

Question Paper

Financial Management – II (142): April 2007

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

1. Which of the following statements is **not true** with respect to companies following a conservative approach to [working capital management](#)? [< Answer >](#)
- (a) They are subjected to a lower degree of risk of insolvency
 - (b) Less amount of funds is locked in current assets
 - (c) Turnover of current assets is less than that in an aggressive approach
 - (d) They will have a low percentage of operating profitability
 - (e) Cost of financing is high.
- (1 mark)
2. Other things remaining the same, which of the following would increase the value of a right? [< Answer >](#)
- I. Increase in the cum-rights price per share.
 - II. Increase in the subscription price at which rights shares are issued.
 - III. Decrease in the number of existing shares required for a rights share.
- (a) Only (II) above
 - (b) Only (III) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.
- (1 mark)
3. Which of the following statements is **not true** with respect to the bought out deals? [< Answer >](#)
- (a) The bought-out deal route is relatively less expensive
 - (b) Existing companies, which do not satisfy conditions laid down by SEBI can issue securities at a premium through bought out deals
 - (c) New companies cannot issue securities through bought out deals
 - (d) Procedural complexities and issue costs are reduced considerably
 - (e) Issue price usually reflects the company's intrinsic value.
- (1 mark)
4. Other things remaining the same, which of the following would cause an increase in the cost of debentures when the [difference between the redemption price and the net amount realized can be written off evenly over the life of the debentures and the amount so written off is allowed as a tax-deductible expense](#)? [< Answer >](#)
- (a) Decrease in the annual interest payment on debenture capital
 - (b) Decrease in the corporate tax rate
 - (c) Increase in the maturity period
 - (d) Decrease in the redemption price per debenture
 - (e) Increase in the net amount realized per debenture.
- (1 mark)

5. Which of the following statements is **not true**?

[< Answer >](#)

- (a) Realized yield approach emphasizes that the past returns on a security are taken as a proxy for the return required by the investors in the future
- (b) The return earned by the investors according to the bond yield plus risk premium approach is equal to the yield on the long-term bonds plus a risk premium
- (c) The earnings price ratio approach emphasizes that the cost of equity is the ratio of the expected EPS for the next year and the current market price per share
- (d) Cost of external equity comes into picture when there are certain floatation costs involved in the process of raising equity from the market
- (e) Cost of retained earnings is always more than the cost of new issue of common stock.

(1 mark)

6. Which of the following statements is/are **true** with respect to an optimal capital structure?

[< Answer >](#)

- I. The company should make maximum use of leverage at minimum cost.
 - II. The capital structure should involve maximum dilution of control of the company.
 - III. The capital structure should be flexible enough to meet the changing conditions.
- (a) Only (II) above
 - (b) Only (III) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.

(1 mark)

7. Which of the following factors is **not** considered in capital structure decisions?

[< Answer >](#)

- (a) Leverage
- (b) Cost of capital
- (c) Cash flow projections of the company
- (d) Location of the company
- (e) Dilution of control.

(1 mark)

8. Which of the following statements is/are **not true** with respect to the Modigliani-Miller approach?

[< Answer >](#)

- I. It states that the cost of capital remains constant throughout all degrees of leverage.
 - II. The total market value of the firm is equal to the market value of equity.
 - III. The total market value of the firm is equal to its expected operating income discounted at a rate appropriate to its risk class.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.

(1 mark)

9. Which of the following statements is **not true** with respect to the Walter's model for dividend policy?

[< Answer >](#)

- (a) Firm has an infinite life
- (b) Retained earnings is the only source of finance available to the firm
- (c) When the firm has a rate of return that is equal to the cost of capital, the firm's dividend policy will not affect the value of the firm
- (d) For a given value of the firm, the dividend per share and the earnings per share remain constant
- (e) When the rate of return on investment is less than the cost of equity capital, a zero payout ratio would maximize the value of the firm.

(1 mark)

10. Which of the following statements is/are **true** with respect to the Gordon's model for dividend policy?

[< Answer >](#)

- I. The model assumes the investors' preference for current dividends.
 - II. Firm's share value is negatively correlated with the payout ratio when the return on investment is less than the cost of equity capital.
 - III. Firms with a rate of return greater than the cost of capital should have higher retention ratio.
- (a) Only (II) above
 - (b) Only (III) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.

(1 mark)

11. Which of the following models of dividend policy states that there would be no impact of the dividend declaration on the market price of the share as long as dividend is at the expected rate?

[< Answer >](#)

- (a) Traditional model
- (b) Walter's model
- (c) Gordon's model
- (d) Modigliani-Miller model
- (e) Rational Expectations model.

(1 mark)

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

[< Answer >](#)

- I. Financing through internal accruals can be done through depreciation charges and retained earnings.
 - II. Bill rediscounting scheme is an example of deferred credit.
 - III. Indian companies can float their stocks in the foreign capital markets through euro-issues.
- (a) Only (II) above
 - (b) Both (I) and (II) above
 - (c) Both (I) and (III) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.

(1 mark)

13. Arrange the following current assets in the increasing order of liquidity:

[< Answer >](#)

- I. Cash and bank balances.
 - II. Finished goods inventory.
 - III. Sundry debtors.
 - IV. Marketable securities.
- (a) (I), (IV), (III) and (II) above
 - (b) (I), (III), (IV) and (II) above
 - (c) (II), (III), (IV) and (I) above
 - (d) (II), (IV), (I) and (III) above
 - (e) (III), (II), (IV) and (I) above.

(1 mark)

14. Which of the following statements is/are **not true** with respect to the situation of overtrading in a company?

[< Answer >](#)

- I. The company is undercapitalized.
 - II. Funds are locked up in current assets resulting in a lower turnover of working capital.
 - III. It can be prevented by increasing the asset base through additional finances raised through the issuance of shares.
- (a) Only (II) above
 - (b) Both (I) and (II) above
 - (c) Both (I) and (III) above
 - (d) Both (II) and (III) above
 - (e) All (I), (II) and (III) above.

(1 mark)

15. Which of the following statements is/are **not true** with respect to the cost of trade credit?

[< Answer >](#)

- I. The higher the discount rate offered the higher would be the cost of trade credit.
 - II. The larger the spread between the credit period and the cash discount period, the higher the cost of trade credit.
 - III. Cash discount can be availed only when the cost of trade credit exceeds the opportunity cost of cash.
- (a) Only (I) above
 - (b) Only (II) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.

(1 mark)

16. Under which of the following types of factoring does the client get all the components of service?

[< Answer >](#)

- (a) Recourse factoring
- (b) Non-recourse factoring
- (c) Maturity factoring
- (d) Advance factoring
- (e) Invoice discounting.

(1 mark)

17. Other things remaining the same, which of the following statements is/are **true** with respect to the costs associated with inventories? [< Answer >](#)

- I. Total ordering costs can be reduced by increasing the order size.
- II. Increase in the ordering costs will increase the carrying costs.
- III. Increase in the order size will increase the carrying costs.

- (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)

18. Which of the following kinds of inventories is used to uncouple the production and the sales functions? [< Answer >](#)

- (a) Raw material inventory
- (b) Stores and spares
- (c) Work-in-process inventory
- (d) Finished goods inventory
- (e) Packing materials.

(1 mark)

19. Which of the following statements is/are **true**? [< Answer >](#)

- I. Higher the quantity of safety stock, lower the stock-out cost.
- II. Lower the quantity of safety stock, higher the incidence of carrying costs.
- III. The total stock-out costs and the carrying costs are minimum at the reorder level.

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

(1 mark)

20. Which of the following statements is **not true**? [< Answer >](#)

- (a) The EOQ model can be used to determine the optimum order quantity
- (b) The set-up cost is incurred at the time of commencement of each production run
- (c) The larger the size of the production run, the lower will be the set-up cost per unit
- (d) The carrying cost will decrease with an increase in the size of the production run
- (e) The optimum production size is at that level where the total of the set-up cost and the inventory carrying cost is minimum.

(1 mark)

21. Which of the following costs is **not** a cost of maintaining receivables? [< Answer >](#)

- (a) Administrative costs
- (b) Collection costs
- (c) Ordering costs
- (d) Defaulting costs
- (e) Financing costs.

(1 mark)

22. Which of the following statements is/are **not true**?

[< Answer >](#)

- I. Liberal cash discount policy increases the cost of discount.
- II. Shortening of credit period increases the incidence of bad debt losses.
- III. Liberalized credit standards increase the amount of money locked in receivables.

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

(1 mark)

23. Which of the following statements is **not true** with respect to the ageing schedule?

[< Answer >](#)

- (a) It is used to depict the age-wise distribution of accounts receivables at a given time
- (b) It is a measure for monitoring receivables
- (c) It is influenced by the sales pattern as well as the payment behaviour of the customers
- (d) Ageing schedule and the average collection period give same results irrespective of the quantum of sales and the payment behaviour of the customers
- (e) A comparison of ageing schedule at different intervals helps in identifying changes in the payment behaviour of the customers.

(1 mark)

24. Which of the following credit evaluation methods is a weighted average sum of facts that ostensibly has a bearing on creditworthiness?

[< Answer >](#)

- (a) Ageing schedule
- (b) Numerical credit scoring
- (c) Days sales outstanding
- (d) Collection matrix
- (e) Average collection period.

(1 mark)

25. Karthik Automobiles Ltd., has forecast its sales to be as follows:

[< Answer >](#)

Month	January	February	March
Sales (Rs.)	10,00,000	12,00,000	14,00,000

All the sales are on cash basis. Purchases amount to 70% of the following month's sales and are paid in the following month of purchase. Wages and administrative expenses per month amount to Rs.1,00,000 and Rs.1,20,000 respectively and are paid in the month in which they are incurred. Depreciation and amortization of preliminary expenses amount to Rs.1,40,000 and Rs.60,000 respectively. If the opening cash balance in January is Rs.1,00,000, the closing cash balance in the month of February is

- (a) – Rs.2,00,000
- (b) – Rs.4,00,000
- (c) Rs.2,50,000
- (d) Rs.3,20,000
- (e) Rs.5,00,000.

