

Question Paper Financial Management - II (142) : October 2004
--

- | |
|--|
| <ul style="list-style-type: none">• • Answer all questions.• • Marks are indicated against each question. |
|--|

1. Other things remaining the same, which of the following will generally result in as a consequence of making the credit standards more stringent one? $\leq$
Answer
 $\geq$

- (a) More bad debt losses
- (b) Increase in the number of customers
- (c) Higher sales turnover
- (d) Reduction of the outstanding debtors in the balance sheet
- (e) Incremental cost of collection of the receivables.

(1 mark)

2. Which of the following statements about cash management is **true**? $\leq$
Answer
 $\geq$

- (a) Depreciation expense appears explicitly on the cash budget, but its tax effects are not included
- (b) If cash flows are not uniform during the month, then monthly, rather than weekly or daily, cash budgets should be prepared
- (c) Cash management involves costs, but there is little that management can do to reduce these necessary costs of doing business
- (d) Compensating balance requirements over the cash planning period will affect a firm's target cash balance
- (e) Increases in accounts receivable are also reflected in the cash budget.

(1 mark)

3. Which of the following statements is **not** correct about working capital policy? $\leq$
Answer
 $\geq$

- (a) A company may hold a relatively large amount of cash if it anticipates uncertain sales levels in the coming year
- (b) Credit policy has an impact on working capital since it has the potential to influence sales levels and the speed with which cash is collected
- (c) The cash budget is useful in determining future financing needs

- (d) Holding minimal levels of inventory can reduce inventory carrying costs and cannot lead to any adverse effects on profitability
- (e) Managing working capital levels is important to the financial staff since it influences financing decisions and overall profitability of the firm.

(1 mark)

4. The positive value to the firm, which adds debt to the capital structure in the presence of corporate taxes is ≤
Answer
≥
- (a) Due to the extra cash flow going to the investors of the firm instead of the tax authorities
 - (b) Due to the earnings before interest and taxes being fully taxed at the corporate rate
 - (c) Due to the willingness of the shareholders to protect the interests of the debt holders
 - (d) Because personal tax rates are the same as corporate tax rates
 - (e) Because shareholders prefer to let financial managers choose the capital structure thus making their value independent of it.

(1 mark)

5. Which of the following is **not** considered as a capital component for the purpose of calculating the weighted average cost of capital (WACC) in capital budgeting? ≤
Answer
≥
- (a) Long-term debt
 - (b) Common stock
 - (c) Accounts payable and accruals
 - (d) Preferred stock
 - (e) Convertible bonds.

(1 mark)

6. The return on investment of a firm is 14% and cost of equity capital is 12%. In order to maximize the value of a firm according to Walter Model, the firm should ≤
Answer
≥
- (a) Adopt 100% dividend pay-out policy
 - (b) Not pay any dividend
 - (c) Be indifferent as to the dividend policy
 - (d) Plough back 50% of profits and pay the rest as dividends
 - (e) Leave the decision of dividend payment to the discretion of Board of Directors.

(1 mark)

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

- (a) Commercial paper can be issued by large firms with good credit rating
- (b) Accruals are “free” in the sense that no explicit interest is paid on these funds
- (c) A conservative approach to working capital will result in all permanent assets being financed using long-term securities
- (d) The risk to the firm using short-term credit is usually less than that to the firm using long-term debt
- (e) Both (b) and (c) above.

≤
Answer
≥

(1 mark)

8. Which of the following statements is **correct**?

- (a) Poor synchronization of cash flows which results in high cash management costs can be partially offset by increasing disbursement float and decreasing collections float
- (b) The size of a firm's net float is primarily a function of its natural cash flow synchronization and how it clears its checks
- (c) Lockbox systems are used mainly for security purposes as well as to decrease the firm's net float
- (d) If a firm can speed up its collections and slow down its disbursements, it will be able to reduce its net float
- (e) A firm practicing good cash management and making use of positive net float will bring its check book balance as close to zero as possible, but must never generate a negative book balance.

