

# Question Paper

## Financial Management – II (142): July 2005

- Answer all questions.
- Marks are indicated against each question.

1. Which of the following is/are **not** feature(s) of preference shares? < Answer >
- I. Preference shareholders have preference over equity shareholders to the pre-tax earnings in the form of dividends.  
II. Preference-dividend is tax deductible.  
III. Voting rights can be given to the preference shareholders in the case of cumulative preference shares, if there are arrears in dividends for two or more years.
- (a) Only (I) above  
(b) Only (II) above  
(c) Only (III) above  
(d) Both (I) and (II) above  
(e) Both (II) and (III) above.
- (1 mark)**
2. Which of the following statements is **true**? < Answer >
- (a) Retained earnings represent the profits ploughed back into the business  
(b) Retained earnings are given lesser importance, when a firm follows a residual dividend policy  
(c) Retained earnings represent the extent to which the firm has invested in liquid assets out of its profits  
(d) Retained earnings is the only principal source of finance for growing firms  
(e) Retained earnings cannot be utilized by a firm to buy-back its shares.
- (1 mark)**
3. When a company makes a rights issue, which of the following is **true** for a shareholder who lets his rights lapse? < Answer >
- (a) His wealth increases  
(b) His wealth remains constant  
(c) His wealth decreases  
(d) His wealth may increase or decrease depending on the situation  
(e) There is insufficient information to draw any inference.
- (1 mark)**
4. Which of the following is **not** an assumption underlying the Modigliani and Miller approach to capital structure? < Answer >
- (a) Information is freely available to investors and securities traded in the market are infinitely divisible  
(b) The transaction cost is constant irrespective of the value of the transactions in securities  
(c) Firms can be divided into classes in such a way that all the firms falling within one class have the same degree of business risk  
(d) There is no corporate or personal income tax  
(e) Investors make rational investment decisions.
- (1 mark)**
5. In the presence of floatation costs, the cost of external equity is < Answer >
- (a) More than the cost of existing equity capital  
(b) Less than the cost of existing equity capital  
(c) Equal to the cost of existing equity capital  
(d) Equal to the cost of long-term debt  
(e) Equal to the cost of short-term debt.

**(1 mark)**

6. Which of the following statements is **false**?

[< Answer >](#)

- (a) If the probability of bankruptcy is very high, assets are likely to be sold at a significant discount to their true economic values
- (b) Bankruptcy entails high legal and administrative costs
- (c) Other things remaining the same, the probability of bankruptcy is lower for a levered firm than for an unlevered firm
- (d) The equity shareholders expect a higher rate of return from a firm, which is faced with the problem of bankruptcy
- (e) Beyond a threshold level, the probability of bankruptcy increases at an increasing rate, as the debt-equity ratio increases.

(1 mark)

7. A company has retained earnings of Rs.72 lakh and equity capital of Rs.38 lakh. If the equity investors expect a rate of return of 17% and the cost of issuing fresh equity is 6%, the cost of the retained earnings to the company is

[< Answer >](#)

- (a) 16.4%                      (b) 17.0%                      (c) 17.7%                      (d) 18.1%                      (e) 19.1%.

(1 mark)

8. Glamour Ltd. earned a profit of Rs.20 lakh before providing for interest and tax. The company's capital structure consists of 4,00,000 equity shares of Rs.10 each and 25,000, 14% secured redeemable debentures of Rs.150 each. The cost of equity is 16%. The value of the firm under net income approach is

[< Answer >](#)

- (a) Rs.37,50,000                      (b) Rs.50,37,000                      (c) Rs.92,18,750  
(d) Rs.92,81,750                      (e) Rs.1,29,68,750.

(2 marks)

9. Consider the following data of M/s. Moontrack Ltd.

[< Answer >](#)

|                        |             |
|------------------------|-------------|
| Market Value of Debt   | Rs.5,00,000 |
| Interest               | Rs.30,000   |
| Net Operating Income   | Rs.1,00,000 |
| Cost of Equity Capital | 14%         |

If debt-equity ratio increases to 6:5, the revised equity capitalization rate according to net operating income approach is

- (a) 10.0%                      (b) 12.4%                      (c) 14.0%                      (d) 14.8%                      (e) 20.0%.

(3 marks)

10. Which of the following statements is **false**?

[< Answer >](#)

- (a) A firm with a high capital intensity relies more on long term debt and equity
- (b) The capital structure of a firm should be built conservatively, if chances of obsolescence are high
- (c) Term loan is the cheapest source of finance
- (d) In a non-seasonal and non-cyclical business, investment in current assets is usually financed by short term debt
- (e) An aggressive capital structure will be tilted more towards debt than equity.

(1 mark)

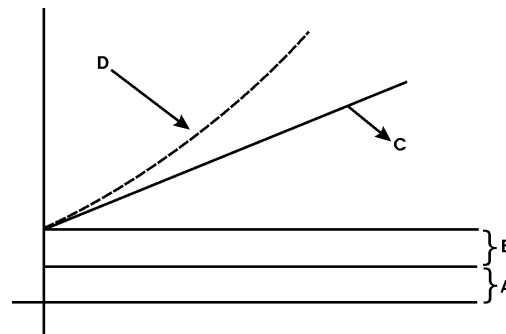
11. Which of the following costs is/are the direct cost(s) of bankruptcy?

[< Answer >](#)

- I. Out of pocket expenses that arise in the course of going through a bankruptcy.
  - II. Shortfall in value that arises from economic inefficiencies, when it is about to go bankrupt.
  - III. Fees and other compensation paid to third parties due to bankruptcy.
- (a) Only (I) above  
(b) Only (II) above  
(c) Only (III) above  
(d) Both (I) and (III) above  
(e) All (I), (II) and (III) above.

(1 mark)

12. The following figure shows the relationship between the required rate of return on equity and the leverage ratio: < Answer >

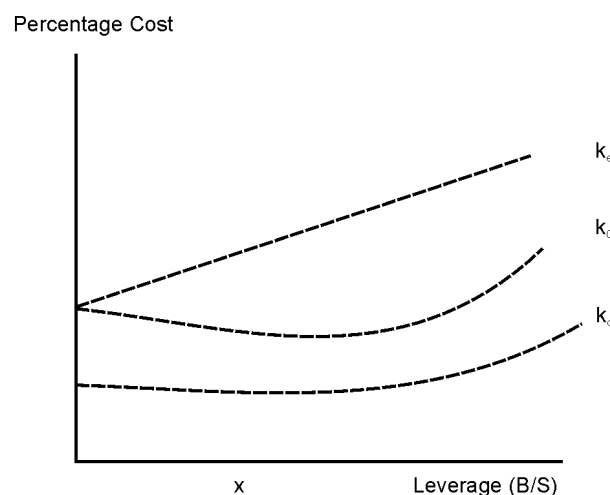


Which of the following is/are **true**?

- I. Leverage is represented on the Y- axis.
  - II. 'A' denotes the premium for business risk.
  - III. 'B' denotes the premium for financial risk.
  - IV. Line 'D' denotes increase in cost of equity with increased leverage in the presence of bankruptcy costs.
- (a) Only (II) above
  - (b) Only (IV) above
  - (c) (I), (II) and (III) above
  - (d) (II), (III) and (IV) above
  - (e) All (I), (II), (III) and (IV) above.

**(1 mark)**

13.



< Answer >

The above graph is related to which of the following approaches to cost of capital?

- (a) Net operating income approach
- (b) Net income approach
- (c) Traditional approach
- (d) Modigliani Miller approach
- (e) Merton Miller approach.

**(1 mark)**

14. Which of the following statements fall(s) under the Proposition (II) of Modigliani and Miller approach to capital structure? < Answer >

- I. The investment and financing decisions of a firm are independent of each other.
- II. The market value of a firm is independent of its capital structure and is determined by capitalizing its expected return at the rate appropriate to its class.
- III. The expected yield on common stock (cost of equity) is equal to the sum of the capitalization rate for a pure equity stream of a specific class and the premium based on the financial risk.

- (a) Only (I) above
- (b) Only (III) above
- (c) Both (I) and (III) above
- (d) Both (II) and (III) above
- (e) All (I), (II) and (III) above.