(2 marks)

26. Which of the following elements of internal audit represents the professional aspects of the job?

[< Answer >](#)

- (a) Totality
- (b) Expertise
- (c) Independence
- (d) Objectivity
- (e) Utility.

(1 mark)

27. Which of the following issues is **not** considered while appraising a market in capital expenditure decisions?

[< Answer >](#)

- (a) Structure of competition
- (b) Consumer requirements
- (c) Production constraints
- (d) Optimality of the scale of operations
- (e) Present and prospective supply position.

(1 mark)

28. Which of the following statements is/are **true** with respect to Net Benefit Cost Ratio (NBCR)?

[< Answer >](#)

- I. It is the difference between the benefit cost ratio and unity.
 - II. It is defined as the ratio of the net present value and the initial investment.
 - III. A project is accepted if it's NBCR < 0.
- (a) Only (II) above
 - (b) Only (III) above
 - (c) Both (I) and (II) above
 - (d) Both (I) and (III) above
 - (e) Both (II) and (III) above.

(1 mark)

29. Consider the following projects.

[< Answer >](#)

- I. Project A, which has a Net Benefit Cost Ratio less than one but more than zero.
- II. Project B, whose present value of inflows is less than the present value of outflows.
- III. Project C, which has a cost of capital less than the internal rate of return.
- IV. Project D, which has the highest annual capital charge compared to all other projects.

Which of the projects mentioned above could be accepted?

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

(1 mark)

30. Which of the following statements is **not true** regarding Internal Rate of Return (IRR)?

[< Answer >](#)

- (a) It takes into account the time value of money
- (b) It considers the cash flow stream over the entire investment horizon
- (c) It gives misleading results while choosing between mutually exclusive projects that differ significantly in terms of outlays.
- (d) It is always uniquely defined even in the case of projects having a cash flow stream that consists of one or more cash outflows interspersed with cash inflows
- (e) IRR is the rate of return at which NPV is zero.

(1 mark)

31. Murphy Electronics Ltd., has a paid up capital of Rs.100 lakh (face value of each equity share is Rs.10). The shares are currently trading at Rs.80 each. The company has a policy of paying dividends to its shareholders on December 31st of every year. The dividends declared by the company during the last five years are as follows: [< Answer >](#)

Year	1	2	3	4	5
Dividend declared (Rs.lakh)	9	10.5	15	18	21

As per the dividend growth model, the cost of equity capital for the company is approximately

- (a) 21.45%
- (b) 24.59%
- (c) 26.83%
- (d) 28.68%
- (e) 30.20%.

(2 marks)

32. Mata Laboratories Ltd., has just issued redeemable debentures of Rs.1,000 each repayable at par at the end of 8th year from now. The coupon rate on the debentures is 14% p.a. The flotation costs amounted to 10% of issue price. The cost of debentures to the company is [< Answer >](#)

- (a) 14.23%
- (b) 15.16%
- (c) 16.33%
- (d) 17.22%
- (e) 18.59%.

(2 marks)

33. Gemini Paper Mills Ltd., has investment plans of Rs.10 lakh. It has Rs.2,10,000 in the form of retained earnings, which will be used to meet a part of its investment requirements. It wants to maintain the debt equity ratio at 3:7. The company falls in the tax bracket of 40%. The following further information is available: [< Answer >](#)

Cost of debt:	
– Up to Rs.1,80,000	10%(before tax)
– Beyond Rs.1,80,000	12%(before tax)
Cost of equity	15%

The weighted average cost of financing investments is

- (a) 9.56%
- (b) 10.65%
- (c) 11.23%
- (d) 12.44%
- (e) 13.48%.

(2 marks)

34. Joshi Associates Ltd., earned a profit of Rs.20 lakh before providing for interest and tax. The company's capital structure is as follows: [< Answer >](#)

- (i) 4,00,000 equity shares of Rs.10 each and its market capitalization rate is 16%.
- (ii) 25,000, 14% secured redeemable debentures of Rs.150 each.

As per the net income approach, the value of the firm and its overall cost of capital respectively are

- (a) Rs.1,17,68,450; 14.67%
- (b) Rs.1,29,68,750; 15.06%
- (c) Rs.1,29,68,750; 15.42%
- (d) Rs.1,32,58,650; 15.42%
- (e) Rs.1,34,67,870; 16.26%.

(2 marks)

35. Neptune Constructions Ltd., has earned a profit before interest and tax of Rs.50 lakh. The company's capital structure includes 2 lakh, 14% debentures of Rs.100 each. The overall capitalization rate of the firm is 16%. As per the net operating income approach, the equity capitalization rate of the company is [< Answer >](#)

- (a) 14.67%
- (b) 15.36%
- (c) 17.54%
- (d) 19.56%
- (e) 21.34%.

(2 marks)

36. Which of the following is/are **true** in the context of playing the float? [< Answer >](#)

- I. The amount of cheques issued by the company, which are awaiting payment by the bank is called payment float.
- II. If the payment float is greater than the collection float, the company is said to have a positive net float.
- III. When the payment float is less than the collection float, the cash balance as per the books of the company is less than the cash balance as per the books of the bank.

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

(1 mark)

37. The following table shows the sales estimates of Nova Industries Ltd., for the following months:

[< Answer >](#)

Month	Estimated sales (Rs.)
January	2,00,000
February	2,20,000
March	1,20,000
April	1,00,000
May	1,50,000
June	2,40,000
July	2,00,000
August	2,00,000

20% of sales are on cash basis and the remaining is on credit basis. 50% of the credit sales are collected in the month following the sales, 30% in the second month and 20% in the third month. The cash inflows in the month of August would be

- (a) Rs.1,42,800
- (b) Rs.1,51,200
- (c) Rs.1,60,000
- (d) Rs.1,88,000
- (e) Rs.2,01,600.

(2 marks)

38. Nihar Industries Ltd., is contemplating to invest in a novel project costing Rs.500 lakh. It is therefore considering the following five financing alternatives consisting of various combinations of debt and equity.

[< Answer >](#)

Alternative	Debt (Rs.)	Equity (Rs.)	Cost of debt (%)	Cost of equity (%)
A	400,00,000	100,00,000	13	12
B	250,00,000	250,00,000	11	17
C	200,00,000	300,00,000	10	18
D	300,00,000	200,00,000	12	14
E	150,00,000	350,00,000	9	20

If the corporate tax rate is 40%, which of the above alternatives should the company choose?

- (a) A
- (b) B
- (c) C
- (d) D
- (e) E.

(2 marks)

39. The following details are available regarding the long-term sources of finance of M/s. Bijli Electricals Ltd.,:

[< Answer >](#)

Range of new financing	Cost of debt (%)	Cost of Equity (%)
Up to Rs.10 lakh	9	13
Above Rs.10 lakh and up to Rs.20 lakh	10	14
Above Rs.20 lakh and up to Rs.40 lakh	11	15
Above Rs.40 lakh and up to Rs.1 crore	12	15.5

The company is considering expanding its operations and requires Rs.50 lakh for the same. It is planning to raise funds in the following proportions:

Equity	0.7
Debt	0.3

The company falls in the tax bracket of 40%. The weighted marginal cost of capital of new financing is

- (a) 10.45%
- (b) 11.50%
- (c) 12.30%
- (d) 13.10%
- (e) 14.40%.

(2 marks)

40. The dividend per share paid by Radhika Textiles Ltd., is Rs.12.50 and its dividend pay-out ratio is 25%. If the multiplier is 12, the dividend yield on the company's share as per Graham and Dodd model is

[< Answer >](#)

- (a) 3.03%
- (b) 3.36%
- (c) 3.57%
- (d) 3.82%
- (e) 4.17%.

(2 marks)

41. A closely-held chemical manufacturing firm has been following a dividend policy which can maximize the market value of the firm. It is also perceived that Walter's model to dividend policy holds good for this company. Accordingly, each year at dividend time, the capital budget is reviewed in conjunction with the earnings for the period and alternative investment opportunities for the shareholders.

[< Answer >](#)

In the current year, the firm reports net earnings of Rs.5,00,000. It is estimated that the firm can earn Rs.1,00,000, if the net earnings of the current year are retained. The investors have alternative investment opportunities that will yield 15%. The firm has 50,000 shares outstanding. The P/E multiple of the shares of the company is

- (a) 8.1
- (b) 8.9
- (c) 9.6
- (d) 10.2
- (e) 11.6.

(2 marks)

42. A textile company belongs to a risk class for which the cost of equity is 10%. It currently has 50,000 shares [< Answer >](#) outstanding selling at Rs.100 each. The firm expects earnings of Rs.5,00,000 during the period and therefore it is contemplating to declare a dividend of Rs.8 at the end of the current year. The company also has a new project which requires an investment of Rs.10,00,000 during the same period. The value of the firm assuming that the MM model holds good is

- (a) Rs.37 lakh
- (b) Rs.45 lakh
- (c) Rs.50 lakh
- (d) Rs.56 lakh
- (e) Rs.60 lakh.

(2 marks)

43. Akruti Constructions Ltd., (ACL) is intending to acquire substantial shares in Jagruti Projects Ltd., (JPL) to acquire [< Answer >](#) control in the company. The beta factor of JPL's shares is 1.6 and the current market price of its each share is Rs.170. The company is consistently paying a dividend of Rs.46 per share every year and is expected to pay the same amount even in the future. The risk-free rate is 6% and the market rate of return is 18%. How much extra amount should ACL pay for each share over the current market price so that the price of the share of JPL is at equilibrium as per the CAPM approach?