≤
Answer
≥

(1 mark)

9. High-growth firms will have lower debt ratios than low-growth firms because

- (a) Low growth firms have lower potential bankruptcy costs
- (b) The amount of debt that can be added today is limited by the current ability to pay, not the increases in firm value from greater growth
- (c) High growth firms are usually unmanageable and more volatile than low growth firms
- (d) Present value of future opportunities is usually greater for the high growth firm
- (e) Both (a) and (c) above.

≤
Answer
≥

(1 mark)

10. A _____ is useful for determining the impact of assumptions made about critical variables in calculating NPV. $\leq$
Answer
 $\geq$

- (a) Scenario analysis (b) Financial plan
(c) Decision tree (d) Sensitivity analysis
(e) Breakeven analysis.

(1 mark)

11. The logic behind bond yield plus risk premium approach for estimating the cost of capital is that $\leq$
Answer
 $\geq$

- I. The return required by the investors is directly based on the risk profile of a company
II. The risk profile is adequately reflected in the return earned by the bondholders
III. The risk borne by the equity investors is higher than that of the bondholders

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

(1 mark)

12. Which of the following is **not** the assumption of Walter model on dividend policy? $\leq$
Answer
 $\geq$

- (a) Firm has an infinite life
(b) 'r' and 'k' are assumed to be constant and thus additional investment made by the firm will not change its risk and return profile
(c) Retained earnings are the only source of finance available to the firm
(d) The retention ratio remains constant and hence the growth rate also is constant
(e) For a given value of the firm, the dividend per share and the earnings per share remain constant.

(1 mark)

13. Which of the following is an example of a capitalized expenditure? $\leq$
Answer
 $\geq$

- (I) Funds spent last year to renovate a building that could be used to house a new project that is currently being evaluated.
(II) Installation costs necessary to use a machine that is just purchased.

(III) The necessary increase in inventories needed to support a project that is currently being implemented.

- (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)

14. Which of the following is a feature of secured premium note (SPN)?

- (a) It is a kind of non-convertible debenture with an attached warrant
- (b) It allows the investors to subscribe to the equity of a third firm at a preferential price vis-à-vis the market price
- (c) It is a partly convertible debenture with an attached warrant
- (d) It is also known as zero coupon convertible note
- (e) It is an example of a perpetual preference share.

(1 mark)

15. Which of the following best describes the likelihood of making a bad investment decision because of errors in projected cash flows?

- (a) Operating risk
- (b) Scenario risk
- (c) Forecasting risk
- (d) Erosion risk
- (e) Incremental cash flow risk.

(1 mark)

16. Which of the following is **true** about equity capital as a source of finance?

- (a) Using equity capital to finance working capital may lead to a situation of technical insolvency
- (b) Assessing the cost of equity capital is a difficult and complex task
- (c) Equity capital provides tax benefits to the issuing company
- (d) Cost of equity capital is lesser than the cost of debt capital
- (e) The more a company depends on equity capital the higher will be the financial risk of the company.

(1 mark)

17. All of the following are advantages of the NPV-payback approach to risk analysis except

- (a) It is easy and inexpensive to apply

- (b) It considers a project's liquidity
- (c) It explicitly considers the variability of a project's return
- (d) It is consistent with the notion that risk increases with futurity
- (e) It consider the time value of money.

(1 mark)

18. Which of the following results in a collection float?

- (a) Cheques issued by a firm, but awaiting payment by the bank
- (b) Cheques deposited by a firm in the bank, but not cleared by the bank
- (c) Payments due from sundry debtors
- (d) Payments due to sundry creditors
- (e) The minimum balance shown in current account.

≤
Answer
≥

(1 mark)

19. Decreasing the balances of a firm's operating assets (cash and marketable securities, accounts receivable, and inventory) would result in:

- (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 too restrictive credit policy and/or terms
- (e) Increasing opportunity cost of funds.