**(1 mark)**

15. In a world with corporate taxes but no possibility of firms' financial distress, the value of the firm will be maximized, when [< Answer >](#)
- (a) Pure debt is used (b) Pure equity is used  
(c) Debt and equity are used in equal proportions (d) Debt equity ratio is 2:1  
(e) Debt equity ratio is 3:2.
- (1 mark)**
16. Which of the following assumptions, if not held, will vitiate the capital structure theories? [< Answer >](#)
- I. The net operating income is expected to grow or decline over time.  
II. Investors have identical subjective probability distributions of net operating income.  
III. The firm has a policy of retaining all its earnings.
- (a) Only (I) above (b) Only (II) above  
(c) Only (III) above (d) Both (I) and (III) above  
(e) Both (II) and (III) above.
- (1 mark)**
17. Which of the following is/are the limitation(s) of Walter model on dividend policy? [< Answer >](#)
- I. Exclusive financing by retained earnings makes the model suitable only for all equity firms.  
II. In case of high investments the return on investment will not be constant.  
III. The business risk of the firm has a direct impact on the value of the firm, thus cost of equity capital cannot be constant.
- (a) Only (I) above (b) Only (II) above  
(c) Both (I) and (II) above (d) Both (II) and (III) above  
(e) All (I), (II) and (III) above.
- (1 mark)**
18. Which of the following committees has **not** dealt with working capital financing? [< Answer >](#)
- (a) Dahejia Committee (b) Tandon Committee  
(c) Kannan Committee (d) Chore Committee (e) Marathe Committee.
- (1 mark)**
19. Decreasing the balances of a firm's inventory would result in [< Answer >](#)
- (a) Decreasing illiquidity and solvency costs  
(b) Decreasing order and setup costs associated with replenishment and production of finished goods  
(c) Increasing costs of investment in accounts receivable and bad debts  
(d) Increasing opportunity costs of lost sales due to the availability of low inventory  
(e) Increasing opportunity cost of funds invested in inventory and accounts receivable.
- (1 mark)**
20. Which of the following types of factoring offers short-term finance, sales ledger administration as well as credit protection simultaneously? [< Answer >](#)
- (a) Recourse factoring (b) Non-recourse factoring  
(c) Maturity factoring (d) Invoice discounting  
(e) Supplier guarantee factoring.
- (1 mark)**
21. Shelf stock refers to [< Answer >](#)
- (a) Items that are stored by the firm and sold with little or no modification to customers  
(b) Items that are sold with a major modification to customers  
(c) Items that are stored by the firm and are not sold at all  
(d) Items that lost their value and sold as scraps  
(e) Items that are stored by the firm and sold, when there is sudden increase in demand.
- (1 mark)**
22. When we allow for taxes, bankruptcy and agency costs, the cost of capital for a firm [< Answer >](#)
- (a) Remains constant with increasing levels of financial leverage  
(b) First declines and then ultimately rises with increasing levels of financial leverage

- (c) Increases with increasing levels of financial leverage
- (d) Decreases with increasing levels of financial leverage
- (e) First increases and then ultimately decreases with increasing levels of financial leverage.

(1 mark)

23. The maximum time period allowed for public deposits in India is

[< Answer >](#)

- (a) 1 year
- (b) 2 years
- (c) 3 years
- (d) 5 years
- (e) 10 years.

(1 mark)

24. If the marginal reduction in ordering costs exceeds the marginal increase in carrying cost of inventory,

[< Answer >](#)

- (a) The firm has minimized its' carrying cost
- (b) The firm should increase the number of orders
- (c) The firm should decrease the number of orders
- (d) The firm has maximized its' ordering costs
- (e) The firm has minimized its' total cost.

(1 mark)

25. A company can improve (lower) its debt-to-total assets ratio by

[< Answer >](#)

- I. Selling debentures.
- II. Selling common stock.
- III. Selling fixed assets.

- (a) Only (I) above
- (b) Only (II) above
- (c) Only (III) above
- (d) Both (II) and (III) above
- (e) All (I), (II) and (III) above.

(1 mark)

26. Overtrading means

[< Answer >](#)

- (a) The firm has disproportionately high amount of working capital with respect to the level of sales
- (b) The firm has disproportionately low amount of working capital with respect to the level of sales
- (c) The firm has disproportionately high level of receivables with respect to total assets
- (d) The firm has disproportionately high level of cash with respect to total assets
- (e) The firm has been experiencing low turnover of working capital.

(1 mark)

27. Which of the following is **not** a legitimate financial reason for holding marketable securities?

[< Answer >](#)

- (a) The firm has just sold long-term securities and has not yet invested the proceeds in earning assets
- (b) The firm has purchased a fixed asset that will require a large write-off of depreciable expense
- (c) The firm must finance seasonal operations
- (d) The firm must pay dividends on the issued securities
- (e) The firm must pay taxes during this month.

(1 mark)

28. Which of the following is/are **true** regarding the choice of the mix of cash and near cash assets?

[< Answer >](#)

- I. If the degree of uncertainty surrounding cash flow projections is low, the companies will be tilted more towards marketable securities and intercorporate deposits.
- II. If the company has access to non-bank sources of funds, it will tend to have a higher proportion of intercorporate deposits and marketable securities.
- III. When a high degree of uncertainty is associated with the future cash flows of a firm, the firm should invest all the cash in equity shares.
- IV. When a high degree of uncertainty is associated with the future cash flows of a firm, the firm should maintain adequate cash balance and have an overdraft arrangement with a bank.
- V. When the management of a firm is averse towards risk, the firm should maintain a higher proportion of funds in the form of equity shares and intercorporate deposits than in the form of cash.

- (a) Only (I) above
- (b) Only (III) above
- (c) (I), (II) and (IV) above
- (d) (I), (III) and (V) above
- (e) All (I), (II), (III), (IV) and (V) above.

(1 mark)

29. Which of the following is **not** true regarding the P/E ratio?

[< Answer >](#)

- (a) It is the multiplier applied to earnings per share to determine its current value
- (b) P/E ratios allow comparison of the relative market values of various companies based on Re.1 of earnings per share
- (c) It indicates expectations about the future of a company
- (d) Firms expected to provide returns greater than those of the market with equal or less risk normally have P/E ratios lower than the market P/E
- (e) It does not provide any idea regarding the book value of the company.

(1 mark)

30. In what manner does depreciation expense affect investment projects?

[< Answer >](#)

- (a) It reduces cash flows by the amount of the depreciation expense
- (b) It increases cash flows by the amount of the depreciation expense
- (c) It reduces taxable income by the amount of the depreciation expense
- (d) It reduces taxes by the amount of the depreciation expense
- (e) It increases taxable income by the amount of the depreciation expense.

(1 mark)

31. If a project has a net present value of Rs.80, the project's profitability index will be

[< Answer >](#)

- (a) Equal to 0.8
- (b) Greater than 1
- (c) Equal to 1
- (d) Less than 1
- (e) Insufficient information.

(1 mark)

32. Which of the following statements is/are **true**?

[< Answer >](#)

- I. Collection float indicates the amount of cheques issued by a company, awaiting payment by the bank.
  - II. If the collection float is more than the payment float, the company is said to have positive net float.
  - III. When the bank balance as per the books of the company is less than that in the bank's books, the company can play the float.
  - IV. Payment float is the amount of cheques that have been received but not credited to the firm's accounts.
- (a) Only (II) above
  - (b) Only (III) above
  - (c) Both (II) and (III) above
  - (d) (I), (III) and (IV) above
  - (e) All (I), (II), (III) and (IV) above.

(1 mark)

33. Which of the following statements is/are **incorrect**?

[< Answer >](#)

- I. A stock out is a situation, when the firm does not have an item in stock but there is a demand for that from a customer or from production department.
  - II. Managing stock outs requires a trade off between carrying cost and stock out cost.
  - III. The economic order quantity is the order quantity that minimizes total ordering costs.
- (a) Only (I) above
  - (b) Only (II) above
  - (c) Only (III) above
  - (d) Both (I) and (III) above
  - (e) Both (II) and (III) above.

(1 mark)

34. A company is considering three projects. Required rates of return on projects A, B and C are respectively 10%, 8% and 12%. Which of the following independent projects should the company accept?

[< Answer >](#)

- I. Project A has an IRR of 9 percent.
  - II. Project B has an IRR of 8.5 percent.
  - III. Project C has an IRR of 11 percent.
- (a) Only (I) above
  - (b) Only (II) above
  - (c) Only (III) above
  - (d) Both (II) and (III) above

(e) All (I), (II) and (III) above.

(1 mark)

35. Which of the following statements is/are **not** true with respect to internal rate of return?

< Answer >

- I. Internal rate of return gives the maximum net present value for any project.
- II. The internal rate of return of a project does not change, as the cost of capital changes.
- III. It ignores the cash flows of the project beyond payback period.

- (a) Only (II) above
- (b) Only (III) above
- (c) Both (I) and (III) above
- (d) Both (II) and (III) above
- (e) All (I), (II) and (III) above.

(1 mark)

36. Which of the following involves selecting a mutually exclusive investment?

< Answer >

- (a) Ranking the NPVs of projects and making selections until funds are exhausted
- (b) Selecting either project A or project B
- (c) Trying to coordinate the selection of two similar projects
- (d) Evaluating a proposal to significantly upgrade an old machine
- (e) Selecting both projects A and B.

(1 mark)

37. Large batch size orders

< Answer >

- (a) Are easier for the supplier to manage
- (b) Are difficult for the supplier to manage
- (c) Are more costly for the supplier
- (d) Decrease the customer's inventory levels
- (e) Increase the customer's flexibility to deal with sudden market changes.

(1 mark)

38. Lengthening the credit period is likely to result in all of the following except

< Answer >

- (a) Higher sales
- (b) More cash sales
- (c) Larger investment in receivables
- (d) Longer average collection period
- (e) More cost of holding receivables.

(1 mark)

39. The internal rate of return for a project that has a net investment of Rs.1,50,000 and net cash flows of Rs.40,000 for 5 years is

< Answer >

- (a) Between 9% and 10%
- (b) Between 10% and 11%
- (c) Between 11% and 12%
- (d) Between 12% and 13%
- (e) Between 14% and 15%.