- (a) Rs.12.54
- (b) Rs.16.24
- (c) Rs.19.52
- (d) Rs.23.12
- (e) Rs.27.34.

(2 marks)

44. Bunny Projects Ltd., is an all equity firm and reported net earnings of Rs.6,84,000 for the current year. It has a paid up [< Answer >](#) capital of Rs.20,00,000 and the face value of each share is Rs.20. The company has a policy of retaining a part of its earnings and reinvesting them in various projects. If the company can earn 25% on such earnings, the cost of equity capital is 12.5% and the growth rate is 6%, the price of the share as per the Gordon's model for dividend policy approximately is

- (a) Rs.56
- (b) Rs.60
- (c) Rs.69
- (d) Rs.72
- (e) Rs.80.

(2 marks)

45. Jaya Hotels Ltd., has a book value per share of Rs.137.80. Its return on equity is 15% and it follows a policy of [< Answer >](#) retaining 60% of its earnings. If the opportunity cost of capital is 18%, the price of the share computed as per the Walter's model differs from that computed as per the dividend growth model by approximately

- (a) – Rs. 6.97
- (b) – Rs. 7.89
- (c) Rs. 3.19
- (d) Rs.11.46
- (e) Rs.12.10.

(2 marks)

46. The annual demand for a product is 12,800 units. The unit cost is Rs.6 and inventory carrying cost is 25% of the average inventory cost. If the cost of procurement is Rs.150, the time between two consecutive orders would be (Assume 360 days in a year) [< Answer >](#)

- (a) 1 month
- (b) 1.5 months
- (c) 2 months
- (d) 2.5 months
- (e) 3 months.

(2 marks)

47. Ruby Ltd., a retail firm buys in lots of 125 boxes in every quarter. The cost per box is Rs.125 and the ordering cost is Rs.250 per order. The inventory carrying cost is estimated at 20% of unit value per annum. How much would the company save if it employs the economic order quantity of 100 boxes? [< Answer >](#)

- (a) Rs.43.2
- (b) Rs.48.6
- (c) Rs.52.6
- (d) Rs.58.4
- (e) Rs.62.5.

(2 marks)

48. The following data are available in respect of material X for the current year: [< Answer >](#)

Opening stock	Rs.1,80,000
Purchases during the year	Rs.5,40,000
Closing stock	Rs.2,20,000

Assuming 360 days in a year, the average number of days for which the stock is held is

- (a) 124 days
- (b) 130 days
- (c) 136 days
- (d) 144 days
- (e) 150 days.

(2 marks)

49. The average annual usage of material for Yogi Industries Ltd., is 3,60,000 units. The lead-time for procuring material is 5 days and the average number of units per order is 5,000. If the stock out acceptance factor considered is 3.00, what is the reorder level? (Assume 360 days in a year) [< Answer >](#)

- (a) 12,000 units
- (b) 18,000 units
- (c) 20,000 units
- (d) 24,000 units
- (e) 30,000 units.

(1 mark)

50. The average daily usage rates of an inventory, lead time and their respective probabilities are as follows:

[< Answer >](#)

Daily usage rate (in units)	Probability	Lead time (in days)	Probability
250	0.4	25	0.70
400	0.6	40	0.30

The probable stock-out level is

- (a) 5,210 units
- (b) 5,480 units
- (c) 5,970 units
- (d) 6,340 units
- (e) 6,860 units.

(2 marks)

51. Diamond Industries Ltd., currently has credit sales of Rs.30,00,000 with an average collection period of two months. At present no discounts are offered to the customers. The management of the company is contemplating to allow a discount of 2% on cash payment which would result in the reduction of the average collection period to one month. It is assumed that 50% of the customers would take advantage of cash discount. If the company normally requires a 25% return on its investment, what is the net change in the profit due to the introduction of discount?

[< Answer >](#)

- (a) Rs.28,500
- (b) Rs.32,500
- (c) Rs.34,000
- (d) Rs.37,500
- (e) Rs.42,500.

(2 marks)

52. Ganesh Enterprises Ltd., currently has sales of Rs.150 lakh. Its existing credit terms are 1/10, net 45 days and average collection period is 30 days. Forty percent of customers in terms of sales revenue are utilizing the cash discount incentive. The contribution to sales ratio of the company is 20 percent and cost of funds is 15 percent.

[< Answer >](#)

The company is contemplating liberalization of its existing credit terms to 2/10, net 45 days. Sales are expected to increase by Rs.15 lakh and average collection period would come down to 20 days. Eighty percent of customers in terms of sales revenue are expected to avail themselves of the cash discount under the liberalization scheme.

The net incremental benefit to the company due to the liberalization of its existing credit terms is

- (a) – Rs.0.589 lakh
- (b) – Rs.0.767 lakh
- (c) Rs.1.485 lakh
- (d) Rs.1.857 lakh
- (e) Rs.1.968 lakh.

(2 marks)

53. The current sales of Prakash Electricals Ltd., are Rs.100 lakh, the average collection period is 50 days, the bad debt losses amount to 5 percent of sales and collection expenses are Rs.1 lakh. The variable costs to sales ratio is 70%. The company's cost of funds is 15%. The company is planning to increase its collection effort through special programs to reduce the amount of receivables and the incidence of bad debt losses. [< Answer >](#)

The new collection effort would increase the sales by Rs.10 lakh and would reduce the average collection period to 35 days, decrease the bad debt losses to 3% of sales but involve collection expenses of Rs.2.5 lakh.

The net incremental profit to the company due to new collection effort is approximately

- (a) Rs.2.053 lakh
- (b) Rs.2.545 lakh
- (c) Rs.3.723 lakh
- (d) Rs.3.943 lakh
- (e) Rs.4.165 lakh.

(2 marks)

54. Narmada Industries Ltd., (NIL) purchases components from Godavari Industries Ltd., (GIL) on the terms 1/10, net 45. NIL has requested for an increase in the cash discount to 2%, the period of cash discount remaining unchanged. GIL has accordingly increased the cash discount and also changed the credit period. On careful verification, NIL realizes that on account of change in the credit period, the cost of not paying within the discount period is now two and half times the cost before the change in terms. The new credit period approximately is [< Answer >](#)

- (a) 22.28 days
- (b) 28.88 days
- (c) 32.78 days
- (d) 38.28 days
- (e) 43.38 days.

(2 marks)

55. Meenakshi Electricals Ltd., is considering offering credit to a customer. The probability that the customer would pay is 0.75. The revenues from the sale are expected to be Rs.45,000, and the cost of sale is expected to be Rs.12,600. What would be the expected profit/loss to the company if credit is offered to this customer? [< Answer >](#)

- (a) – Rs.22,050
- (b) – Rs.22,750
- (c) Rs.17,900
- (d) Rs.18,950
- (e) Rs.21,150.

(1 mark)

56. Vikas Enterprises Ltd., is planning to purchase a punching machine, the details of which are as follows: [< Answer >](#)

Cost of machine	Rs.60,00,000
Annual cost of operations	Rs.5,00,000 for the first four years Rs.6,00,000 for the subsequent years
Useful life	10 years

The annual capital charge of the machine at a cost of capital of 12 percent is

- (a) Rs.12.40 lakh
- (b) Rs.14.36 lakh
- (c) Rs.16.08 lakh
- (d) Rs.18.09 lakh
- (e) Rs.21.45 lakh.

(2 marks)

57. Indian Industries Ltd., is planning to purchase a machine to augment its installed capacity to meet the growing demand for its products. There are three machines under consideration. The estimated sales and the yearly expenditure for each of the three machines are given below. All sales are on cash basis. [< Answer >](#)

(Rs.)			
Particulars	Machine I	Machine II	Machine III
Initial investment	3,00,000	3,00,000	3,00,000
Estimated annual sales	5,00,000	4,00,000	4,50,000
Cost of production (estimated):			
Direct materials	40,000	40,000	48,000
Direct labour	50,000	30,000	36,000
Factory overheads	60,000	50,000	58,000
Administration costs	20,000	10,000	15,000
Selling and distribution costs	10,000	10,000	10,000

The corporate tax rate is 40%. The economic life of machine I is 2 years and it is 3 years for the other two. The scrap values are Rs.40,000, Rs.25,000 and Rs.30,000 respectively. The pay-back periods of the three machines respectively are

- (a) 1.16 years; 1.23 years and 1.36 years
- (b) 1.23 years; 1.46 years and 1.36 years
- (c) 1.23 years; 1.56 years and 1.46 years
- (d) 1.34 years; 1.56 years and 1.46 years
- (e) 1.34 years; 1.78 years and 1.60 years.

(3 marks)

58. A machine is available at a purchase cost of Rs.8,00,000. The life of the machine is five years and the scrap value at the end of fifth year is expected to be zero. It is expected to generate the following annual profits before depreciation for the next five years: [< Answer >](#)

Year	Amount (Rs.)
1	2,00,000
2	4,00,000
3	3,00,000
4	1,50,000
5	50,000

The accounting rate of return from the machine is

- (a) 10.00%
- (b) 15.00 %
- (c) 16.65%
- (d) 17.78%
- (e) 20.00%.

(2 marks)

59. Given below are the cash flows pertaining to a project:

[< Answer >](#)

Year	Amount (Rs.)
0	-11,00,000
1	6,00,000
2	2,00,000
3	1,00,000
4	5,00,000

The IRR from the project approximately is

- (a) 10.25%
- (b) 10.55%
- (c) 11.25%
- (d) 12.25%
- (e) 12.75%.