≤
Answer
≥

(1 mark)

20. Which of the following is/are the advantages of privately placing the securities?

- I. Negotiation of price is possible
- II. Fewer procedural formalities
- III. Accessible to only private limited companies
- IV. Access to funds is faster.

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

≤
Answer
≥

(1 mark)

21. A company may change from LIFO to FIFO to
- (a) Avoid paying taxes
 - (b) Take advantage of tax deferrals
 - (c) Avoid obsolescence risk
 - (d) Increase reported inventory and hence improve various accounting constructs such as working capital
 - (e) Decrease reported inventory and hence improve various accounting ratios such as inventory turnover.

≤
Answer
≥

(1 mark)

22. Which of the following factors is likely to cause the average firm to increase the amount of debt in the firm's capital structure?
- (a) A decrease in the corporate tax rate
 - (b) An increase in the personal tax rate
 - (c) An increase in the capital gains tax rate
 - (d) An increase in bankruptcy costs
 - (e) An increase in the firm's operating leverage.

≤
Answer
≥

(1 mark)

23. If the material is priced at the value that is realizable at the time of issue, such pricing method is referred to as
- (a) Standard price method
 - (b) Replacement method
 - (c) LIFO method
 - (d) Weighted average cost method
 - (e) FIFO method.

≤
Answer
≥

(1 mark)

24. An unusually high turnover of accounts receivable, which implies a very short days sales outstanding (DSO), could indicate that the firm
- (a) Has a lenient credit policy
 - (b) Offers small discounts
 - (c) Uses a lockbox system, synchronizes cash flows, and has short credit terms
 - (d) Has an inefficient credit and collection department
 - (e) Has a poor debtor base.

≤
Answer
≥

(1 mark)

25. If debentures are issued by a company,

≤

- (a) The interest of the debenture holders is assured by SEBI
- (b) Debenture redemption reserve should be at least 75 percent of the issue amount prior to the commencement of the redemption process
- (c) Debenture redemption reserve must be created if the maturity period is less than 18 months
- (d) Call option on debentures allows the issuer to redeem the debentures at a certain price before maturity
- (e) Put option on debentures allows the issuer to redeem the debentures at a certain price before maturity.

Answer
 $\geq$

(1 mark)

26. A large customer of a firm delays the payment by six days. The effect of this delay on accounts receivables and cash conversion cycle is respectively

$\leq$
Answer
 $\geq$

- (a) Decreases; Lengthens
- (b) Decreases; Shortens
- (c) Increases; Lengthens
- (d) Increases; Shortens
- (e) Decreases; Unchanged.

(1 mark)

27. In an analysis of the optimal economic order quantity (EOQ), what tradeoff is considered?

$\leq$
Answer
 $\geq$

- (a) The tradeoff between the costs of carrying increased inventory and the sales lost by not having sufficient inventory
- (b) The tradeoff between the costs of carrying inventory and the ordering costs of inventory
- (c) The tradeoff between the costs of large raw material orders and the costs saved by buying small amounts at all times
- (d) The tradeoff between providing the customer with inventory on demand versus the cost of having "stock outs" once in a while
- (e) The tradeoff between the total inventory cost and total stock out cost.

(1 mark)

28. Most of the firm's shareholders will prefer

$\leq$
Answer
 $\geq$

- (a) Floating dividends that vary with the firm's performance
- (b) Stable dividends over time
- (c) That funds be reinvested as retained earnings

(c) Only (III) above
above

(d) Both (I) and (III)

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

(1 mark)

34. Which of the following assets is least liquid?

(a) Work in process

(b) Cash and bank balance

(c) Debtors

(d) Bills receivable

(e) Certificates of deposits.

$\leq$
Answer
 $\geq$

(1 mark)

35. The advantage(s) of the accounting payback period method in capital budgeting analysis is/are

(a) It is easy to use and places a premium on liquidity

(b) All inflows related to the decision are considered

(c) Outflows are equated with inflows using the rate of return

(d) It considers the time value of money

(e) It gives less weight on distant cash flows.

