MG-177
Seat No.

## Third Year B. B. A. Examination <br> April/May - 2003

Advanced Financial Management
Time: $\mathbf{3}$ Hours]
[Total Marks : 70
Instructions : (1) All the calculations-work sheet-should be a part of your answer.
(2) Clearly mention the number of the question you are attempting.
(3) Present value tables will be provided on request.
(4) Figures to the right indicate full marks of the question.

1 (a) (i) As a financial consultant, will you advise your
4 client to have them deposit in a commercial bank which pays $8 \%$ interest compounded semi annually or $8 \%$ interest compounded annually ? Why ? Show your calculations as a part of the answer.
(ii) X Ltd. is proposing to issue a 5 year $14 \%$ bonds. The bonds will be redeemed at Rs. 120 at the end of 5th year. Its face value is 100. If an investor has a minimum required rate of return of $15 \%$. What is the present value of such bond for him ?

## OR

(a) (i) "Annuity tables can be used for all types of cash flows." - Discuss.
(ii) An investor is likely to retire at the end of 10 years. In order to receive Rs. 3,00,000 annually for 10 years after retirement, how much amount should he save annually for 10 years till the date of retirement ? Assume a discount rate of per $10 \%$.
(b) (i) Following details are available about Pinkal Ltd. :

## Type of capital

Equity share capital (each
share of Rs.10) $\quad 10,00,000$
$11 \%$ preference share capital
(each share of Rs. 100)
2,00,000
Reserves and Surplus
18,00,000
15\% Debentures (each debenture
of Rs.100)
Total

## Book value

## Rs.

20,00,000
50,00,000

On equity shares, the next year's expected rate of dividend is $25 \%$. The growth rate of the earnings of the company is $10 \%$. The average current market price of equity share is Rs. 25. Assume that the cost of retained earnings is 4\% less than the cost of equity capital. The current market price of preference shares and debentures are Rs. 80 and Rs. 70 respectively. The tax rate applicable to company is $50 \%$. Ascertain the average cost of capital of the company on the basis of Market Value Weights.
(ii) Explain the C.A.P.M. approach.

## OR

(b) (i) Assuming a corporate tax rate of $50 \%$, calculate after tax cost of capital in the following situations: (any two)
(1) A six year $15 \%$ preference share of Rs. 1005 redeemable at a premium of $5 \%$. Flotation cost 4\%.
(2) A $10 \%$ debenture of Rs. 1,000 face value to be redeemed after 8 years. The debenture is expected to be sold at $10 \%$ discount and flotation cost 3\%.
(3) A company wants to issue equity shares of Rs. 100 each. The flotation cost per share is $4 \%$ of the market price of share. The company wants to pay a dividend of Rs. 6 per share. The growth rate of dividend is estimated to be $5 \%$. Calculate the cost of equity capital.

## (ii) "Cost of equity and retained earnings is not zero." - Discuss.

2 (a) Discuss various factors affecting level of working $\quad 7$

## OR

(a) Discuss operating cycle concept with the help of an example.
(b) Write preparing a project report on behalf of a client you have collected the following facts. Estimate the New Working Capital required for the project. Add $1 \%$ to your computed figure to allow for contingencies :

## Estimated cost per unit of production

Amount
per unit
(Rs.)
Raw material ................................................................ 80
Direct Iabour ................................................................ 20
Overheads (including depreciation Rs. 15)............... 60
Total cost........................................................... 160
Additional Information :
Selling price
Rs. 200 / unit
Level of activity $1,04,000$ units of production per annum
Raw material in stock 4 weeks

