

current level of 2 percent to 4 percent of sales. Total credit sales are expected to increase from 50,000 units to 75,000 units. The present average cost per unit is Rs. 15, and the variable cost and sales per unit are Rs. 12 and Rs. 20 respectively. Assume the firm expects a rate of return of 20 percent. Should the firm extend the credit period? (12)

(b) Briefly discuss the various techniques of cash management. (6)

[This question paper contains 8 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 5164

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Unique Paper Code : 2922062402

Name of the Paper : Financial Management

Name of the Course : BMS

Semester : IV

Duration : 3 Hours

Maximum Marks : 90

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Answer any **five** questions.
3. **All** questions carry equal marks.
4. Attempt parts of a question together.
5. Show your workings clearly on the answer sheet itself.
6. Use of Simple Calculator is allowed.

1. (a) A plastic manufacturer has under consideration the proposal of production of high-quality plastic glasses. The necessary equipment to manufacture the glasses would cost Rs. 1 lakh and would last 5 years. The tax-relevant rate of depreciation is 20 percent on written down value. There is no other asset in this block. The expected salvage value is Rs. 10,000. The glasses can be sold at Rs. 4 each. Regardless of the level of production, the manufacturer will incur cash cost of Rs. 25,000 each year if the project is undertaken. The variable costs are estimated at Rs. 2 per glass. The manufacturer estimates it will sell about 75,000 glasses per year; the tax rate is 35 percent. Should the proposed equipment be purchased? Assume 20 percent cost of capital and additional working requirement, Rs. 50,000. (12)

- (b) Discuss the MIRR technique of Capital Budgeting. (6)

2. (a) ABC Ltd was started a year ago with a paid-up equity capital of ₹40,00,000. The other details are as under :

- (vii) Average credit allowed to debtors is 4 weeks.
- (viii) Average credit allowed by suppliers is 2 weeks.
- (ix) Lag in payment of wages average 1 week.
- (x) Lag in payment of overheads average 2 week.
- (xi) The company wishes to have a desired cash balance of Rs. 50,000.
- (xii) 10 percent of net working capital is required to be maintained for contingencies.

You may assume that production is carried on evenly throughout the year (52 weeks) and wages and overheads accrue similarly. (12)

- (b) Explain systematic and unsystematic risk. (6)

6. (a) X Ltd. is contemplating an increase in the credit period from 45 days to 60 days. The average collection period which is at present 60 days is expected to increase to 75 days. It is also likely that the bad debt expenses will increase from the

Estimated cost per unit of production:	(Rs.)
Raw Material	50
Direct Labour	30
Overheads (inclusive of depreciation Rs. 10)	25
Selling & Distribution	15
Total	120

The following information is also available :

- (i) It is proposed to maintain a level of activity of 3,00,000 units per annum.
- (ii) Selling price is Rs. 150 per unit.
- (iii) Raw materials are expected to remain in stores for an average period of 4 weeks.
- (iv) Work-in-progress (assume 50% completion stage) are expected to remain in stores for an average period of 2 weeks. Assume raw material is completely fed into the production process at the beginning of the period.
- (v) Finished goods are required to be in stock for an average period of 6 weeks.
- (vi) 60% of total sales are credit sales.

Earnings of the company: ₹4,00,000

Dividend paid: ₹3,20,000

Price-earnings ratio: 12.5

Number of shares: 40,000

- (i) Find the company's dividend payout ratio.
Find the market price of a share of the company at this payout ratio, using Walter's model.
- (ii) Is the company's dividend payout ratio optimal as per Walter's model? Why?
- (iii) What is the market price of a share of the company at the 'optimal dividend payout' ratio as per Walter's model? (12)
- (b) How does Gordon's model differ from Walter's approach to the relevance of dividends? What are their similarities? (6)
3. (a) Company X and Company Y are in the same risk class and are identical in all respects except that Company X uses debt, while Company does not. The levered firm has ₹9,00,000 debentures, carrying a 10% interest rate. Both firms earn 20%

operating profit on their total assets of ₹15 lakhs. Assume perfect capital markets, rational investors, and so on; a tax rate of 35% and a capitalization rate of 15% for an all-equity company.

- (i) Compute the value of firms X and Y using the Net Income (NI) Approach.
 - (ii) Compute the value of each firm using the Net Operating Income (NOI) Approach.
 - (iii) Using the NOI Approach, calculate the overall cost of capital for firms X and Y.
 - (iv) Which of these two firms has an optimal capital structure according to the Net Operating Income (NOI) Approach? Why? (12)
- (b) How does the cost of equity capital behave in the traditional theory and MM approach to capital structure? (6)
4. (a) Calculate the explicit cost of debt for each of the following situations :

- (i) Debentures are sold at par and flotation costs are 5 percent.
- (ii) Debentures are sold at premium of 10 percent and flotation costs are 5 percent of issue price.
- (iii) Debentures are sold at discount of 5 percent and flotation costs are 5 percent of issue price. Assume :
 - (a) coupon rate of interest on debentures is 10 percent;
 - (b) face value of debentures is Rs. 100;
 - (c) maturity period is 10 years; and
 - (d) tax rate is 35 percent. (12)

- (b) How weighted average cost of capital is computed? Explain. (6)

5. (a) Your client has requested you to estimate net working capital required for his project on the basis of data given below :