(1 mark)

40. Sansung & Son Inc. is thinking about expanding their business by opening another shop on property, they purchased 10 years ago. Which of the following items should be included in the analysis of this endeavor?

< Answer >

- I. The property was cleared of trees and bushes 5 years ago at a cost of Rs.5,000.
  - II. The new shop is expected to affect the profitability of the existing shop since some current customers will transfer their business to the new shop. Sansung & Son estimates that profits at the existing shop will decrease by 10 percent.
  - III. Sansung & Son can lease the entire property to another company (that wants to grow flowers on the lot) for Rs.5,000 per year.
- (a) Only (I) above
  - (b) Only (II) above
  - (c) Both (I) and (II) above
  - (d) Both (II) and (III) above
  - (e) All (I), (II) and (III) above.

(1 mark)

[< Answer >](#)

41. Indian Associates Inc. has Rs.40,00,000 in assets and currently has no debt. It is financed entirely with 3,00,000 shares of common stock, each of which trades at Rs.15 per share. The firm's EBIT is expected to be Rs.10,00,000 at year end i.e. at  $t = 1$ . The corporate tax rate is 40 percent. Indian Associates expects to pay out a dividend at year-end, which is 55 percent of its net income. The company estimates that its earnings and dividends grow at a constant rate of 5 percent a year. Suppose Indian Associates can issue Rs.12,00,000 in debt at an interest rate of 10% and uses the proceeds to repurchase shares of stock at the original price of Rs.15. The cost of stock after the change in capital structure will be 12 percent. If the expected growth rate and payout ratio do not change, what is the expected price after the change in capital structure?

(a) Rs.17.25      (b) Rs.15.00      (c) Rs.18.86      (d) Rs.20.98      (e) Rs.33.17.

(3 marks)

[< Answer >](#)

42. Deccan Paints Ltd. has 10 lakh equity shares outstanding and these shares are presently traded in NSE at Rs.150 each. The rate of capitalization appropriate to the risk class to which the firm belongs is 12%. The net income for the year is Rs.2 crore and the investment budget is Rs.4 crore. Assume that no dividend will be declared and the additional fund requirement will be financed by new issue of equity shares. If Modigliani-Miller hypothesis holds good, the number of equity shares to be issued by the company is

(a) 1,09,048      (b) 1,09,248      (c) 1,19,048      (d) 1,19,248      (e) 1,29,348.

(1 mark)

[< Answer >](#)

43. Fixup Ltd. currently has sales of Rs.10,00,000, and its days sales outstanding are 30 days. The financial manager estimates that offering longer credit terms would (1) increase the days sales outstanding to 50 days and (2) increase sales to Rs.12,00,000. However, bad debt losses, which were 2 percent on the old sales, would amount to 5 percent on the incremental sales only (bad debts on the old sales would stay at 2 percent). Variable costs are 80 percent of sales and Fixup has a 15 percent receivables financing cost. The annual incremental pre-tax profit, if credit period is extended will be (assume 360 days in a year)

(a) -Rs.1,000      (b) -Rs.1,666      (c) Rs. 18,334      (d) Rs.1,666      (e) Rs.1,000.

(2 marks)

[< Answer >](#)

44. The minimum cash flow that must be received at the end of year three to make a project, with an initial investment of Rs.40,000 with cash flows for the first and second year of Rs.13,000 each and an opportunity cost of capital of 12.5%, "acceptable" is

(a) Rs.18,173      (b) Rs.18,275      (c) Rs.19,284      (d) Rs.25,875      (e) Rs.30,565.

(2 marks)

[< Answer >](#)

45. Gamma International had bank balance of Rs.1,00,000 on 1st July, 2005 according to both the company's account and bank pass book. From that day, it issues daily cheques for Rs.25,000 that are cleared on the 3rd working day and deposits daily cheques of Rs.18,000 which are realized on the 2nd working day. The amount of net float on 3rd July is

(a) Rs.42,000      (b) Rs.38,000      (c) Rs.32,000      (d) - Rs.42,000      (e) - Rs.32,000.

(2 marks)

[< Answer >](#)

46. If the earnings per share is Rs.18, the payout ratio is 40%, the return on investment is 10% and cost of equity capital is 16%, the price-earning ratio of the share according to Gordon's dividend capitalization model is

(a) 2 times      (b) 4 times      (c) 8 times      (d) 16 times      (e) 32 times.

(1 mark)

[< Answer >](#)

47. The current collection pattern for XYZ Ltd., which sells on credit terms of 'net 30' is as follows:

| Percentage of Sales (%) | Collection period |
|-------------------------|-------------------|
| 20                      | 40 days           |
| 30                      | 50 days           |
| 25                      | 60 days           |
| 20                      | 90 days           |
| 5                       | Bad Debts         |



Annual sales, which are all on credit, are Rs.10,00,00,000. Variable costs are constant at 60% of sales price. The credit manager of the firm is planning to implement a stricter selection procedure for potential customers. It is expected that after the implementation of the same, the collection pattern will change as follows:

| Percentage of Sales (%) | Collection period |
|-------------------------|-------------------|
| 50                      | 40 days           |
| 30                      | 50 days           |
| 15                      | 60 days           |
| 5                       | Bad Debts         |

It is expected that the new selection procedure for potential customers will result in a decline in sales by 10% and reduction in bad debts to 2%. The interest cost of financing the debtors is 14% per annum. Assuming that 10% reduction in sales comes from 3% fall in bad debts and the balance 7% from those customers who would have paid after 60 days, the net benefit/loss due to stricter procedure will be

- (a) Rs.9,80,000      (b) Rs.18,00,000      (c) Rs.28,00,000  
(d) –Rs.8,53,000      (e) –Rs.18,00,000.

(3 marks)

[< Answer >](#)

48. Which of the following is/are **true** regarding a company following a conservative working capital policy?

- I. The company will finance its current assets more from long-term sources.
- II. The technical insolvency of the company will be high.
- III. The company will have a higher current ratio than one following an aggressive working capital policy.
- IV. The company will have a lower current assets turnover ratio than the one following an aggressive working capital policy.

- (a) Only (I) above      (b) Both (II) and (III) above  
(c) Both (III) and (IV) above      (d) (I), (II) and (III) above  
(e) (I), (III) and (IV) above.

(1 mark)

[< Answer >](#)

49. The following figures are collected from annual report of Hyderabad Ceramics Ltd.:

|                                                                | 2003<br>(in Rs. 000s) | 2004<br>(in Rs.000s) |
|----------------------------------------------------------------|-----------------------|----------------------|
| Raw materials inventory – Closing Balance                      | 160                   | 192                  |
| Work in process inventory – Closing Balance                    | 25                    | 45                   |
| Finished Goods inventory – Closing Balance                     | 30                    | 50                   |
| Purchases of raw materials during the year                     | 1135                  | 1242                 |
| Manufacturing expenses during the year                         | 1125                  | 1230                 |
| Depreciation                                                   | 75                    | 100                  |
| Selling, administration and financial expenses during the year | 200                   | 230                  |
| Excise Duty paid during the year                               | 120                   | 150                  |

Assuming 360 days in a year, what should be the average finished goods storage period of Hyderabad Ceramics for the year 2004?

- (a) 2 days      (b) 3 days      (c) 4 days      (d) 5 days      (e) 6 days.

(3 marks)

[< Answer >](#)

50. ABC Ltd. requires Rs.60 lakh in cash to meet its transaction needs during the next three-month cash planning period. It holds marketable securities of an equal amount. The annual yield on these marketable securities is 20%. The conversion of these securities into cash entails a fixed cost of Rs.3,000 per transaction. If the optimal lot size for conversion of securities into cash is Rs.6 lakh, the total cost of holding and converting cash is

- (a) Rs.30,000      (b) Rs.30,750      (c) Rs.37,500  
(d) Rs.45,000      (e) Rs.63,750.

(2 marks)

[< Answer >](#)

51. If the inventory turnover ratio is 7, the average number of days the inventory is in stock, is closest to

- (a) 70 days      (b) 52 days      (c) 45 days      (d) 36 days      (e) 25 days.

(1 mark)

[< Answer >](#)

52. Homemaker, a reputed washing machine manufacturer, plans to manufacture 12,000 sets of washing machines for the next year. The cost components are as follows:

| Item                                           | Unit Cost (Rs.) |
|------------------------------------------------|-----------------|
| Raw Material                                   | 5,000           |
| Manufacturing Expenses                         | 2,000           |
| Selling, administrative and financial expenses | 1,000           |

The selling price per unit is Rs.10,000 and sales may be assumed to be uniform throughout the year, while the manufacturing expenses are expected to be incurred evenly throughout the month. The durations at various stages of the operating cycle are given below:

|                       |          |
|-----------------------|----------|
| Raw material stage    | 2 months |
| Work in process stage | 1 month  |
| Finished goods stage  | 1 month  |
| Debtors stage         | 3 months |

If the minimum cash balance required is Rs.10,00,000, what is the estimate for the working capital requirement of the company?