(2 marks)

60. Following are the data on a capital project being evaluated by the management of Hyderabad Industries Ltd., (HIL):

[< Answer >](#)

Annual cost saving	Rs.40,000
Useful life	4 years
IRR	15%
Profitability index	1.1

The NPV of the project is

- (a) Rs. 7,300
- (b) Rs. 9,960
- (c) Rs.10,730
- (d) Rs.11,420
- (e) Rs.12,980.

(2 marks)

61. A firm uses a centralized billing and collection system that results in an average daily receipt of Rs.5,00,000. It is planning to introduce an advanced billing and collection system which is expected to reduce the collection period of accounts receivable by 2 days and to cost Rs.50,000 annually. The firm can earn 12% on its investments. How much can the firm save annually by introducing such a system?

[< Answer >](#)

- (a) Rs.40,000
- (b) Rs.50,000
- (c) Rs.65,000
- (d) Rs.70,000
- (e) Rs.75,000.

(1 mark)

62. If the net benefit cost ratio is 0.2, the net present value is Rs.40,000, the present value of the cash inflows associated with the project is

[< Answer >](#)

- (a) Rs.1,80,000
- (b) Rs.2,00,000
- (c) Rs.2,40,000
- (d) Rs.2,70,000
- (e) Rs.3,00,000.

(1 mark)

63. If the cost of an investment is Rs.2,00,000 and it pays Rs.35,000 in perpetuity at an interest rate of 10%, the benefit cost ratio of the investment is [< Answer >](#)

- (a) 0.39
- (b) 0.69
- (c) 1.09
- (d) 1.75
- (e) Cannot be determined.

(1 mark)

64. Consider the following information pertaining to Kamakshi Foods Ltd., [< Answer >](#)

	Rs. lakh
Average stock of work-in-process	115
Manufacturing expenses	5
Depreciation	10

If the work-in-process conversion period is 5 days and the opening stock of work-in-process is Rs.10 lakh more than the closing stock, the average daily consumption of raw material is (assume 360 days in a year)

- (a) Rs.20.98 lakh
- (b) Rs.22.93 lakh
- (c) Rs.25.67 lakh
- (d) Rs.27.93 lakh
- (e) Rs.29.93 lakh.

(2 marks)

65. Raja Fertilizers Ltd., made credit purchases of Rs.15 lakh for the current year. The opening balance of trade creditors was Rs.90,000 and the closing balance of creditors was one-third of the opening trade creditors. Assuming 360 days in a year, the average payment period is [< Answer >](#)

- (a) 12.2 days
- (b) 13.3 days
- (c) 14.4 days
- (d) 15.5 days
- (e) 16.6 days.

(1 mark)

66. Consider the following data pertaining to Saraswati Enterprises Ltd.,: [< Answer >](#)

Gross operating cycle	75 days
Net operating cycle	50 days
Raw-material storage period	36 days
Conversion period	3 days
Finished goods storage period	18 days

If the company changes its collection and payment programs and brings down the average collection period by 10 days while increasing the average payment period by 6 days, what is the effect on the gross operating cycle?

- (a) Increases by 10 days
- (b) Increases by 12 days
- (c) Increases by 16 days
- (d) Decreases by 10 days
- (e) Decreases by 16 days.

(2 marks)

67. The maximum permissible bank finance as per the method I of Tandon Committee recommendations for Kangan Industries Ltd., is Rs.1,200 lakh. The company has current assets of Rs.2,500 lakh and core current assets of Rs.500 lakh. The maximum permissible bank finance as per the methods II and III of Tandon Committee recommendations respectively are [< Answer >](#)

- (a) Rs.600 lakh; Rs.550 lakh
- (b) Rs.765 lakh; Rs.725 lakh
- (c) Rs.765 lakh; Rs.745 lakh
- (d) Rs.975 lakh; Rs.600 lakh
- (e) Rs.975 lakh; Rs.750 lakh.

(2 marks)

68. The current price of a share of Kaushik Pharmaceuticals Ltd., is Rs.75. The company is planning to issue 1 right share for every 5 equity shares. If the company targets that the ex-rights value of a share should be at least Rs.70, the subscription price for one rights share should be more than or equal to [< Answer >](#)

- (a) Rs.38
- (b) Rs.40
- (c) Rs.45
- (d) Rs.48
- (e) Rs.50.

(1 mark)

Suggested Answers

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1. Answer : (b)

[<TOP>](#)

Reason : Companies following a conservative approach to working capital management are subjected to a lower degree of risk of insolvency because more amount of funds are locked in current assets and the turnover of current assets is less than that in an aggressive approach. They will have a low percentage of operating profitability and the cost of financing is high. Hence statement (b) is not true and is the answer.

2. Answer : (d)

[<TOP>](#)

Reason : The theoretical value of a right is $\frac{P_0 - S}{N+1}$.

The following would cause an increase in the value of a right:

- Increase in the cum-rights price per share.
- Decrease in the subscription price at which rights shares are issued.
- Decrease in the number of existing shares required for a rights share.

Therefore statements (I) and (III) are true and statement (II) is not true. Hence (d) is the answer.

3. Answer : (c)

[<TOP>](#)

Reason : The bought-out deal route is relatively inexpensive and funds accrue without much delay. Statements (a) is true.

Companies both existing and new, which do not satisfy conditions laid down by SEBI may issue securities at a premium. Statement (b) is true and statement (c) is not true.

Procedural complexities and issue costs are reduced considerably and the funds reach the firm upfront. Statement (d) is true.

Issue price usually reflects the company's intrinsic value. Statement (e) is true.

Hence (c) is the answer.

4. Answer : (b)

[<TOP>](#)

Reason : When the difference between the redemption price and the net amount realized can be written off evenly over the life of the debentures and the amount so written off is allowed as a tax-deductible expense,

$$k_d = \frac{I(1-t) + \left(\frac{F-P}{n}\right)(1-t)}{\left(\frac{F+P}{2}\right)}$$

where,

I = annual interest payment per debenture capital

t = corporate tax rate

F = redemption price per debenture

P = net amount realized per debenture

n = maturity period

The following would increase the post-tax cost of debenture capital:

Decrease in the annual interest payment per debenture capital will decrease k_d .

Decrease in the corporate tax rate will increase k_d .

Increase in the maturity period will decrease k_d .

Decrease in the redemption price per debenture will decrease k_d .

Increase in the net amount realized per debenture will decrease k_d .

Hence (b) is the answer.

5. Answer : (e)

[<TOP>](#)

Reason : Realized yield approach emphasizes that the past returns on a security are taken as a proxy for the return required by the investors in the future. Statement (a) is true.

The return earned by the investors according to the bond yield plus risk premium approach is equal to the yield on the long-term bonds plus a risk premium. Statement (b) is true.

The earnings price ratio approach emphasizes that the cost of equity is the ratio of the expected EPS for the next year and the current market price per share. Statement (c) is true.

Cost of external equity comes into picture when there are certain floatation costs involved in the process of raising equity from the market. Statement (d) is true.

Cost of retained earnings is always less than the cost of new issue of common stock due to absence of floating costs. Statement (e) is not true.

Hence (e) is the answer.

6. Answer : (d)

[<TOP>](#)

Reason : Features of an optimal capital structure are:

Profitability: The company should make maximum use of leverage at minimum cost. Statement (I) is true.

Flexibility: The capital structure should be flexible enough to meet the changing conditions. Statement (III) is true.

Control : The capital structure should involve minimum dilution of control of the company. Statement (II) is not true.

Therefore statements (I) and (III) are true and statement (II) is not true. Hence (d) is the answer.

7. Answer : (d) [<TOP>](#)

Reason : Factors that should be considered when a capital structure decision is taken:

- Leverage
- Cost of capital
- Cash flow projections of the company
- Size of the company
- Dilution of control
- Floatation costs.

Hence location of the company is insignificant while taking a capital structure decision. Hence (d) is the answer.

8. Answer : (b) [<TOP>](#)

Reason : It states that the cost of capital remains constant throughout all degrees of leverage. Statement (I) is true.

The total market value of the firm is equal to the sum of the market value of debt and the market value of equity. Statement (II) is not true.

The total market value of the firm is equal to its expected operating incomes discounted at a rate appropriate to its risk class. Statement (III) is true.

Hence (b) is the answer.

9. Answer : (e) [<TOP>](#)

Reason : According to the Walter's model for dividend policy,

- Firm has an infinite life.
- Retained earnings is the only source of finance available to the firm .
- For a given value of the firm, the dividend per share and the earnings per share remain constant
- When the firm has a rate of return that is equal to the cost of capital, the firm's dividend policy will not affect the value of the firm
- When the rate of return on investment is less than the cost of equity capital, a 100% payout ratio would maximize the value of the firm.
- When the rate of return on investment is more than the cost of equity capital, a 0% payout ratio would maximize the value of the firm.

Hence statement (e) is not true and is the answer.

10. Answer : (d) [<TOP>](#)

Reason : According to the Godon's model for dividend policy,

Investors prefer current dividends. Statement (I) is true.

Firm's share value is positively correlated with the payout ratio when the return on investment is less than the cost of equity capital. Statement (II) is not true.

Firms with a rate of return greater than the cost of capital should have higher retention ratio. Statement (III) is true.

Therefore statements (I) and (III) are true and statement (II) is not true. Hence (d) is the answer.

11. Answer : (e) [<TOP>](#)

Reason : Rational Expectations model states that there would be no impact of the dividend declaration on the market price of the share as long as it is at the expected rate. Hence (e) is the answer.

12. Answer : (e) [<TOP>](#)

Reason : Financing through internal accruals can be done through depreciation charges and retained earnings. Statement (I) is true.

Bill rediscounting scheme is an example of deferred credit. Statement (II) is true.

Indian companies can float their stocks in the foreign capital markets through euro-issues. Statement (III) is true.