WIP (assume full unit of raw material required in the beginning of manufacturing other conversion costs are $50 \%$ ) Average 2 weeks
Finished goods in stock.................................... 4 weeks
Credit allowed by suppliers 2 weeks
Credit allowed to Debtors ..... 6 weeks
Lag in payment of wages ..... 1 week
Cash in Bank (balance desired to be maintained) ..... Rs. 35,000You may assume that the production is carriedon evenly through-out the year ( 52 weeks) and wagesand overheads accrue similarly. All sales are on CreditBasis only.
OR
(b) Prepare an estimate of working capital required,from the following information :
Production (annual) ..... 1,20,000 units
Selling price per unit ..... Rs. 10
Raw materials $60 \%$ of selling price
Direct wages $10 \%$ of selling price
Overheads $20 \%$ of selling price
Material on hand 2 month's requirement
Work in process ..... 1 month
Finished goods in stock ..... 3 months
Credit allowed to customers ..... 3 months
Credit for purchase of materials ..... 2 months
Lag in payment of wages ..... 1 month
Lag in payment of overheads ..... 1 month
Average cash balance ..... Rs. 40,000
You may assume that production is carried onevenly throughout the year and wages and overheadsaccrue similarly. Assume 1 year $=12$ months.
3 (a) Explain Walter's model of Dividend Policy.7
OR
(a) What is dividend policy ? What factors will you consider before determing the policy ?
(b) Write a short note on : (any one)
(i) Listing of securities
(ii) Private placement
(iii) Public issue.

4 (a) Explain Modigliani - Miller approach to the theory of capital structure.

## OR

(a) Explain following terms: (any two)
(i) Earnings per share
(ii) Financial Break-even point
(iii) Price Earning Ratio
(iv) Financial Leverage.
(b) According to traditional approach the market value of company X and Y are as under :

|  | $\mathbf{X}$ | $\mathbf{Y}$ |
| :--- | ---: | ---: |
| Net Operating Income (EBIT) | 200000 | 200000 |
| Cost of Debts | 0 | 20000 |
| Net Income (NI) | 200000 | 180000 |
| Cost of equity capital (KC) | $10 \%$ | $12 \%$ |
| Market value of equity S | 2000000 | 1500000 |
| Market value of debts | 0 | 400000 |
| Total value of the company | 2000000 | 1900000 |
| Average cost of capital | $10 \%$ | $9 \%$ |
| Debt Equity ratio | 0 | .05 |

According to NOI Approach, calculate the cost of equity capital and the value of company X and Y . Assume that there are no taxes and the rate of equilibrium is $12.5 \%$.
(b) The Financial Manager of Arvind Ltd. is planning to expand its operations. Rs. 10,00,000 will be required to implement this expansion plan. He has formulated various financial plans to finance this plan.
(i) Either Equity capital of Rs. $10,00,000$ or Rs. 5,00,000 10\% Debentures and Rs. 5,00,000 equity.
(ii) Either equity capital of Rs. 5,00,000 and 10\% Debentures of Rs. 5,00,000 or equity capital of Rs. 4,00,000 and $12 \%$ preference shares of Rs. 6,00,000.

Determine the indifference point for each Financial plan, assuming $35 \%$ corporate tax rate, no dividend tax, face value of equity shares as Rs. 100.

5 (a) What is Conventional and Non conventional cash flows ? Explain with an example.
(b) A machine costing Rs. 120 lakhs has a life of 10 years at the end of which its scrap value is likely to be 15 lakhs. The firms cutoff rate is $12 \%$. The machine is expected to yield an annual profit after tax of Rs. 14 lakhs, depreciation being reckoned on SLM basis.

Ascertain the NPV and IRR of the project.

## OR

5 A toy manufacturing company is considering replacing an existing piece of equipment with new machine. The old machine was purchased three years ago at a cost of Rs. 70,000. The machine originally had a projected life of 7 years and was to be depreciated straight line to zero salvage value. The new machine would cost Rs. 90,000 to purchase and Rs. 30,000 to install. Due to the expension in operation the management estimates the net working capital requirement of machine at Rs. 15,000. It has a four
year life with no salvage value. It will be depreciated on SLM basis. The old machine can be sold for Rs. 20,000. The tax rate is $35 \%$ and cost of capital is $10 \%$. The Incremental Projected Profit before depreciation and taxes are as follows :
Year $\left.\begin{array}{c}\text { Incremental cash } \\ \text { in flows before } \\ \text { depreciation and } \\ \text { taxes }\end{array}\right\}$

Should the company replace the old machine with new one ? The gains arising from disposal of used assets are considered tax free.