- (a) Rs.350 lakh      (b) Rs.400 lakh      (c) Rs.450 lakh  
(d) Rs.500 lakh      (e) Rs.550 lakh.

(3 marks)

[< Answer >](#)

53. The objective of cash collection and disbursement policies is to

- (a) Minimize storage costs  
(b) Speed up collections and slow down disbursements  
(c) Maximize the return on near cash equivalents  
(d) Maximize the return on current assets  
(e) Maximize the return on equity.

(1 mark)

[< Answer >](#)

54. A firms' credit policy consists of which of the following items?

- (a) Credit period, cash discounts, credit standards, receivables monitoring  
(b) Credit period, cash discounts, credit standards, collection policy  
(c) Credit period, cash discounts, receivables monitoring, collection policy  
(d) Cash discounts, credit standards, receivables monitoring, collection policy  
(e) Credit period, receivables monitoring, credit standards, collection policy.

(1 mark)

[< Answer >](#)

55. Kotla Inc. has annual sales of Rs.3,65,00,000 (Rs.1,00,000 a day on a 365-day basis). On average, the company has Rs.1,20,00,000 in inventory and Rs.80,00,000 in accounts receivable. The company is looking for ways to shorten its net operating cycle, which is calculated on a 365-day basis. Its CFO has proposed new policies that would result in a 20% reduction in both average inventories and accounts receivable. The company anticipates that these policies will also reduce sales by 10%. Accounts payable will remain unchanged. What effect would these policies have on the company's net operating cycle? (Round off to the nearest whole day)

- (a) -40 days      (b) -22 days      (c) -13 days      (d) +22 days      (e) +40 days.

(2 marks)

[< Answer >](#)

56. Which of the following costs is **not** associated with inventory?

- (a) Material cost      (b) Shortage cost  
(c) Carrying cost      (d) Ordering cost      (e) Collection cost.

(1 mark)

[< Answer >](#)

57. A firm's credit policy

- I. Represents an investing decision.

II. Has no impact on a firm's average collection period.

III. Affects the level of a firm's bad debts.

- (a) Only (I) above (b) Only (II) above  
(c) Only (III) above (d) Both (I) and (II) above  
(e) Both (I) and (III) above.

**(1 mark)**

[< Answer >](#)

58. The Graham Dodd model on dividend policy gives

- (a) 3 times more weightage to dividends than to retained earnings  
(b) 3 times more weightage to retained earnings than to dividends  
(c) Same weightage to both dividends and retained earnings  
(d) 4 times more weightage to dividends than to retaining earnings  
(e) 4 times more weightage to retained earnings than to dividends.

**(1 mark)**

[< Answer >](#)

59. A firm has 80,00,000 ordinary shares outstanding. The current market price per share is Rs.33 and the book value per share is Rs.18. The firm's EPS is Rs.3.60 and dividend per share is Rs.3.00. The growth rate, assuming that past performance will continue is

- (a) 7% (b) 8% (c) 9% (d) 10% (e) 11%.

**(1 mark)**

[< Answer >](#)

60. M/s Max Ltd. is considering of introducing a cash discount in its credit terms. The company's current credit terms are 'net 30' and it would like to change it to 1/10, net 30. It is expected that 50% of the firm's customers will take advantage of the credit terms. The annual sales are Rs.50 lakh. If the required rate of return is 12% and the net change in the firm's operating profit due to change in credit policy is Rs.0.8 lakh, the incremental investment in receivables is (Assume the average collection period would decrease after new credit terms)

- (a) Rs.5,00,000 (b) Rs.6,00,000 (c) Rs.6,25,000  
(d) Rs.7,50,000 (e) Rs.8,75,000.

**(1 mark)**

[< Answer >](#)

61. Asterix Ltd. has received an order from Obelix Ltd., which insists that the Rs.50,000 of machinery be supplied on 60 days credit. The probability that Obelix Ltd will pay in 60 days is 0.6. However, if the order is accepted and Obelix does not default, there is a 70% chance that Obelix will place further eight identical orders in one year's time. Experience has shown that once a firm meets the credit terms on an initial order, the probability of default for the subsequent orders reduces to 0.1. Any work on this order will not hamper the regular operations of Asterix Ltd. The cost of production is Rs.40,000. The expected net benefit to Asterix from accepting the order, if it expects to receive eight further orders from Obelix is

- (a) Rs.1,500 (b) Rs.9,200 (c) Rs.18,000  
(d) Rs.20,980 (e) Rs.26,240.

**(2 marks)**

[< Answer >](#)

62. Lakeland Ramblers is considering two projects to boost their tourist revenue. Project A costs Rs.60,000 and produces annual net cash flows of Rs.25,000 for 5 years. Project B costs Rs.1,00,000 and produces annual net cash flows of Rs.25,000 for 10 years. If Lakeland's cost of capital is 12%, which project should be chosen using the net present value method?

- (a) Project A, NPV is Rs.8,791 higher  
(b) Project B, NPV is Rs.11,125 higher  
(c) Project A, NPV is Rs.18,250 higher  
(d) Project B, NPV is Rs.21,567 higher  
(e) Project A, NPV is Rs.28,383 higher.

**(2 marks)**

[< Answer >](#)

63. Laserscope Inc. is trying to determine the optimal combination of short-term and long-term debt to employ in financing its assets. Laserscope will have Rs.16 million in current assets and Rs.20 million in fixed assets next year and expects operating income (EBIT) to be Rs.4.1 million. The company's tax rate is 40% and its total debt ratio is 50%. The firm's debt will be financed by one of the following policies:

| Financing Policy | Amount of Short term debt | Interest rate on |                 |
|------------------|---------------------------|------------------|-----------------|
|                  |                           | Long term debt   | Short term debt |
| Aggressive       | Rs.12 million             | 11.0 %           | 7.5%            |
| Conservative     | Rs.6 million              | 10.3%            | 7.0%            |

What is the return on shareholders' equity under each policy?

- (a) Aggressive = 12.70% & conservative = 12.22%
- (b) Aggressive = 8.47% & conservative = 8.14%
- (c) Aggressive = 4.23% & conservative = 4.07%
- (d) Aggressive = 7.67% & conservative = 8.81%
- (e) Aggressive = 12.47% & conservative = 8.14%

(3 marks)

[< Answer >](#)

64. The annual cost of production is Rs.12,600 lakh and average conversion period is 3 days. The opening stock of work in process is 10% higher than the closing stock of work in process. Assuming 360 days in a year, the value of opening stock of work in process is

- (a) Rs.100 lakh
- (b) Rs.110 lakh
- (c) Rs.120 lakh
- (d) Rs.130 lakh
- (e) Rs.150 lakh.

(1 mark)

[< Answer >](#)

65. Lakshya Corp. is a retailer that can finance its purchases with trade credit under the terms: 1/10, net 30 days. The company plans to take advantage of the trade credit that is offered. After all the trade credit is used, the company can either finance the purchases with a bank loan at the rate of 10 percent (on a 365-day year), or the firm can continue to use trade credit. The company has an understanding with its suppliers to "stretch out" its payments beyond 30 days without facing any additional financing costs. Therefore, the longer it takes the company to pay its suppliers, the lower the cost of trade credit. How many days from the date of purchase would the firm wait to pay its suppliers in order for the cost of the trade credit to equal the cost of the bank loan? (Round off the figure to the nearest integer)

- (a) 30 days
- (b) 36 days
- (c) 40 days
- (d) 44 days
- (e) 47 days.

(2 marks)

[< Answer >](#)

66. The Godavari pump company uses about 1,00,000 valves per year and the usage is fairly constant at 5,280 valves per month. The valve's cost is Rs.2.50 per unit when bought in quantities and carrying cost is estimated to be 20% of average inventory investment on an annual basis. The cost to place an order and process the delivery is Rs.20. It takes 45 days to receive delivery from the date of an order and a safety stock of 3,560 valves is desired. You are required to determine the reorder point.

- (a) 7,920 units
- (b) 8,840 units
- (c) 10,000 units
- (d) 11,480 units
- (e) 12,625 units.

(1 mark)

[< Answer >](#)

67. The following are the inventory carrying and storage costs of Alpha Ltd.,

Orders must be placed in round lots of 100 units.

Annual usage is 5,00,000 units.

Carrying cost is 10% of the purchase price.

The purchase price is Rs. 500 per unit and the ordering cost is Rs.1,000 per order.

If the annual usage increases by 50% from the present level, what is the proportionate change in EOQ to the proportionate change in annual usage?

- (a) -36.67%
- (b) -28.89%
- (c) 44.44%
- (d) 46.67%
- (e) 56.67%.

(2 marks)

[< Answer >](#)

68. Blackbox Intelligence currently uses maximum trade credit by not taking discounts on its purchases. Blackbox is considering borrowing from its bank, using notes payable, in order to take trade discounts. The firm wants to determine the effect of this policy change on its net income. The standard industry credit terms offered by all its suppliers are 2/10, net 30 days and Blackbox pays in 30 days. Its purchases are Rs.11,760 per day, using a 365-day year. The interest rate on the notes payable is 10 percent and the firm's tax rate is 40 percent. If the firm implements the plan, what is the expected change in Blackbox's annual net income?