Therefore all the statements (I), (II) and (III) are true and (e) is the answer.

13. Answer : (c) [<TOP>](#)

Reason : Current assets in the ascending order of liquidity:

Finished goods inventory, sundry debtors, marketable securities and cash and bank balances. Therefore (II), (III), (IV) and (I) represents the correct order. Hence (c) is the answer.

14. Answer : (a) [<TOP>](#)

Reason : Turnover of assets is disproportionately high compared to the volume of sales. The company is under capitalized with respect to volume of sales. Turnover of current assets is high. It can be prevented by increasing the asset base through additional finances raised through the issuance of shares. Statement (I) and (III) are true.

Statement (II) is a feature of under trading in a company. Hence (a) is the answer.

15. Answer : (b) [<TOP>](#)

Reason :
$$\text{Cost of trade credit} = \frac{\text{Rate of discount}}{1 - \text{Rate of discount}} \times \frac{\text{Number of days in a year}}{(\text{Credit period} - \text{Discount period})}$$

The higher the discount rate offered the higher would be the cost of trade credit. Statement (I) is true.

The smaller the spread between credit and cash discount, the higher is the cost of trade credit. Statement (II) is not true.

Cash discount can be availed only when the cost of trade credit exceeds the opportunity cost of cash. Statement (III) is true.

Hence (b) is the answer.

16. Answer : (b) [<TOP>](#)

Reason : Non-recourse factoring is also known as full factoring. Under this type of factoring, the factor has no recourse to the client if the receivables are not recovered, i.e, the client gets total credit protection. In this type of factoring, all the components of service viz., short-term finance, administration of sales ledger and credit protection are available to the client. Hence (b) is the answer.

17. Answer : (c) [<TOP>](#)

Reason : Total ordering costs can be reduced by increasing the order size. Statement (I) is true.

Decrease in the ordering costs will increase the carrying costs. Statement (II) is not true.

Increase in the order size will increase the carrying costs. Statement (III) is true.

Hence (c) is the answer.

18. Answer : (d) [<TOP>](#)

Reason : Raw material inventory is used to uncouple the production function from the purchasing function so that delays in shipment of raw materials do not cause production delays. The purpose of work-in-process inventory is to uncouple the various operations in the production process that machine failures and work stoppages in one operation will not affect other operations. Finished goods inventory is used to uncouple the production and the sales functions. Hence (d) is the answer.

19. Answer : (d)

[<TOP>](#)

Reason : Higher the quantity of safety stock, lower the stock-out cost. Statement (I) is true.
Lower the quantity of safety stock; lower the incidence of carrying costs. Statement (II) is not true.
The total stock-out costs and the carrying costs are minimum at the reorder level. Statement (III) is true.
Hence (d) is the answer.

20. Answer : (d)

[<TOP>](#)

Reason : The EOQ model can be used to determine the optimum production quantity. Statement (a) is true.
The set-up cost is incurred at the time of commencement of each production run. Statement (b) is true.
The larger the size of the production run, the lower will be the set-up cost per unit. Statement (c) is true.
The carrying cost will increase with an increase in the size of the production run. Statement (d) is not true.
The optimum production size is at that level where the total of the set-up cost and the inventory carrying cost is minimum. Statement (e) is true.
Hence (d) is the answer.

21. Answer : (c)

[<TOP>](#)

Reason : Ordering costs are associated with maintaining inventories and not maintaining receivables. Hence (c) is the answer.

22. Answer : (b)

[<TOP>](#)

Reason : Liberal cash discount policy increases the cost of discount. Statement (I) is true.
Shortening of credit period decreases the incidence of bad debt losses. Statement (II) is not true.
Liberalized credit standards increase the amount of money locked in receivables. Statement (III) is true.
Hence (b) is the answer.

23. Answer : (d)

[<TOP>](#)

Reason : It is used to depict the age-wise distribution of accounts receivables at a given time. Statement (a) is true.
It is a measure for monitoring receivables. Statement (b) is true.
It is influenced by the sales pattern as well as the payment behaviour of the customers. Statement (c) is true.
If sales are decreasing, average collection period and the ageing schedule will differ from what they would be if sales were constant. Statement (d) is not true.
A comparison of ageing schedule at different intervals helps in identifying changes in the payment behaviour of the customers. Statement (e) is true.
Hence (d) is the answer.

24. Answer : (b)

[<TOP>](#)

Reason : Numerical credit scoring is a weighted average sum of facts that ostensibly has a bearing on creditworthiness. Hence (b) is the answer.

25. Answer : (d)

[<TOP>](#)

Reason :

(Rs.)		
	January	February
Opening balance	1,00,000	1,80,000
+ Receipts from sales	10,00,000	12,00,000
	11,00,000	13,80,000
- Wages and administration	2,20,000	2,20,000
- Purchases paid	7,00,000	8,40,000
Closing cash balance	1,80,000	3,20,000

Closing cash balance at the end of February is Rs.3,20,000. Hence (d) is the answer.

26. Answer : (b) [<TOP>](#)

Reason : The elements of the internal audit represent the basic procedures that will simplify the completion of internal audit.

Expertize represents the professional aspects of a job. Hence (b) is the answer.

27. Answer : (d) [<TOP>](#)

Reason : Optimality of the scale of operations is not considered while performing market appraisal, it is considered while performing technical appraisal. Hence (d) is the answer.

28. Answer : (c) [<TOP>](#)

Reason : $NBCR = BCR - 1$, i.e, it is the difference between the benefit cost ratio and unity. Statement (I) is true.

$$NBCR = \frac{NPV}{I}$$
, i.e, it is defined as the ratio of the net present value and the initial value. Statement (II) is true.

A project is accepted if it's $NBCR > 0$. Statement (III) is not true.

Hence (c) is the answer.

29. Answer : (b) [<TOP>](#)

Reason : A project will be accepted under the following situations:

- When the Benefit Cost Ratio of the project is greater than one and the Net Benefit Ratio of the project is greater than zero.
- When the Net Present Value is greater than zero (i.e. when the present value of inflows is greater than the present value of outflows).
- When the project's internal rate of return is greater than the firm's cost of capital
- When a project has the minimum annual capital charge.

Based on the above criteria, we can conclude that only projects A and C can be selected and (b) is the answer.

30. Answer : (d) [<TOP>](#)

Reason : IRR is a discounted cash flow technique, therefore it takes into account time value of money. Hence option (a) is correct. Option (b) is also correct as IRR takes into account all the cash flows arising over the period of investment. Under the IRR criterion, a project is accepted only if the $IRR >$ the cost of capital otherwise it is rejected. Hence statement (c) is also correct. Internal rate of return is the rate at which the present value of inflows is equal to the present value of cash outflows. Statement (d) is incorrect because when a project has a cash flow stream that consists of one or more cash outflows interspersed with cash inflows, it will not have a unique IRR but will have multiple IRRs. Option (d) is not true. IRR is the return at which $NPV = 0$. Therefore option (e) is correct. Hence option (d) is the answer.

31. Answer : (c) [<TOP>](#)

Reason : First of all the growth rate in dividends has to be computed. During the last four years, (year 1 is ignored since the dividend of year 1 is compared with that of the year 5) dividend has increased from Rs.9 lakh to Rs.21 lakh

$$\text{Therefore, } (1+g)^4 = \frac{21,00,000}{9,00,000} = 2.3333$$

$$\text{i.e, } g = (2.3333)^{1/4} - 1 = 0.2359 = 23.59\%$$

Dividend in the year 5 = Rs.2.1

According to the dividend growth model,

$$k_e = \frac{D_0(1+g)}{P} + g = \frac{2.1(1.2359)}{80} + 0.2359 = 0.2683 = 26.83\%.$$

Hence (c) is the answer.

32. Answer : (c)

[<TOP>](#)

Reason : Issue price of debentures = Coupon x PVIFA_(k,8) + Redemption value x PVIF_(k%,8)

Where, k = the cost of debentures

Issue price = Rs.900 (Rs.1,000 – flotation costs of 10%)

Coupon = 14% = Rs.140

$900 = 140 \times \text{PVIFA}_{(k,8)} + 1,000 \times \text{PVIF}_{(k\%,8)}$

k can be found out by trial and error.

When k = 16%, RHS = Rs.913.18

When k = 17%, RHS = Rs.873.76

k lies between 16% and 17%.

By interpolation, $k = 16\% + \frac{913.18 - 900}{913.18 - 873.76} = 16\% + 0.33\% = 16.33\%$.

Hence (c) is the answer.

33. Answer : (d)

[<TOP>](#)

Reason : Pattern for raising additional finance:

Debt = 0.3 x Rs.10 lakh = Rs.3 lakh

Equity = 0.7 x Rs.10 lakh = Rs.7 lakh

Therefore Equity funds = Rs.7,00,000

Retained earnings = Rs.2,10,000

Additional equity share capital = Rs.4,90,000

Debt funds = Rs.3,00,000

10% debt = Rs.1,80,000

12% debt = Rs.1,20,000

Cost of debt = k_d :

$$\frac{I(1-t)}{\text{Total debt}} = \frac{(0.1 \times 1,80,000 + 0.12 \times 1,20,000)(1-0.4)}{3,00,000} = \frac{32,400(0.6)}{3,00,000} = 0.0648 = 6.48\%.$$

Cost of equity capital = cost of retained earnings = 15%

Overall cost of capital:

Source	Amount (Rs.)	Proportion	After-tax cost (%)	Total cost
Equity capital	4,90,000	0.49	15	7.35
Retained earnings	2,10,000	0.21	15	3.15
Debt	3,00,000	0.30	6.48	1.944
				12.444

Therefore overall cost of capital = 12.44% and (d) is the answer.

