## LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600034

# M.Com. DEGREE EXAMINATION - COMMERCE <br> FIRST SEMESTER - NOVEMBER 2009 <br> CO 1807 - FINANCIAL MANAGEMENT 

Date \& Time: 04/11/2009 / 1:00-4:00 Dept. No.
Max. : 100 Marks

## PART A

## Answer all questions :

$10 \times 2=20$

1. Give the formula for operating leverage.
2. Mention the pattern of capital structure.
3. What do you mean by arbitrage process?
4. Write a note on operating cycle.
5. Explain the term Lock-box system.
6. Analyze the merits and demerits of pay back period.
7. Calculate K and V according to net income approach when ABC limited is expecting an annual EBIT of Rs. 2,00,000. The company has Rs. 8,00,000 in $10 \%$ debentures. The Ke is $12.5 \%$
8. Annual requirement $=10,000$ units cost per unit $=$ Rs. 5 ordering cost $=$ Rs100per order rent, insurance etc per unit per annum Rs. 3 return on investment $=20 \%$ Calculate EOQ.
9. A company has $15 \%$ perpertual debt of Rs. $2,00,000$ the tax rate is $35 \%$ debenture the Kd assuming the debt is issued at $10 \%$ discount.
10. Write the formula for Ke as per dividend plus growth approach.

## PART - B

Answer any five questions :
11. What are the significance of capital budgeting?
12. Explain the following capital structure approaches with assumptions
a. Net income approach b. Net operating income approach
13. Discuss the internal factors affecting dividend policy.
14. Arun Ltd issued $12 \%$ preference shares of Rs. 1000 each at Rs. 950 repayable in two equal installments at the end of $10^{\text {th }}$ and11th year respectively Kp.

|  | Annuity table value <br> for 10 yrs | PV factor for $10^{\text {th }}$ year | PV factor for $11^{\text {th }}$ <br> year |
| :--- | :--- | :--- | :--- |
| $12 \%$ P v Factor | 5.65 | .322 | .287 |
| $15 \%$ P v Factor | 5.019 | .247 | .215 |

15. X Ltd. currently provides 45 days credit to its customers. Existing sales are Rs 1.5 crores. The cost of capital is $15 \%$ and variable cost is $80 \%$ of sales. The firm is considering extending the credit period to 60 days. This will increase sale by Rs. 15,00,000 on which $5 \%$ bad debts is expected should the company extent the credit period.
16. (a) Explain the traditional approach of capital structure.
(b) In considering the most desirable capital structure for a company, the following estimates of the cost of debt and equity capital (after tax) has been made at various levels of debtequity mix:
Debt as percentage of

| Cost of Debt | Cost of Equity |
| :---: | :---: |
| $(\%)$ | $(\%)$ |
| 5.0 | 12.0 |
| 5.0 | 12.0 |
| 5.0 | 12.5 |
| 5.5 | 13.0 |
| 6.0 | 14.0 |
| 6.5 | 16.0 |
| 7.0 | 20.0 |

You are required to determine the optimal debt-equity mix for the company by calculating composite cost of capital.
17. National steel company is considering to invest in a project which cost Rs. 2,50,000 and will require an increase in the level of inventories and receivables (working capital) of Rs. 1,25,000 over its life. The project will generate additional sales of Rs. $2,50,000$ and will require additional expenses of Rs. 75,000 every year. The project has 5 years life. The firm's cost of capital is $10 \%$ and is in the tax bracket of $50 \%$.
Assuming straight line method of depreciation should the project be accepted?
Given: Present Value of an Annuity of Re. 1 at $10 \%$ for 5 years is 6.105 .
18. A project having an initial investment of Rs. 6,000. It has the following cash flows with a respective probability.COC and discount rate is $15 \%$. Ascertain the NPV.

Year 1
Year 2
Year 3

| Cash inflow | prob. | Cash inflow | prob. | Cash inflow | prob. |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1,000 | .1 | 2,000 | .2 | 1,500 | .1 |
| 1,500 | .2 | 2,500 | .3 | 2,200 | .7 |
| 2,000 | .4 | 2,700 | .2 | 2,800 | .1 |
| 2,500 | .2 | 2,800 | .3 | 3,500 | .1 |
| 3,000 | .1 |  |  |  |  |

## PART - C

Answer any two questions : $2 \times 20=40$
19. Suriya Ltd. has the following book value of capital structure.

Rs.
Equity capital (Rs. 10 each)
100 lakhs
$11 \%$ Preference share capital (Rs. 100 each)
Retained Earnings
10 lakhs
13.5\% Debentures (Rs. 100 each)

120 lakhs
$12 \%$ Term loans
50 lakhs
80 lakhs

360 lakhs
(1) The next expected dividend per share is Rs 1.5 . The dividend per share expected to grow at $7 \%$. The market price per share is Rs. 20.
(2) Preference shares are redeemed at par after 10 years is currently selling at Rs. 75.
(3) Debentures are redeemable at par after 6 years is currently selling at Rs.80.
(4) The tax rate is $50 \%$.

Calculate weighted average COC using book value and market value as weights.
20. A Ltd. produces $1,20,000$ units per annum. Its percentage for cost to selling price are raw materials $60 \%$, wages $10 \%$, and Overheads $20 \%$.
Selling price is Rs. 5 per unit.

1. Raw material is in stock 2 months
2. Work-in-progress in stock 1 months
3. Finished goods in stock 3 months
4. Creditors allowed 2 months credit and Debtors are given 3 months credit.
5. Wages and OHS are paid on the $1^{\text {st }}$ of each month for the previous month.
6. Cash in hand Rs. $40,000$.

Calculate the cash cost of working capital.
21. Loyola college incurred the following expenses on its visiting faculty during the Previous Year.

| Salary Rs. | $2,50,000$ |
| :--- | :--- |
| Travel | $1,50,000$ |
| Accommodation | $6,00,000$ |
| Boarding | $2,00,000$ |

The accommodation expenses are expected to increase by Rs. 1,00,000 every year.
The college plans to construct a building to take care of the accommodation of such faculty. This building will save Rs. 80,000 in boarding charges and Rs.2,70,000 in cost of training which where either to conduct in a near by hotel every year to construct the building the college will use its existing land which was bought from some year bank at a cost of Rs. 8,00,000. The building will cost Rs. $16,00,000$ and the annual maintenance is expected to be Rs. $1,00,000$. The cost of construction will be written off equally over 5 years. The tax rate is $50 \%$ and the cost of capital is $15 \%$. Should the college construct the building.