- (a) –Rs.23,520      (b) –Rs.31,440      (c) +Rs.23,520  
 (d) +Rs.37,679      (e) +Rs.69,888.

**(3 marks)**

69. Mardia Automobiles Ltd. is trying to determine the optimal order quantity for a critical spare part with the following particulars:

[< Answer >](#)

|                         |              |
|-------------------------|--------------|
| Annual usage            | 25,000 units |
| Price of each unit      | Rs.60        |
| Fixed cost per order    | Rs.500       |
| Inventory carrying cost | 20 percent.  |

Recently a supplier of the company has offered a discount of Rs.5 per unit, provided the quantity ordered in a single purchase should be at least 5,000 units. What will be the net incremental benefit of ordering 5,000 units in comparison to the economic order quantity?

- (a) Rs.1,12,321 gain      (b) Rs.1,12,321 loss  
 (c) Rs.1,10,321 gain      (d) Rs.1,10,321 loss  
 (e) No change in position.

**(3 marks)**

70. The following information is applicable to Kaul Electronics Ltd.:

[< Answer >](#)

|                            |             |
|----------------------------|-------------|
| Annual sales of television | 2,500 units |
| Fixed cost per order       | Rs.2,000    |
| Purchase price per unit    | Rs.8,000    |
| Carrying cost per unit     | Rs.1,600    |

What will be its economic order quantity for the television sets and the number of orders in a year? (Round off your answer to the nearest integer)

- (a) 59 units and 42 orders      (b) 69 units and 36 orders  
 (c) 79 units and 32 orders      (d) 89 units and 28 orders  
 (e) 99 units and 25 orders.

**(2 marks)**

71. Capital Foods purchased an oven 5 years ago for Rs.45,000. The oven is being depreciated over its estimated 10-year life using the straight line method to a salvage value of Rs.5,000. Capital is planning to replace the oven with a more automated one that will cost Rs.1,50,000 installed. If the old oven can be sold for Rs.30,000, what is the tax liability? Assume a marginal tax rate of 40 percent.

[< Answer >](#)

- (a) Rs.900      (b) Rs.1,000      (c) Rs.2,000      (d) Rs.1,20,000      (e) Rs.1,27,000.

**(2 marks)**

72. If the current assets and current liabilities are Rs.2,000 lakh and Rs.1,200 lakh respectively, how much amount can be borrowed on a short-term basis without reducing the current ratio below 1.5?

[< Answer >](#)

- (a) Rs.400 lakh      (b) Rs.1,000 lakh      (c) Rs.1,200 lakh  
 (d) Rs.1,400 lakh      (e) Rs.2,000 lakh.

**(1 mark)**

## Suggested Answers

### Financial Management – II (142): July 2005

1. Answer : (d)  $\leq$   
TOP  
 $\geq$   
Reason : Preference shares have the following features:
  - i. Preference shareholders earn a fixed rate of dividend.
  - ii. The dividends received by preference shareholders are not tax-deductible.
  - iii. Preference shareholders have preference over equity shareholders to the post-tax earnings in the form of dividends and assets in the event of liquidation.
  - iv. With the commencement of Companies Act, 1956, the issue of preference shares with voting rights has been restricted to the following cases:
    - When there are arrears in dividends for two or more years in case of cumulative preference shares.
    - When preference dividend is due for a period of two or more consecutive preceding years.
    - When in the preceding six years including the immediately preceding financial year, the company has not paid the preference dividend for a period of three or more years.

Hence statement (I) and (II) are incorrect and (III) is correct, hence the answer is (d).
2. Answer : (a)  $\leq$   
TOP  
 $\geq$   
Reason : Retained earnings represent the profits ploughed back into the business. Retained earnings are given more importance, when a firm follows a residual dividend policy. Retained earnings can be utilized by a firm to buy-back its' shares. Growing firms use not only retained earnings, other sources of finance also. Hence, alternative (a) is answer.
3. Answer : (c)  $\leq$   
TOP  
 $\geq$   
Reason : In rights issue, if a shareholder lets high rights lapse, his wealth decreases.
4. Answer : (b)  $\leq$   
TOP  
 $\geq$   
Reason : The MM approach to capital structure assumes that information is freely available to all the investors, that firms can be classified in such a way that firms falling within a class have the same degree of business risk, that there are no corporate or personal income taxes, that investors make rational investment decisions and that there are no transaction costs.
5. Answer : (a)  $\leq$   
TOP  
 $\geq$   
Reason : In the presence of floatation costs, the cost of external equity will always be more than the cost of existing equity capital (a). It has no logical connection with cost of long-term or short-term debt. Hence (b), (c), (d) and (e) are incorrect.
6. Answer : (c)  $\leq$   
TOP  
 $\geq$   
Reason : If the probability of bankruptcy is high, the assets are likely to be sold at a significant discount to their true economic values (a). Bankruptcy entails substantial expenditure on legal and administrative proceedings (b). The equity shareholders will require a higher rate of return, if the firm faces the problem of bankruptcy (d). The probability of bankruptcy is higher for a levered firm than for an unlevered firm. Hence (c) is false. Beyond a threshold level, the probability of bankruptcy increases at an increasing rate, as the debt-equity ratio increases.
7. Answer : (b)  $\leq$   
TOP  
 $\geq$   
Reason : Retained earnings are the amount pertaining to equity holders, which have not been paid to them. Therefore, the cost of retained earnings will be equal to expected return of equity holder. And as there is no cost of issue involved, it will be 17%.
8. Answer : (e)  $\leq$   
TOP  
 $\geq$   
Reason : Market value of Debt =  $150 \times 25,000 = \text{Rs.}37,50,000$   

$$\text{Market value of Equity} = \frac{\text{Net income}}{k_e} = \frac{20,00,000 - 5,25,000}{0.16}$$

= Rs.92,18,750  
 $\therefore$  Market value of the firm = Rs.92,18,750 + 37,50,000  
 =Rs.1,29,68,750.

9. Answer : (d)

Reason : As per Net Operating Income Approach

$$k_e = \frac{\text{NOI} - \text{INT}}{S}$$

where symbols are in their standard use

$$\therefore S = \frac{1,00,000 - 30,000}{0.14} = \text{Rs.}5,00,000$$

Market value of Debt = Rs.5,00,000 (given)

$\therefore$  Value of the firm = Rs.10,00,000

$$\text{Overall cost of capital } k_o = \frac{\text{NOI}}{V} = \frac{1,00,000}{10,00,000} \times 100 = 10\%$$

$$K_d = \frac{30,000}{5,00,000} \times 100 = 6\%$$

As per NOI approach, overall cost of capital will remain constant even if the debt-equity ratio changes.

$$k_e = k_o + (k_o - k_d) \frac{D}{E}$$

$$\therefore k_e = 0.10 + (0.10 - 0.06) \frac{6}{5}$$

$$= 0.10 + 0.048 = 0.148 = 14.8\%.$$

10. Answer : (d)

Reason : Forecasting is difficult in a non-seasonal and non-cyclical business and thus long-term finance is preferable instead of short-term debt. Because after a short period of time the debt has to be refunded. So the correct answer is (d).

11. Answer : (d)

Reason : The short fall in value arising from economic inefficiency can be a cause of bankruptcy and is not a direct cost of bankruptcy. On the other hand, out of pocket expenses and fees and other compensation are direct fallout of the bankruptcy. So the answer would be (d).

12. Answer : (b)

Reason : As the leverage increases, the cost of equity also increases because shareholders demand more premiums for taking bankruptcy risk. And the cost of capital also increases at an increasing pace. D represents it. A denotes risk free rate. B denotes the premium for business risk. C denotes the premium for financial risk. Hence, statement (IV) is correct.

13. Answer : (c)

Reason : This diagram is based on traditional approach of capital structure theories. In this theory, it is said that the cost of debt capital remains more or less constant up to a certain degree of leverage but rises thereafter at an increasing rate. Also the cost of equity capital remains more or less constant up to a certain degree of leverage but rises thereafter at an increasing rate. As a consequence of this, the average cost of capital behaves similarly to the cost of equity and cost of debt capital.

14. Answer : (b)

Reason : Under proposition (II) of MM approach, it is said that the expected yield on common stock (cost of equity) is equal to the sum of the capitalization rate for a pure equity stream of a specific class and the premium based on the financial risk. The risk premium is a function of the leverage applied (debt-equity ratio) and the spread between the capitalization rate (cost of capital) and the cost of debt. Hence, the answer would be (b).