34. Answer : (c)

[<TOP>](#)

Reason : According to the net income approach, Value of the firm = S + B

Where, S = Market value of equity

B = Market value of debt

$$\text{Market value of equity} = S = \frac{\text{NI}}{k_e}$$

Net income (NI):

Profit before interest and tax	Rs.20,00,000
(-) interest @ 14%	Rs.5,25,000
Net income available to the shareholders	Rs.14,75,000

$$S = \frac{14,75,000}{0.16} = \text{Rs.}92,18,750$$

$$B = 25,000 \times \text{Rs.}150 = \text{Rs.}37,50,000.$$

$$\text{Total value of firm} = \text{Rs.}92,18,750 + \text{Rs.}37,50,000 = \text{Rs.}1,29,68,750.$$

$$\text{Overall cost of capital} = k_o = \frac{\text{EBIT}}{V} = \frac{20,00,000}{1,29,68,750} \times 100 = 15.42\%.$$

Hence (c) is the answer.

35. Answer : (d)

[<TOP>](#)

$$\text{Reason : Value of the firm} = \frac{\text{EBIT}}{k_o} = \frac{50,00,000}{0.16} = \text{Rs.}3,12,50,000$$

$$\text{Value of the equity} = S = V - B = 3,12,50,000 - 2,00,00,000 = \text{Rs.}1,12,50,000.$$

According to the net operating approach,

$$k_o = k_e \left(\frac{S}{V} \right) + k_d \left(\frac{B}{V} \right)$$

$$16 = k_e \left(\frac{1,12,50,000}{3,12,50,000} \right) + 14 \left(\frac{2,00,00,000}{3,12,50,000} \right)$$

$$16 = 0.36 k_e + 8.96$$

$$k_e = 19.56\%.$$

Or,

$$k_e = k_o + (k_o - k_d) \frac{B}{S}$$
$$k_e = 16 + (16 - 14) (2/1.125) = 19.56\%.$$

Hence (d) is the answer.

36. Answer : (c)

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Reason : Statement I is true by the definition of playing the float.

Statement II is true because Net float = Payment float – Collection float.

Statement III is not true because when the payment float is less than the collection float the cash balance in the books of the company is more than the cash balance in the books of the bank.

Hence (c) is the answer.

37. Answer : (e)

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Reason :

Particulars	March	April	May	June	July	August
Sales	1,20,000	1,00,000	1,50,000	2,40,000	2,00,000	2,00,000
Cash sales	24,000	20,000	30,000	48,000	40,000	40,000
Credit sales	96,000	80,000	1,20,000	1,92,000	1,60,000	1,60,000
Collection from the debtors:						
50 % in the following month	88,000	48,000	40,000	60,000	96,000	80,000
30% in the second month	48,000	52,800	28,800	24,000	36,000	57,600
20% in the third month	-	32,000	35,200	19,200	16,000	24,000
Cash inflows	1,60,000	1,52,800	1,34,200	1,51,200	1,88,000	2,01,600

Therefore total collection from the debtors in the month of August is Rs.2,01,600. Hence (e) is the answer.

38. Answer : (a)

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Reason :

Alternative	$k_d(1-t)\%$	$k_e\%$	W_d	W_e	$k_o = W_e k_e + W_d k_d(1-t)$
A	7.8	12	0.8	0.2	8.64%
B	6.6	17	0.5	0.5	11.8%
C	6.0	18	0.4	0.6	13.2%
D	7.2	14	0.6	0.4	9.92%
E	5.4	20	0.3	0.7	15.62%

The company has to choose that alternative with minimum overall weighted average cost of capital. Therefore it has to choose alternative A with 80% debt and 20% equity.

Hence (a) is the answer.

39. Answer : (c)

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Reason :

Source of new finance	Cost (%)	Range of new financing (Rs. lakh)	Breaking point (Rs. lakh)	Range of new financing (Rs. lakh)
Equity	13.0	0 – 10	$10/0.7 = 14.29$	0 -14.29
	14.0	11 – 20	$20/0.7 = 28.57$	14.29 – 28.57
	15.0	21 – 40	$40/0.7 = 57.14$	28.58 – 57.14
	15.5	41 - 100	$100/0.7 = 142.86$	57.15 – 142.86
Debt	9.0	0 – 10	$10/0.3 = 33.33$	0 -33.33
	10.0	11 – 20	$20/0.3 = 66.67$	33.34 – 66.67
	11.0	21 – 40	$40/0.3 = 133.33$	66.68 – 133.33
	12.0	41 - 100	$100/0.3 = 333.33$	133.34 – 333.33

Since the company wants to raise Rs.50,00,000, it falls in the range of Rs.28.58 lakh – Rs.57.14 lakh for equity and in the range of Rs.33.34 lakh – Rs.66.67 lakh for debt.

In these ranges,

$$k_e = 15\%$$

$$k_d(1-t) = (10)(0.6) = 6\%$$

$$W_e = 0.7$$

$$W_d = 0.3$$

$$k_o = 0.7 \times 15 + 0.3 \times 6 = 12.3\%.$$

Hence (c) is the answer.

40. Answer : (c)

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Reason : Payout ratio = 25%

$$\text{EPS} = \text{Rs.50/-}$$

$$\text{Share price } P = m \left(D + \frac{E}{3} \right) = 12 \times \left[12.5 + \frac{50}{3} \right] = \text{Rs.350}$$

$$\text{Dividend yield} = \frac{\text{Dividend per share}}{\text{Market price per share}} = \frac{12.5}{350} = 3.57\%$$

Hence (c) is the answer.

41. Answer : (b)

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Reason : According to the Walter's model for dividend policy,
$$P = \left[\frac{D}{k_e} + \left(\frac{r}{k_e} \right) (E-D) / k_e \right]$$

The optimal dividend pay-out ratio depends upon the return on investment and the cost of capital.

$$\text{Here, } r = \frac{1,00,000}{5,00,000} = 0.2 = 20\%.$$

The cost of capital is given as 15%.

The return on investment is greater than the cost of capital. In such a case, the value of the company's share is maximized when the dividend pay-out ratio is zero.

$$\text{Therefore, } P = \left[\frac{0}{0.15} + \left(\frac{0.20}{0.15} \right) (10 - 0) / 0.15 \right] = \text{Rs.88.89}$$

$$E = \text{EPS} = \frac{\text{Net earnings}}{\text{Number of shares}} = \frac{5,00,000}{50,000} = \text{Rs.10}$$

$$P/E = 88.89/10 = 8.889 \text{ (i.e., 8.9 approximately).}$$

Hence (b) is the answer.

42. Answer : (c)

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Reason : Price per share at the end of the year:

$$k_e = 10\%.$$

$$P_0 = \frac{1}{(1+k_e)} (D_1 + P_1) \Rightarrow 100 = \frac{1}{(1+0.1)} (8 + P_1) \Rightarrow P_1 = \text{Rs.102}$$

Amount to be raised by the issue of new shares:

$$n_1 P_1 = I - (E - n D_1) = 10,00,000 - (5,00,000 - 50,000 \times 8) = \text{Rs.9,00,000}$$

$$\text{Number of additional shares to be issued} = \frac{9,00,000}{102} \text{ shares.}$$

$$\text{Value of the firm} = n P_0 =$$

$$\frac{(n+n_1)P_1 - I + E}{(1+k_e)} = \frac{\left(50,000 + \frac{9,00,000}{102} \right) 102 - 10,00,000 + 5,00,000}{1.10}$$

$$= \text{Rs.50,00,000.}$$

Hence (c) is the answer.

43. Answer : (a)

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Reason : Cost of equity = Expected return on a security = $k_e = R_f + \beta(R_m - R_f) = 6\% + 1.6(18\% - 6\%) = 25.2\%$

$$= \frac{\text{Dividend paid}}{\text{Expected return}} = \frac{46}{0.252} = \text{Rs. } 182.54.$$

The share is said to be correctly priced at Rs.182.54. But the current market price is Rs.170. Therefore ACL can afford to spend Rs.12.54 (182.54 – 170) over the current market price on each share so that they get the correct price.

Hence (a) is the answer.

44. Answer : (e)

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Reason : According to the Gordon's model for dividend policy, $P = \frac{E(1-b)}{k_e - br}$

Where, E = EPS

b = retention ratio

k_e = Cost of equity capital

r = return on investment

Net earnings	Rs.6,84,000
Number of shares (Rs.20,00,000/20)	1,00,000
EPS	6.84

Given $g = br = 0.06 = b \times 0.25 \Rightarrow b = 0.24$

$k_e = 12.5\%$

Therefore the price of the share = $P = \frac{6.84 (1 - 0.24)}{0.125 - 0.06} = \text{Rs. } 79.98 \approx \text{Rs. } 80$

Hence (e) is the answer.

45. Answer : (c)

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Reason :

Book value per share	Rs.137.80
Return on equity	15%
Retention ratio	60%
Dividend pay-out	40%
EPS = Book value x ROE	$137.80 \times 0.15 =$ Rs.20.67
DPS = EPS x 0.4	Rs.8.27
Opportunity cost of capital	18%
Growth in dividend = br	$0.6 \times 0.15 = 9\%$

Calculation of share price using dividend growth model:

$$P_0 = \frac{D_1}{k_e - g} = \frac{8.27(1.09)}{0.18 - 0.09} = \text{Rs. } 100.16$$

Calculation of share price using Walter's model:

$$P = \left[\frac{D}{k_e} + \left(\frac{r}{k_e} \right) (E - D) / k_e \right] = \left[\frac{8.27}{0.18} + \left(\frac{0.15}{0.18} \right) (20.67 - 8.27) / 0.18 \right] = 45.94 + 57.41 = \text{Rs. } 103.35$$

Therefore the share price computed from Walter's model is more by Rs.3.19 from that computed from the dividend discount model. Hence (c) is the answer.

