| Rent, royalties etc | - | 6 months | $1,00,000$ |
| Clerical staff | - | $1 ⁄ 2$ month | $6,24,000$ |
| Manager | - | $1 ⁄ 2$ month | 48,000 |
|  |  | $4 \frac{1}{2}$ months | $4,80,000$ |

4. Payment in advance:

Sundry expenses (paid quarterly in advance)
5. Undrawn profits on an average throughout the year

80,000
1,10,000

Calculate the average amount of working capital required.
20. One plant of a company is doing poorly and is being considered for replacement. Three mutually exclusive plants $\mathrm{X}, \mathrm{Y}$ and Z have been proposed. The plants are expected to cost Rs.1,00,000 each and have an estimated life of 5 years, 4 years and 3 years respectively and have no salvage value. The company's required rate of return is $10 \%$. The anticipated cash flows after tax for the three plants are as follows:

| Year | Plant X | (Rs.) | Plant Y (Rs.) | Plant Z (Rs.) |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 2 | 25,000 |  | 40,000 | 50,000 |  |
| 2 | 25,000 |  | 40,000 | 50,000 |  |
| 3 | 25,000 |  | 40,000 | 5,000 |  |
| 5 | 25,000 |  | 15,000 | - |  |
|  | 95,000 | - | - |  |  |

(i) Rank the proposals applying the methods of payback, ARR and NPV.
(ii) What would be the profitability index if the IRR equaled the return on investment? What is the significance of a profitability index less than one?
(iii) Recommend the project to be adopted and give reasons.
21. A) Murugan Ltd issues 10 \% irredeemable preference shares of the face value of Rs. 100 each. Flotation costs are estimated at 5\% of the expected sale price.

1. What is $K$ if the preference shares are issued at (i) par value, (ii) $10 \%$ premium and (iii) $5 \%$ discount?
2. Also, compute $K$ in these situations assuming $14 \%$ dividend tax.
B) A company has $12 \%$ perpetual debt of Rs. $1,00,000$. The tax rate is $40 \%$. Determine the cost of capital (before tax as well as after tax) assuming the debt is issued at (i) par, (ii) $10 \%$ discount and (iii) $10 \%$ premium.