$\leq$
Answer
 $\geq$

(1 mark)

36. Working capital margin can be said to be financed by

(a) Cash credit

(b) Overdraft

(c) Equity capital only

(d) Term loan only

(e) Long term sources of capital.

$\leq$
Answer
 $\geq$

(1 mark)

37. The basic EOQ model makes a number of assumptions, including:

(a) Fluctuating demand

(b) Uncertain lead times

(c) Zero lead-time

(d) Uncertain carrying cost

(d) Dependent orders.

$\leq$
Answer
 $\geq$

(1 mark)

38. If the yield curve is upward sloping, a firm's marketable securities portfolio, assumed to be held for liquidity purposes, should be

(a) Weighted towards long-term securities because they pay higher rates

(b) Weighted towards short-term securities because they pay higher rates

(c) Weighted towards treasury bills to avoid interest rate risk

(d) Weighted towards short-term securities to avoid interest rate risk

$\leq$
Answer
 $\geq$

- (e) Balanced between long and short-term securities to minimize the effects of either an upward or a downward trend in interest rates.

(1 mark)

39. Which of the following will result in an increase in the net operating cycle of a firm?

Answer ≤
≥

- (a) An increase in the consumption of the raw materials
- (b) Synchronizing the various processes in the production system for a better volume
- (c) Incremental demand for the product owing to a favorable government policy
- (d) Negotiating with the suppliers for a special discount in lieu of a shorter credit period
- (e) Searching for the new customers to sell the product against cash.

(1 mark)

40. How should a financial manager select one of two mutually exclusive projects that have different risk?

Answer ≤
≥

- (a) Select the project with the larger risk-adjusted net present value
- (b) Choose the project with the least relative risk
- (c) Choose the project with greater return even if that project has greater risk
- (d) Choose the project with less risk even though that project has less return
- (e) Choose any of the two projects.

(1 mark)

41. ADBI bank has offered to set up a collection system to process credit card payments from customers of ABC Ltd for an annual fee of Rs.150,000 plus Rs 0.05 per payment. Total collections are Rs.547.5 million annually—consisting of an average of 10 payments per year from 1,100,000 credit card customers. Average mailing time for customers would be reduced from 3.5 days currently to 2 days with the new system. Cheque processing and clearing time also would be reduced from 5 days presently to 1.5 days with the new arrangement. Establishment of the new system would reduce annual payment processing costs at the Mumbai headquarters of ADBI by Rs.250,000 and reduce the compensating balance at its Mumbai bank by Rs.500,000. The ADBI bank will not require ABC Ltd to maintain a compensating balance if it establishes the new system. Funds released by the new

Answer ≤
≥

arrangement can be invested elsewhere in the firm to earn 15% per annum pretax. The net pretax benefits to ABC Ltd of establishing the new system with the ADBI bank are expected to be

- (a) Rs.5,00,000 (b) Rs.6,75,000 (c) Rs.7,50,000 (d) Rs.8,75,000 (e) Rs.9,25,000.

(2 marks)

42. The wealth ratios for the year 2002, 2003, and 2004 are 1.12, 1.26 and 1.4 respectively. The realized yield would be ≤
Answer
≥
- (a) 21% (b) 23.65% (c) 24.91% (d) 25.48% (e) 26.59%.

(1 mark)

43. Kunwar Ajay Sarees is a popular Indian name in the field of sarees. The existing annual sales of the company are Rs.100 crore. Its existing credit terms are 1/10, net 30 days. Average collection period of the company is 25 days. It has been observed that fifty percent of the customers in term of sales revenue avail the cash discount. In order to increase its sales, the company is contemplating of liberalizing its existing credit terms to 2/10, net 30 days. Sales are likely to increase by Rs.15 crore and average collection period to decline to 15 days. Eighty percent of the customers in terms of sales revenue are expected to avail of the cash discount incentive under liberalization scheme. If the contribution to sales ratio is 20% and the cost of funds to the company is 12%, what will be the incremental cost to the company due to this collection relaxation program? (Assume 360 days in a year) ≤
Answer
≥
- (a) Rs.106.73 lakh (b) Rs.111.11 lakh (c) Rs.118.20 lakh (d) Rs.129.00 lakh (e) Rs.134.00 lakh.