46. Answer : (b)

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Reason : Time between two consecutive orders = $\frac{12 \text{ months}}{\text{No. of orders}}$

$$\begin{aligned}\text{No. of orders} &= \frac{\text{Annual demand}}{\text{EOQ}} \\ &= \sqrt{\frac{2 \times \text{Annual consumption} \times \text{Buying cost per order}}{\text{unit cost} \times \text{Storage and carrying costs}}} \\ &= \sqrt{\frac{2 \times 12,800 \times 150}{0.25 \times 6}}\end{aligned}$$

$$\text{EOQ} = 1,600 \text{ units}$$

$$\text{No. of orders} = \frac{12,800}{1,600} = 8 \text{ orders}$$

$$\text{Time between two consecutive orders} = \frac{12 \text{ months}}{8 \text{ orders}} = 1.5 \text{ months}$$

Hence (b) is the answer.

47. Answer : (e)

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Reason : Total inventory cost = Total ordering costs + Total carrying costs

$$\text{Total ordering costs} = \frac{U}{Q} \times F = (\text{No. of orders} \times \text{Cost per order})$$

Where,

U = Annual usage

F = Fixed cost per order

Q = Quantity ordered

$$\text{Total carrying costs} = \frac{QPC}{2}$$

Where,

Q = Quantity ordered

P = Purchase price per unit

C = Carrying cost as %

When $Q = 125 \times 4 = 500$ boxes,

Total inventory cost = Total ordering costs + Total carrying costs

$$\begin{aligned} &= (\text{No. of orders} \times \text{Cost per order}) + \frac{QPC}{2} = (4 \times 250) + \frac{125 \times 125 \times 0.2}{2} \\ &= 1,000 + 1,562.5 = 2,562.5 \end{aligned}$$

When EOQ is employed,

Total inventory cost = Total ordering costs + Total carrying costs

$$\begin{aligned} &= \left(\frac{125 \times 4}{100} \times 250 \right) + \frac{125 \times 100 \times 0.2}{2} \\ &= \text{Rs. } 1,250 + 1,250 \\ &= \text{Rs. } 2,500. \end{aligned}$$

Therefore the company would save Rs.62.5 when EOQ is employed.

Hence (e) is the answer.

48. Answer : (d)

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Reason : Average number of days for which the stock is held =

$$\frac{360 \text{ days}}{\text{Inventory turnover ratio}} = \frac{360}{2.5} = 144 \text{ days}$$

$$\text{Inventory turnover ratio} = \frac{\text{Raw material consumed}^1}{\text{Average stock}^2} = \frac{5,00,000}{2,00,000} = 2.5$$

1. Raw material consumed = Opening stock + Purchases made during the year – Closing stock

$$= 1,80,000 + 5,40,000 - 2,20,000$$

$$= \text{Rs. } 5,00,000$$

2. Average stock = (opening stock + closing stock)/2 = Rs.2,00,000

Hence (d) is the answer.

49. Answer: (c)

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Reason: $\text{Reorder level} = S \times L + F\sqrt{S \times R \times L}$

where,

S – Daily usage in units = $3,60,000/360 = 1,000$ units

L – Lead time in days = 5

R – Average number of units per order = 5,000 units

F – Stock-out acceptance factor = 3.00

$\therefore \text{Reorder level} = 1,000 \times 5 + 3\sqrt{1,000 \times 5,000 \times 5} = 20,000$ units

Hence (c) is the answer.

50. Answer : (c)

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Reason : The possible levels of usage and their corresponding probabilities are computed in the following table:

Daily usage rate		Lead time		Possible levels of usage	
Units	Probability	No. of days	Probability	Possible levels of usage	Probability
(1)	(2)	(3)	(4)	(1) x (3)	(2) x (4)
250	0.4	25	0.7	6,250	0.28
		40	0.3	10,000	0.12
400	0.6	25	0.7	10,000	0.42
		40	0.3	16,000	0.18

Normal Usage during lead time = Average Daily Usage rate x Average Lead Time

Average Daily Usage rate = $250 \times 0.40 + 400 \times 0.60 = 340$ units.

Average Lead Time = $25 \times 0.7 + 40 \times 0.3 = 29.5$ days

Normal Usage during lead time = $340 \times 29.5 = 10,030$ units.

Stock outs will occur if the usage is above 10,030 units. Therefore stock out level = 5,970 units

Hence (c) is the answer.

51. Answer : (b)

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Reason : Calculation of reduction in investment in debtors:

Current debtors $(30,00,000 \times 2/12) = \text{Rs.}5,00,000$

Revised debtors $(30,00,000 \times 1/12) = \text{Rs.}2,50,000$

Reduction in debtors balance = $\text{Rs.}2,50,000$.

Discount to be offered $(30,00,000 \times 50/100 \times 2/100) = \text{Rs.}30,000$

Increase in profit due to decrease in debtors $(2,50,000 \times 25/100) = \text{Rs.}62,500$

Net increase in profit = $\text{Rs.}62,500 - \text{Rs.}30,000 = \text{Rs.}32,500$.

Hence (b) is the answer.

52. Answer : (c)

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Reason : The effect of the change in the existing credit policy can be estimated from the following formula:

$$\Delta P = \Delta S(1 - V) + k\Delta I - \Delta DIS$$

Where

ΔS = Increase in sales = Rs.15 lakh

V = Variable cost to sales ratio = $1 - \text{contribution}/\text{Sales} = 0.8$

k = cost of funds = 15%

$$\Delta I = \text{Savings in receivables} = \frac{S_0}{360} (ACP_O - ACP_N) - V \frac{\Delta S}{360} ACP_N$$

$$\Delta DIS = p_n (S_0 + \Delta S) d_n - p_0 S_0 d_0$$

Where

p_n = proportion of discount sales after liberalizing = 0.8

S_0 = sales before liberalizing = Rs.150 lakh

ΔS = Increase in sales = Rs.15 lakh

d_n = new discount percentage = 0.02

p_0 = proportion of discount sales after liberalizing = 0.4

d_0 = old discount percentage = 0.01

$$\Delta DIS = p_n (S_0 + \Delta S) d_n - p_0 S_0 d_0 = 0.8 (150 + 15) 0.02 - 0.4 \times 150 \times 0.01 = \text{Rs.2.04 lakh}$$

$$\Delta I = \frac{S_0}{360} (ACP_O - ACP_N) - V \frac{\Delta S}{360} ACP_N$$

$$= \frac{150}{360} (30 - 20) - 0.8 \times \frac{15}{360} \times 20 = \text{Rs.3.5 lakh.}$$

$$\Delta P = \Delta S(1 - V) + k\Delta I - \Delta DIS = 15 (1 - 0.8) + 0.15 \times 3.5 - 2.04 = \text{Rs.1.485 lakh.}$$

There is net incremental profit of Rs.1.485 lakh on account of liberalizing the credit policy. Hence (c) is the answer.

53. Answer : (c)

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Reason : The effect of the new collection programs on the profit can be estimated from the following formula:

$$\Delta P = \Delta S(1 - V) - k\Delta I - \Delta BD - \Delta C$$

ΔP = Change in profits

ΔS = Increase in sales

V = Variable cost to sales ratio

k = cost of funds

$$\Delta I = \text{Savings in receivables} = \frac{S_0}{360} (ACP_O - ACP_N) - V \frac{\Delta S}{360} ACP_N$$

$$= \frac{100}{360} (50 - 35) - 0.7 \times \frac{10}{360} \times 35 = \text{Rs.3.486 lakh}$$

$$\Delta BD = \text{increase in bad debts cost} = b_n (S_0 + \Delta S) - b_0 S_0 = 0.03 (100 + 10) - 0.05 \times 100$$

$$= -\text{Rs.1.7 lakh}$$

$$\Delta C = \text{increase in collection expenses} = 2.5 - 1 = 1.5 \text{ lakh.}$$

$$\Delta P = 10 \times 0.3 + 0.15 \times 3.486 - (-1.7) - 1.5 = \text{Rs.3.7229 lakh} \approx \text{Rs.3.723 lakh. Therefore (c) is the answer.}$$

54. Answer : (d)

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$$\text{Reason : Cost of trade credit} = \frac{\text{Rate of discount}}{1 - \text{Rate of discount}} \times \frac{\text{Number of days in a year}}{(\text{Credit period} - \text{Discount period})}$$

$$= \frac{0.01}{0.99} \times \frac{360}{(45 - 10)} = 10.39\%$$

$$\text{New cost of trade credit} = 10.39 \times 2.5 = 25.975\%$$

$$\frac{0.02}{0.98} \times \frac{360}{(x - 10)} = 25.975\%$$

$$\frac{360}{(x - 10)} = 12.72775$$

$$360 = 12.72775 \times (x - 10)$$

$$12.72775 \times x = 487.2775 \Rightarrow x = 38.28 \text{ days.}$$

Hence (d) is the answer.

55. Answer : (e)

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$$\begin{aligned} \text{Reason : Expected profit/loss from offering credit} &= p(\text{Revenue} - \text{cost}) - (1-p)(\text{cost}) \\ &= 0.75 (45,000 - 12,600) - (0.25)(12,600) \\ &= \text{Rs.} 21,150 \end{aligned}$$

The company would get a profit of Rs.21,150 by offering credit.

Hence (e) is the answer.