15. Answer : (a)

- Reason : Since interest on debt is tax deductible and there is no possibility of firms' financial distress, the value of the firm maximizes with more use of leverage. Hence, the correct answer is (a).  $\frac{TOP}{\geq}$
16. Answer : (b)  $\frac{\leq}{TOP}$   
Reason : The following are some of the common assumptions made to understand the relationship between financial leverage and cost of capital.  
i. There is no income tax, corporate or personal.  
ii. The firm has a policy of paying all its' earnings as dividend, i.e. a 100% dividend pay-out ratio is assumed.  
iii. Investors have identical subjective probability distributions of net operating income (earnings before income and taxes) for each company.  
iv. The net operating income is not expected to grow or decline over time.  
Without incurring transaction costs, a firm can change its capital structure instantaneously.
17. Answer : (e)  $\frac{\leq}{TOP}$   
Reason : All the above mentioned statements are the valid criticism of the Walter model on dividend policy.  $\frac{\geq}{TOP}$
18. Answer : (a)  $\frac{\leq}{TOP}$   
Reason : Dahejia Committee has not dealt with working capital financing.  $\frac{\geq}{TOP}$
19. Answer : (d)  $\frac{\leq}{TOP}$   
Reason : Holding lower levels of inventory leads to increasing costs of lost sales.  $\frac{\geq}{TOP}$
20. Answer : (b)  $\frac{\leq}{TOP}$   
Reason : In case of non-recourse factoring, the factor offers short-term finance, sales ledger administration as well as credit protection simultaneously. All these facilities simultaneously are not available in any other mode of factoring.  $\frac{\geq}{TOP}$
21. Answer : (a)  $\frac{\leq}{TOP}$   
Reason : Shelf stock refers to items that are stored by the firm and sold with little or no modification to customers.  $\frac{\geq}{TOP}$
22. Answer : (b)  $\frac{\leq}{TOP}$   
Reason : When we use more debt capital in the capital structure the cost of capital primarily decreases because the interest is a tax deductible expense. But if the process continues the cost of capital will rise because the advantage with the increasing level of financial leverage will be offset by the higher cost of equity. Hence, alternative (b) is correct.  $\frac{\geq}{TOP}$
23. Answer : (c)  $\frac{\leq}{TOP}$   
Reason : The maximum maturity period allowed for public deposits is three years, while the minimum permitted maturity period is six months. In certain cases, a maturity period of even three months also is allowed. By and large companies invite public deposits with maturity periods of 1,2 and 3 years.  $\frac{\geq}{TOP}$
24. Answer : (b)  $\frac{\leq}{TOP}$   
Reason : If the marginal reduction in order costs exceeds the marginal carrying cost of inventory, the firm should increase the number of orders.  $\frac{\geq}{TOP}$
25. Answer : (b)  $\frac{\leq}{TOP}$   
Reason : A company can improve (lower) its' debt-to-total assets ratio by selling some common stock, so the total assets (cash) will increase and the total debt will remain the same, hence, the debt to total asset ratio will decrease. In first statement (I), the ratio will increase and in case of (III) statement, it will remain same. Hence, alternative (b) is answer.  $\frac{\geq}{TOP}$
26. Answer : (b)  $\frac{\leq}{TOP}$   
Reason : Overtrading means that the firm has disproportionately low level of working capital with respect to the level of sales. To define it as a state in which the firm has disproportionately high level of working capital with respect to sales or a disproportionately high level of receivables with respect to total assets or a



disproportionately high level of cash with respect to total assets or low turnover of working capital is incorrect. Hence, alternative (b) is answer.

27. Answer : (b)  $\leq$   
TOP  
 $\geq$   
Reason : Depreciation is the non-cash item. Hence, purchase of fixed assets that will require a large right off has nothing to do with cash requirement and so is not related to holding of marketable securities. The correct answer is (b).
28. Answer : (c)  $\leq$   
TOP  
 $\geq$   
Reason : Statement (I) is true, because low degrees of uncertainty surrounding the cash flow projections implies that there will be less uncertainty surrounding the availability of cash from operations. Hence the firm may reduce the amount of cash (because it earns no return) and invest funds in liquid assets like marketable securities and intercorporate deposits, which earn returns.  
Statement (II) is true, because a company, which has access to non-bank sources of funds, will not tend to keep idle cash and will invest its funds in intercorporate deposits and marketable securities, which earn returns. Hence, there will be a higher proportion of investment in intercorporate deposits and marketable securities.  
Statement (III) is false, because when a high degree of uncertainty is associated with the future cashflows of a firm, the firm should invest all the cash in safety instruments not in equity shares.  
Statement (IV) is true, when a high degree of uncertainty is associated with the future cashflows of a firm, the firm should maintain adequate cash balance and have an overdraft arrangement with a bank.  
Statement (V) is false, because a conservative attitude, on the part of management, towards risk means that the firm will avoid investing its funds in intercorporate deposits and equities, which are unsecured instruments.  
Since statements (I),(II) and (IV) are true, alternative ( c ) is answer.
29. Answer : (d)  $\leq$   
TOP  
 $\geq$   
Reason : The alternative (d) , which states that firms expected to provide returns greater than those of the market with equal or less risk normally have P/E ratios higher than the market P/E. The other three statements (a), (b) ,(c) and (e) are true. Hence, alternative is false. The alternative (d) is false and is the answer.
30. Answer : (c)  $\leq$   
TOP  
 $\geq$   
Reason : Depreciation expense reduces taxable income by the amount of the depreciation expense.
31. Answer : (b)  $\leq$   
TOP  
 $\geq$   
Reason : If a project has a net present value of Rs.80, the project's profitability index will be greater than 1.
32. Answer : (b)  $\leq$   
TOP  
 $\geq$   
Reason : When the payment float is greater than the collection float, it implies that the balance in the books of the company is less than that in the bank's books because of certain cheques issued by the company that are still not paid by the bank. In such a case, the firm can play the float. Hence, statement (III) is true. Collection float can be defined as the amount of cheques deposited by a company in the bank awaiting clearance. Payment float indicates the amount of cheques issued by a company, awaiting payment by the bank.  
When collections float is more than the payment float, the company is said to have negative net float. Hence, statements (I), (II), and (IV) are not true. The answer is (b).
33. Answer: (c)  $\leq$   
TOP  
 $\geq$   
Reason: The economic order quantity is that order quantity that minimizes total costs, and not only the ordering costs. As statement (III) is false, it is answer. The other two statements are true.
34. Answer : (b)  $\leq$   
TOP  
 $\geq$   
Reason : Option (b) is the correct answer. Project B can be accepted, as the IRR is greater than the weighted average cost of capital (WACC).

35. Answer : (c)  $\leq$   
TOP  
 $\geq$   
Reason : Internal rate of return gives zero net present value for any project.  
The internal rate of return of a project does not change, as the cost of capital changes.  
It considers the cash flows of the project for the whole life of the project.  
As statement (I) and (III) are false, alternative (c) is answer.
36. Answer : (b)  $\leq$   
TOP  
 $\geq$   
Reason : If one is selected, the other is rejected, which is the situation for competing projects that do the same thing. Such projects are called mutually exclusive projects.
37. Answer : (a)  $\leq$   
TOP  
 $\geq$   
Reason : Large batch size orders are easier for the supplier to manage. They are less expensive for the supplier. They increase the customers' inventory levels and decrease the customers' flexibility to deal with sudden market changes. Hence, alternative (a) is answer.
38. Answer : (b)  $\leq$   
TOP  
 $\geq$   
Reason : Lengthening the credit period may further increase credit purchases not cash purchases. However, it will cause an increase in total sales, investment in receivables, cost of holding receivables and longer average collection period.
39. Answer : (b)  $\leq$   
TOP  
 $\geq$   
Reason : Option (b) is the correct answer.  
 $PVIFA_{r,5} = Rs.1,50,000/Rs.40,000 = 3.750$ , therefore, IRR is between 10% and 11% (from Table IV)
40. Answer : (d)  $\leq$   
TOP  
 $\geq$   
Reason : Both statements (II) and (III) are true. Therefore, option (d) is the correct answer. The cost of clearing the land is a sunk cost and should not be considered in the analysis. The expected impact of the new store on the existing store should be considered. In addition, the opportunity to lease the land represents an opportunity cost of opening a new store on the land and should be considered.
41. Answer : (c)  $\leq$   
TOP  
 $\geq$   
Reason :
- |                                                                                      |                                    |
|--------------------------------------------------------------------------------------|------------------------------------|
| EBIT                                                                                 | Rs.10,00,000                       |
| Less: Interest on debt                                                               | Rs.1,20,000                        |
| EBT                                                                                  | Rs.8,80,000                        |
| Less: Tax @40%                                                                       | Rs.3,52,000                        |
| PAT                                                                                  | Rs.5,28,000                        |
| Number of equity shares to be repurchased at Rs.15 each share with Rs.12,00,000 debt | $Rs.12,00,000/Rs.15 = 80,000$      |
| Number of equity shares after repurchase                                             | $3,00,000 - 80,000 = 2,20,000$     |
| Earning per share after the change in capital structure                              | $Rs.5,28,000/2,20,000 = Rs.2.4$    |
| Dividend per share                                                                   | $Rs.2.4 \times 0.55 = Rs.1.32$     |
| Price per share $[D_1/(K_e - g)]$                                                    | $Rs.1.32/(0.12 - 0.05) = Rs.18.86$ |
42. Answer : (c)  $\leq$   
TOP  
 $\geq$   
Reason : The market price per share is given by
- $$P_0 = \frac{P_1 + D_1}{1 + k_e} \text{ where, symbols are in standard use.}$$
- If no dividends are declared
- $$150 = \frac{P_1 + 0}{1.12}$$
- $P_1 = Rs.168$   
Net Income = Rs.2 crore