(2 marks)

44. The management of Digital Corp. is trying to find an optimal capital structure. The different proportions of equity and debt in capital structure are as follows. Which of the following proportions gives the optimal capital structure? ≤
Answer
≥

Proportion of equity	Proportion of debt	Cost of equity (%)	Cost of debt (%)
1.00	0.00	10	5
0.90	0.10	10	5.5

0.80	0.20	10.5	6
0.70	0.30	11	6.5
0.60	0.40	11.5	7

- (a) 1:0 (b) 9:1 (c) 4:1 (d) 7:3
(e) 3:2.

(2 marks)

45. A firm with daily credit sales of Rs.50,000 reduced its average collection period by 5 days. What would be the annual benefit? (Assume that the cost of funds as 12 percent) ≤
Answer
≥

- (a) Rs.10,000 (b) Rs.15,000 (c) Rs.20,000 (d) Rs.25,000 (e) Rs.30,000.
(1 mark)

46. What is the amount of the operating cash flow for a firm with Rs.500,000 profit before tax, Rs.100,000 depreciation expense, and a 35% marginal tax rate? ≤
Answer
≥

- (a) Rs.260,000 (b) Rs.325,000 (c) Rs.360,000 (d) Rs.425,000 (e) Rs.450,000.

(2 marks)

47. Chadwick's Corporation's budgeted monthly sales are Rs.3,00,000. Forty percent of its customers pay in the first month and take the 2 percent discount. The remaining 60 percent pay in the month following the sale and don't receive a discount. Purchases for next month's sales are constant each month at Rs.1,50,000. Other payments for wages, rent, and taxes are constant at Rs.70,000 per month. Construct a single month's cash budget with the information given. The average cash gain/loss during a typical month for Chadwick Corporation will be ≤
Answer
≥

- (a) Rs.260,000 (b) Rs.80,000 (c) Rs.77,600 (d) Rs.74,000 (e) Rs.72,800.

(2 marks)

48. If a project's IRR is 11% and the project provides annual cash flows of Rs.15,000 for six years, how much did the project cost? ≤
Answer
≥

- (a) Rs.60,000 (b) Rs.61,258 (c) Rs.63,495 (d) Rs.68,746 (e) Rs.65,567.

(2 marks)

49. Synfosys Computers Inc.,'s trade policy is 3/10, net 30. Synfosys 's annual cost of goods sold is Rs.97,85,000. It uses a 360-day accounting year. The nominal annual cost of trade credit of Synfosys 's is

- (a) 38.93% (b) 47.48% (c) 55.67% (d) 64.78% (e) 73.02%.

(1 mark)

50. Your vehicle costs Rs.2,500 annually in maintenance expense, because of its age. You could replace it with a newer vehicle costing Rs.6,500. Both vehicles would be expected to last five more years. If your opportunity cost is 7.5%, by how much does maintenance expense decrease on the newer vehicle to justify its purchase?

- (a) Rs.1000.00 (b) Rs.1303.29 (c) Rs.1606.33 (d) Rs.4000.00 (e) Rs.1505.00.

(2 marks)

51. The following are the inventory carrying and storage costs of Sigma Ltd.,

- I. Orders must be placed in round lots of 100 units
- II. Annual usage is 5,00,000 units
- III. Carrying cost is 10% of the purchase price
- IV. The purchase price is Rs. 500 per unit and the ordering cost is Rs. 1000 per order.
- V. The delivery time is 10 days.

Determine the EOQ level. If the carrying cost double, what would be the change in EOQ assuming the original level of sales and carrying cost? What is the elasticity of EOQ with respect to carrying cost?