56. Answer : (c)

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Reason : Present value of the costs associated with the machine will be

$$\text{Rs.} 60,00,000 + \text{Rs.} 5,00,000 \times \text{PVIFA}(12 \text{ percent}, 4 \text{ years}) + \text{Rs.} 6,00,000 \times \text{PVIFA}(12 \text{ percent}, 6 \text{ years}) \times \text{PVIF}(12 \text{ percent}, 4 \text{ years})$$

$$= \text{Rs.} 60,00,000 + \text{Rs.} 5,00,000 \times 3.037 + \text{Rs.} 6,00,000 \times 4.111 \times 0.636$$

$$= \text{Rs.} 90,87,257.60$$

The required annual capital charge will be

$$= \frac{\text{Rs.} 90,87,257.60}{\text{PVIFA}(12\%, 10 \text{ years})} = \frac{\text{Rs.} 90,87,257.60}{5.650} = \text{Rs.} 16,08,364.177 = \text{Rs.} 16.08 \text{ lakh. (approximately)}$$

57. Answer : (c)

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Reason :

	Machine I 3,00,000		Machine II 3,00,000		Machine III 3,00,000	
Initial investment						
Expected annual sales		5,00,000		4,00,000		4,50,000
(-) Cost of sales						
Direct materials	40,000		40,000		48,000	
Direct labour	50,000		30,000		36,000	
Factory overheads	<u>60,000</u>		<u>50,000</u>		<u>58,000</u>	
Cost of production	1,50,000		1,20,000		1,42,000	
Administration costs	20,000		10,000		15,000	
Selling and distribution costs	10,000		10,000		10,000	
Depreciation	1,30,000	<u>3,10,000</u>	91,667	<u>2,31,667</u>	90,000	<u>2,57,000</u>
Profit before tax		1,90,000		1,68,333		1,93,000
(-) tax @ 40%		<u>76,000</u>		<u>67,333</u>		<u>77,200</u>
Profit after tax		1,14,000		101,000		1,15,800
(+) depreciation		1,30,000		91,667		90,000
Net cash flow		2,44,000		1,92,667		2,05,800
Pay-back period (Initial investment / Net annual cash flow)		1.23 years		1.56 years		1.46 years

Therefore (c) is the answer.

58. Answer : (b)

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Reason : Total profit before depreciation over the life of the machine = Rs.11,00,000

$$\frac{11,00,000}{5 \text{ years}}$$

Therefore average profit per annum = $\frac{11,00,000}{5 \text{ years}}$ = Rs.2,20,000

Total depreciation over the life of the machine = 8,00,000 – 0 = Rs.8,00,000

$$\frac{8,00,000}{5 \text{ years}}$$

Average depreciation per annum = $\frac{8,00,000}{5 \text{ years}}$ = Rs.1,60,000

Average annual profit after depreciation = 2,20,000 – 1,60,000 = Rs.60,000

$$\frac{\text{Average annual profit after tax}}{\text{Average of initial investment}}$$

Accounting rate of return = $\frac{\text{Average annual profit after tax}}{\text{Average of initial investment}}$

$$\frac{\text{Rs.8,00,000}}{2} = \text{Rs.4,00,000}$$

Average of initial investment = $\frac{\text{Rs.8,00,000}}{2}$

ARR = 60,000/4,00,000 x 100 = 15%

Hence (b) is the answer.

59. Answer : (c)

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Reason : IRR is that rate of return at which the NPV (PV of Cash inflows – PV of cash outflows) is zero.

Therefore,

$$\frac{6,00,000}{(1+r)} + \frac{2,00,000}{(1+r)^2} + \frac{1,00,000}{(1+r)^3} + \frac{5,00,000}{(1+r)^4} - 11,00,000$$

‘r’ is the IRR and can be found out by trial and error and interpolation.

By trial and error,

When r = 11%, RHS = 11,05,349.65

When r = 12%, RHS = 10,84,090.00

k lies between 11% and 12%.

$$\text{By interpolation, } k = 11\% + \frac{11,05,349.65 - 11,00,000}{11,05,349.65 - 10,84,090} = 11\% + 0.25\% = 11.25\%.$$

Hence (c) is the answer.

60. Answer : (d)

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Reason : Given:

NPV = PV of cash inflows – Cost of the project

Annual cost saving = Rs.40,000

Useful life = 4 years

IRR = 15%

At IRR (15%), the total PV of cash inflows = Initial cash outlay.

Initial cash outlay = Rs.40,000 x PVIFA_(15%, 4) = 40,000 x 2.855 = Rs.1,14,200.

PV of cash inflows:

$$\text{Given PI} = \frac{\text{PV of cash inflows}}{\text{Cost of the project}} = 1.1$$

Therefore, PV of cash inflows = 1.1 x cost of the project = 1.1 x 1,14,200 = Rs.1,25,620

NPV = 1,25,620 – 1,14,200 = Rs.11,420.

Hence (d) is the answer.

61. Answer : (d)

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Reason : Cash released by the concentration banking system = Rs.5,00,000 x 2 days = Rs.10,00,000.

Return on the cash released = 0.12 x 10,00,000 = Rs.1,20,000

Therefore savings = Rs.1,20,000 – Rs.50,000 = Rs.70,000.

Hence (d) is the answer.

62. Answer : (c)

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Reason : Net benefit cost ratio (NBCR) = $\frac{\text{NPV}}{\text{Initial investment}}$

$$\text{Therefore initial investment} = \frac{\text{NPV}}{\text{NBCR}} = \frac{40,000}{0.2} = \text{Rs.2,00,000}$$

NPV = PV of cash inflows – Initial investment

PV of cash inflows = NPV + Initial investment = 40,000 + 2,00,000 = Rs.2,40,000.

Hence (c) is the answer.

63. Answer : (d)

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Reason :
$$\text{BCR} = \frac{\text{PV of benefits}}{\text{Initial investment}}$$

PV of initial investment (cost) = Rs.2,00,000
$$\text{PV of benefits} = \frac{35,000}{0.10} = \text{Rs.3,50,000}$$

$$\text{BCR} = 3,50,000 / 2,00,000 = 1.75.$$

Hence (d) is the answer.

64. Answer : (b)

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Reason :
$$\text{Average conversion period} = \frac{\text{Average stock of work-in-process}}{\text{Average daily cost of production}}$$

$$\text{Average daily cost of production} = \frac{115}{5} = \text{Rs.23 lakh}$$

Therefore annual cost of production = 23 x 360 = Rs.8,280 lakh
Now Opening stock = closing stock + 1 lakh
$$\frac{\text{Opening stock} + \text{closing stock}}{2} = 1.15 \text{ lakh}$$

Closing stock + 10 lakh + closing stock = 230 lakh
Closing stock = Rs.110 lakh
Opening stock = Rs.120 lakh
Annual cost of production = Opening work-in-process + annual consumption of raw materials + Manufacturing expenses + Depreciation – Closing work-in-process
8,280 lakh = 120 lakh + annual consumption of raw materials + 5 lakh + 10 lakh – 110 lakh
Annual consumption of raw materials = Rs.8,255 lakh
Average daily consumption of raw materials = Rs.22.93 lakh.
Hence (b) is the answer.

65. Answer : (c)

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Reason :
$$\text{Average payment period} = \frac{\text{Average balance of trade creditors}}{\text{Average daily purchases}}$$

Opening trade creditors = Rs.90,000
Closing trade creditors = 1/3 x 90,000 = Rs.30,000
Therefore average trade creditors = Rs.60,000
Average daily purchases = Rs.15 lakh/360 = Rs.4,166.67
$$\text{Average payment period} = \frac{60,000}{4,166.67} = 14.4 \text{ days}$$

Hence (c) is the answer.

66. Answer : (d)

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Reason : Gross operating cycle = Net operating cycle + Average payment period

$$75 = 50 + \text{Average payment period}$$

$$\text{Average payment period} = 25 \text{ days.}$$

Net operating cycle = Raw material storage period + conversion period + finished goods storage period + average collection period – average payment period.

$$50 = 36 + 3 + 18 + \text{average collection period} - 25$$

$$\text{Average collection period} = 18 \text{ days.}$$

If the average collection period comes down to 8 days and the average payment period increases to 31 days, net operating cycle = $36 + 3 + 18 + 8 - 31 = 34$ days.

$$\text{Therefore gross operating cycle} = \text{net operating cycle} + \text{average payment period} = 34 + 31 = 65 \text{ days.}$$

Thus the gross operating cycle decreases by 10 days. Hence (d) is the answer.

67. Answer : (d)

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Reason : MPBF under method I = Rs.1,200 lakh

$$\text{Rs.1,200 lakh} = 0.75(\text{Current assets} - \text{current liabilities})$$

$$\text{Current assets} - \text{Current liabilities} = \text{Rs.1,200 lakh} / 0.75 = \text{Rs.1,600 lakh}$$

$$\text{Rs.2,500 lakh} - \text{Current liabilities} = \text{Rs.1,600 lakh}$$

$$\text{Current liabilities} = \text{Rs.900 lakh.}$$

Method II:

$$\text{MPBF} = (0.75 \times \text{Current assets}) - \text{current liabilities} = 0.75 \times \text{Rs.2,500 lakh} - \text{Rs.900 lakh} = \text{Rs.975 lakh.}$$

Method III:

$$\text{MPBF} = 0.75 (\text{Current assets} - \text{core current assets}) - \text{Current liabilities} = 0.75 (\text{Rs.2,500 lakh} - \text{Rs.500 lakh}) - \text{Rs.900 lakh} = \text{Rs.600 lakh.}$$

Hence (d) is the answer.

68. Answer : (c)

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$$\text{Reason : Ex-rights value of a share} = \frac{NP_0 + S}{N+1}$$

Where

N is the number of existing shares required for a rights share.

P_0 is the cum rights price per share

S is the subscription price

$$\therefore 70 \leq \frac{5 \times 75 + S}{5+1}$$

$$420 \leq S + 375$$

$$45 \leq S \text{ or } S \geq \text{Rs.45.}$$

Hence (c) is the answer.

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