Investments budget = Rs.4 crore

Amount to be raised by issue of new shares = Rs.2 crore

$$\therefore \text{Number of shares to be issued} = \frac{2,00,00,000}{168} = 1,19,048 \text{ shares.}$$

43. Answer : (c)

Reason : Cost of carrying receivables

$$= \left( 10,00,000 \times \frac{50-30}{360} \times 0.15 \right) + \left( 2,00,000 \times \frac{50}{360} \times 0.8 \times 0.15 \right)$$

$$= 8,333 + 3,333 = \text{Rs.11,666.}$$

Incremental profit =  $2,00,000 \times 0.2 = \text{Rs.40,000}$

Bad debt losses =  $2,00,000 \times 0.05 = \text{Rs. 10,000}$

Net benefit =  $\text{Rs.40,000} - \text{Rs.11,666} - \text{Rs.10,000} = \text{Rs.18,334.}$

44. Answer : (d)

Reason :  $40,000 = 13,000/(1.125)^1 + 13,000/(1.125)^2 + X/(1.125)^3$

$$\text{or, } 40,000 = 11,555.55 + 10,271.60 + X/(1.125)^3$$

$$\text{or, } X/(1.125)^3 = 18,172.85$$

$$\text{or, } X = 18,172.85 \times (1.125)^3$$

$$= \text{Rs. 25,875.00.}$$

45. Answer : (c)

Reason : Balance as per the cash book:

| Day               | 1 <sup>st</sup> July | 2 <sup>nd</sup> July | 3 <sup>rd</sup> July |
|-------------------|----------------------|----------------------|----------------------|
| Opening balance   | Rs.1,00,000          | Rs.93,000            | Rs.86,000            |
| Cheques Deposited | Rs.18,000            | Rs.18,000            | Rs.18,000            |
| Cheques Issued    | Rs.25,000            | Rs.25,000            | Rs.25,000            |
| Closing balance   | Rs.93,000            | Rs.86,000            | Rs.79,000            |

Balance as per the pass book:

| Day              | 1 <sup>st</sup> July | 2 <sup>nd</sup> July | 3 <sup>rd</sup> July |
|------------------|----------------------|----------------------|----------------------|
| Opening balance  | Rs.100,000           | Rs.100,000           | Rs.118,000           |
| Cheque Deposited |                      | Rs.18,000            | Rs.18,000            |
| Cheque Issued    |                      |                      | Rs.25,000            |
| Closing balance  | Rs.100,000           | Rs.118,000           | Rs.111,000           |

Net float =  $\text{Rs.111,000} - \text{Rs.79,000} = \text{Rs.32,000}$  and positive.

46. Answer : (b)

Reason : The price of a share as per Gordon's dividend capitalization model is computed as

$$P = \frac{E(1-b)}{k_e - br}$$

Where E is earnings per share

b is retention ratio

$k_e$  is cost of equity capital

r is return on investment.

$$P = \frac{18(1-0.60)}{0.16-(0.60)(0.10)} = \frac{7.2}{0.1} = \text{Rs.72.}$$

P/E =  $72/18 = 4$  times

Hence option (b) is the correct choice.

47. Answer : (d)

Reason : Sales Lost = Rs. 70,00,000

Variable cost of lost sales = Rs. 42,00,000

Contribution lost = Rs. 28,00,000

Savings in interest cost of financing the debtors =  $70,00,000 \times 0.60 \times 0.14 \times \frac{90}{360}$  = Rs.1,47,000

Savings due to avoidance of bad debts =  $30,00,000 \times 0.60$  = Rs 18,00,000

Net benefit/loss from stricter procedure = –Rs.8,53,000

48. Answer : (e)

Reason : Under a conservative working capital policy, the financing mix will consist of a higher proportion of long-term sources of finance like equity and to some extent debentures also.

Hence statement (I) is correct.

As a conservative working capital policy involves financing of current assets more from long-term sources, the company will have a lower debt-servicing cost compared to an aggressive policy and consequently a lower degree of the risk of technical insolvency.

Hence statement (II) is incorrect.

A company following a conservative working capital policy will invest more in current assets than a company following an aggressive working capital policy. Hence, it will have a higher current ratio than the one following an aggressive working capital policy. So statement (III) is correct.

Under a conservative working capital policy, a firm invests more in current assets than a firm following an aggressive policy. Therefore the current assets turnover ratio computed as  $\text{Sales} \div \text{Current assets}$  will be lower in case of a conservative working capital policy. So statement (IV) is also correct.

Hence option (e) is the correct choice as statements (I), (III) and (IV) are correct.

49. Answer : (d)

Reason : The amount of raw materials consumed = Opening balance + Purchases during the year – Closing balance =  $(1,60,000 + 12,42,000 - 1,92,000)$  = Rs.12,10,000

Annual cost of production = Opening work in process + Consumption of raw materials + Manufacturing expenses + Depreciation – Closing work in process  
=  $25,000 + 12,10,000 + 12,30,000 + 1,00,000 - 45,000$  = Rs.25,20,000

Annual cost of sales = Opening stock of finished goods + Cost of production + Selling, administration and financial expenses + Customs and Excise duties – Closing stock of finished goods =  $30,000 + 25,20,000 + 2,30,000 + 1,50,000 - 50,000$  = Rs.28,80,000

Average cost of goods sold per day =  $\frac{\text{Rs.28,80,000}}{360}$  = Rs.8,000

Average inventory of finished goods =  $\frac{(30,000 + 50,000)}{2}$  = Rs.40,000

So, the finished goods storage period =  $\frac{\text{Rs.40,000}}{8,000}$  = 5 days.

50. Answer : (d)

Reason : Number of conversions =  $\frac{\text{Rs.60 lakh}}{\text{Rs.6 lakh}}$  = 10

Total conversion cost =  $\text{Rs.3,000} \times 10$  = Rs.30,000

Interest cost =  $(6,00,000/2) \times \frac{0.20}{4}$  = Rs.15,000

Total Cost = Conversion Cost + Interest Cost = Rs. (30,000+15,000) = Rs.45,000

51. Answer : (b)

Reason : Average inventory processing period =  $365 / \text{average inventory turnover} = 365/7 = 52.14$  days.

≤  
TOP  
≥

52. Answer : (e)

Reason : (in Rs. Lakh)

≤  
TOP  
≥

| Input                                          | Period (months) | Raw materials | Work in Process | Finished Goods | Debtors | Total |
|------------------------------------------------|-----------------|---------------|-----------------|----------------|---------|-------|
| Raw Material                                   |                 |               |                 |                |         |       |
| In raw material In W I P                       | 2               | 100           |                 |                |         |       |
| In finished Goods                              | 1               |               | 50              |                |         |       |
| In debtors                                     | 1               |               |                 | 50             |         |       |
|                                                | 3               |               |                 |                | 150     | 350   |
| Manufacturing Expenses                         |                 |               |                 |                |         |       |
| In WIP                                         | 1/2             |               | 10              |                |         |       |
| In finished goods                              | 1               |               |                 | 20             |         |       |
| In debtors                                     | 3               |               |                 |                | 60      | 90    |
| Selling, Administrative and financial expenses |                 |               |                 |                |         |       |
| In finished goods                              | 1               |               |                 | 10             |         |       |
| In debtors                                     | 3               |               |                 |                | 30      | 40    |
| Profit                                         |                 |               |                 |                |         |       |
| In debtors                                     | 3               |               |                 |                | 60      | 60    |
| Total                                          |                 | 100           | 60              | 80             | 300     | 540   |

Hence, the amount of working capital requirement is Rs.540 lakh + Rs.10 lakh = Rs.550 lakh

53. Answer : (b)

Reason : The objective of cash collection and disbursement policies is to speed up collections and slow down disbursements. It is not concerned with storage costs or return on cash equivalents, return on current assets and return on equity.

≤  
TOP  
≥

54. Answer : (b)

Reason : A firms' credit policy consists of credit period, cash discounts, credit standards and collection policy.

≤  
TOP  
≥

55. Answer : (b)

Reason : Net operating cycle = Inventory conversion period + Receivables collection period – Payables deferral period

≤  
TOP  
≥

For this problem, we are only interested in the change in the net operating cycle. We may therefore ignore the payables deferral period, since it is assumed to remain unchanged.

Old operating cycle (ignore payables)

=  $\text{Rs.}1,20,00,000 / \text{Rs.}1,00,000 + \text{Rs.}80,00,000 / \text{Rs.}1,00,000$

=  $120 + 80 = 200$  days.

New operating cycle =  $\text{Rs.}96,00,000 / \text{Rs.}90,000 + \text{Rs.}64,00,000 / \text{Rs.}90,000$

=  $106.67 + 71.11 = 177.78$  days.

Change in operating cycle = New operating cycle – Old operating cycle

=  $177.78 - 200$

= -22.22 days. Round off to 22 days shorter.

56. Answer : (e)

Reason : Collection cost is not associated with inventory, it is associated with receivables.

≤  
TOP  
≥

57. Answer: (e)

Reason : A firms' credit policy represents an investing decision, as investment in receivables is to be made. It has an effect on a firms' average collection period. It also affects the level of a firms' bad debts.

≤  
TOP  
≥

58. Answer : (d)

Reason : According to Graham and Dodd model of dividend

≤  
TOP  
≥

$$P = m(E/3+D) \text{ or } P=m(4D+R)/3$$

Where, P = Market price

m = Multiplier

D = dividend per share

E = Earning per share

The weightage for dividend is given assuming that the market is overwhelmingly in favor of liberal dividend pay out. So the correct answer would be (d).

59. Answer : (d)

$\frac{\leq}{TOP} \geq$

Reason : Cost of equity =  $\frac{PAT}{NW} = \frac{PAT/N}{NW/N} = \frac{EPS}{BVPS}$

Substituting the given values, we get

$$k_e = \frac{3.60}{18} = 20\%$$

According to Dividend Discount Model

$$P_o = \frac{D_1}{k_e - g} \Rightarrow k_e = \frac{D_1}{P_o} + g$$

$$\therefore 0.20 = \frac{3(1+g)}{33} + g \Rightarrow 6.6 = 3 + 36g$$

$$\therefore g = \frac{3.6}{36} = 0.10 = 10\%$$

60. Answer : (e)

$\frac{\leq}{TOP} \geq$

Reason : Cost of cash discount =  $50,00,000 \times 0.5 \times 0.01 = \text{Rs. } 25,000$

Let decrease in investment in receivables be Rs. X

Net Change in the firms' operating profit =  $-25,000 + 0.12 \times X = \text{Rs. } 80,000$

X = Rs. 8,75,000

61. Answer : (c)

$\frac{\leq}{TOP} \geq$

Reason : If first order is accepted from Obelix:

If Obelix pays in full in 60 days

Contribution =  $\text{Rs. } 50,000 - \text{Rs. } 40,000 = \text{Rs. } 10,000$

If Obelix defaults

Cost of production =  $\text{Rs. } 40,000$

Expected benefit =  $10,000 \times 0.6 - 40,000 \times 0.4 = -\text{Rs. } 10,000$

If 8 further orders are accepted from Obelix:

Benefit, if Obelix pays =  $10,000 \times 8 = \text{Rs. } 80,000$

Loss, if Obelix defaults =  $40,000 \times 8 = \text{Rs. } 3,20,000$

Expected benefit =  $80,000 \times 0.9 - 0.1 \times 3,20,000 = \text{Rs. } 40,000$

Probability of placing further 8 orders is 0.7

Expected benefit =  $(40,000) \times 0.7 = \text{Rs. } 28,000$

Total expected benefit =  $-10,000 + 28,000 = \text{Rs. } 18,000$

62. Answer : (b)

$\frac{\leq}{TOP} \geq$

Reason : Net present value of project A =  $-60,000 + 25,000(3.605) = \text{Rs. } 30,125$

Net present value of project B =  $-1,00,000 + 25,000(5.650) = \text{Rs. } 41,250$

63. Answer : (b)

$\frac{\leq}{TOP} \geq$

Reason : Option (b) is the correct answer.

|      | <u>Aggressive</u> | <u>Conservative</u> |
|------|-------------------|---------------------|
| EBIT | Rs.4.100          | Rs.4.100            |
| I    | <u>1.560</u>      | <u>1.656</u>        |
| EBT  | 2.540             | 2.444               |

|     |              |              |
|-----|--------------|--------------|
| T   | <u>1.016</u> | <u>0.978</u> |
| EAT | 1.524        | 1.466        |
| ROE | 8.47%        | 8.14%        |

64. Answer : (b)

≤  
TOP  
≥

Reason : Average conversion period =  $\frac{\text{Average stock of WIP}}{\text{Average daily cost of production}}$

$$\text{Average stock of WIP} = \frac{\text{Opening WIP} + \text{Closing WIP}}{2}$$

Substituting the given values, we get

$$\text{Average stock of WIP} = \frac{1.10x + x}{2} = 1.05x$$

Substituting the values in the formula, we get

Average daily cost of production = Rs.12,600/360 = Rs. 35 lakh

$$3 = \frac{1.05x}{35} \Rightarrow x = 100 \text{ lakh}$$

∴ Opening stock of WIP = Rs. 110 lakh.

65. Answer : (e)

≤  
TOP  
≥

Reason : Interest rate on bank loan = 10%

N = Number of days the firm can delay the payment from the date of purchase

Since cost of trade credit should be equal to the cost of bank loan,

$$= \frac{\text{Rate of discount}}{1 - \text{Rate of discount}} \times \frac{365}{(\text{Credit period} - \text{Discount period})}$$

$$= \frac{0.01}{1 - 0.01} \times \frac{365}{N - 10} = 0.10$$

By simplification N = 46.868 ≈ 47 days.

66. Answer : (d)

≤  
TOP  
≥

Reason : Order point = (Lead Time x Normal Usage per month) + Safety Stock

(1.5 months x 5,280 units per month) + 3,560 units = 11,480 units.

67. Answer : (c)

≤  
TOP  
≥

Reason : EOQ =  $[(2 \times 5,00,000 \times 1,000)/(500 \times 0.1)]^{1/2}$

= 4,472 units

Since orders are to be placed in round lots of 100, EOQ will be 4,500 units

EOQ when annual usage increases by 50% from the present level

$$[(2 \times 7,50,000 \times 1,000)/(500 \times 0.1)]^{1/2}$$

= 5,477.23 units

EOQ = 5,500 units

Proportionate change in EOQ to the proportionate change in carrying cost

$$= [(5,500 - 4,500)/4,500] \times [5,00,000/(7,50,000 - 5,00,000)] \times 100 = 44.44\%$$

68. Answer : (d)

≤  
TOP  
≥

Reason : Balckboxs' purchases = Rs.11,760

If it takes discount and pays on 10<sup>th</sup> day,

Its' purchases = Rs.11,760 × 0.98 = Rs.11,524.8

Since it pays on 10<sup>th</sup> day, it replaces trade credit with bank finance for the rest 20 days

$$\frac{\text{Rs.11,524.8} \times 10 \times 20}{365 \times 100}$$

∴ Interest = Rs.63.15

Total of principal and interest = 11,524.8 + 63.15

$$= \text{Rs.}11,587.95$$

$$\text{Increase in net income per day} = 11,760 - 11,587.95 = \text{Rs.}172.05$$

$$\text{Increase in net income per annum (before tax)} = \text{Rs.}172.05 \times 365 = \text{Rs.}62,798.25$$

$$\text{Increase in net income after tax} = \text{Rs.}62,798.25 (1-0.4) = \text{Rs.}37,679.$$

69. Answer : (a)

$\leq$   
TOP  
 $\geq$

Reason : The economic order quantity for MAL is  $Q^* = \sqrt{\frac{2UF}{PC}} = \sqrt{\frac{2 \times 25,000 \times 500}{60 \times 0.2}} = 1443.37$   
= 1443 units

If the order quantity is 5000 units, net incremental benefit over EOQ will be =

$$= UD + \left( \frac{U}{Q^*} - \frac{U}{Q^1} \right) \times F - \left[ \frac{Q^1(P-D)C - Q^*PC}{2} \right]$$

Here, U = 25,000 units,  $Q^* = 1443$  units,  $Q^1 = 5000$  units,

P = Rs.60, D = Rs.5 and C = 20 percent.

So, the net benefit

$$= 25,000 \times 5 + \left( \frac{25,000}{1443} - \frac{25,000}{5,000} \right) \times 500 - \left[ \frac{5,000 \times 55 \times 0.2}{2} - \frac{1443 \times 60 \times 0.2}{2} \right]$$

$$= 1,25,000 + 6,162.51 - 18,842$$

$$= 1,12,320.51$$

$$= \text{Rs.}1,12,321 \text{ (approx)}$$

Hence, the profit will increase by Rs.1,12,321

70. Answer : (c)

$\leq$   
TOP  
 $\geq$

Reason : The economic order quantity is defined as:  $Q^* = \sqrt{\frac{2UF}{PC}}$

Here, U = 2,500 units, F = Rs.2,000, P = Rs.8,000 and C = 20 percent of the inventory value.

$$Q^* = \sqrt{\frac{2 \times 2,500 \times 2,000}{1,600}} = 79$$

So, units

Hence, the required economic order quantity is 79 units.

$$\text{Number of orders} = 2,500 \text{ units} / 79 \text{ units} = 31.64 \text{ times} = 32 \text{ times.}$$

71. Answer : (c)

$\leq$   
TOP  
 $\geq$

Reason : Option (c) is the correct answer.

$$\text{Book Value} = \text{Rs.}45,000 - 5(\text{Rs.}45,000 - \text{Rs.}5,000)/10 = \text{Rs.}25,000$$

$$\text{Tax liability} = (\text{Rs.}30,000 - \text{Rs.}25,000)(0.4) = \text{Rs.}2,000$$

72. Answer : (a)

$\leq$   
TOP  
 $\geq$

Reason: Current Ratio = Current Assets/ Current Liabilities

$$= (2,000 + X) / (1,200 + X) = 1.5$$

$$X = \text{Rs.}400 \text{ lakh.}$$

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