- (a) 4472 units, -1310 units, -29.29% (b) 7071 units, 5000 units, -25.28%
 (c) 5000 units, 4472 units , 30.28% (d) 3162 units, 1310 units, 20.98%
 (e) 4472 units, 1000 units , 29.29%.

(2 marks)

52. Consider the following data:

Raw-material storage period	50 days
Average stock of raw materials	Rs.6,51,000
Average balance of trade creditors	Rs.2,65,000

Assume 360 days in a year and all purchases are made on credit.

If the closing stock of raw-materials is 10% higher than the opening stock of raw-materials, the average payment period is

- (a) 15 days (b) 18 days (c) 20 days (d) 25 days (e) 30 days.

(3 marks)

53. A currently used machine costs Rs.7,750 annually to run. What is the maximum that should be paid to replace the machine with one that will last four years and cost Rs.3,575 annually to operate? The opportunity cost of capital is 15%. ≤
Answer
≥

- (a) Rs.10,000 (b) Rs.11,348 (c) Rs.11,924 (d) Rs.12,349 (e) Rs.12,546.

(2 marks)

54. Precision Airlines is deciding whether to pursue a restricted or relaxed working capital investment policy. Precision's annual sales are expected to be Rs.3.6 million, its fixed assets turnover ratio equals 4.0, and its debt and common equity are each 50 percent of total assets. EBIT is Rs.150,000, the interest rate on the firm's debt is 10 percent, and the firm's tax rate is 40 percent. If the company follows a restricted policy, its total assets turnover will be 2.5. Under a relaxed policy, its total assets turnover will be 2.2. If the firm adopts a restricted policy, assuming that the capital structure remains the same, how much will it save in interest expense? ≤
Answer
≥

- (a) Rs.3,233 (b) Rs.6,175 (c) Rs.9,818 (d) Rs.7,200 (e) Rs.10,136.

(2 marks)

55. The following information is available from SHYAM Ltd., ≤
Answer
≥

Market value of equity capital	Rs.275 crore
Market value of preference capital	Rs.375 crore
Market value of term loan	Rs.150 crore
Cost of equity capital	13%
Cost of preference capital	11%

The weighted average cost of capital is

56. The dividend payout ratio of a firm is 40%. The firm follows traditional approach to dividend policy with a multiplier of 6. The P/E ratio of the firm is ≤
Answer
≥

58. Consider the following information for Silver Syntex:

Silver Syntex is considering to change its credit policy. The consultants have recommended the following two programmes – A and B:

The operation costs of the programmes A and B, if sales is not expected to increase in both the programmes, are respectively

- (a) Rs.1,65,000 and Rs.1,94,000 (b) Rs.1,94,000 and Rs.1,65,000
 (c) Rs.1,65,000 and Rs.2,02,000 (d) Rs.2,02,000 and Rs.1,65,000
 (e) Rs.1,94,000 and Rs.2,02,000.

(2 marks)

59. The annual usage of a raw material is 40,000 units for the Hy Fly Co., Ltd. The price of the raw material is Rs.50 per unit. The ordering cost is Rs.200 per order and the carrying cost 20 percent of the average value of inventory. The supplier has recently introduced a discount of 4 percent on the price of material for orders of 1500 units and above. The company's E.O.Q. prior to the introduction of discount and the net incremental benefit after the introduction of discount are respectively

- (a) 1,265 units, Rs.80,125 (b) 1,000 units, Rs. 875
 (c) 875 units, Rs.1,265 (d) 1,265 units, Rs.80,000
 (e) 1,500 units, Rs.80,125.

(2 marks)

60. The following figures are extracted from the Books of Lee Vee Enterprises:

Profit after tax	Rs.30 crore
Number of shares outstanding	4 crore
P/E ratio	7.2

The total market value of the equity of Lee Vee Enterprises is

- (a) Rs.120 crore (b) Rs.210 crore (c) Rs.216 crore (d) Rs.220 crore (e) Rs.226 crore.

(1 mark)

61. The following information is related to the operations of a firm:

Raw material storage period	70 da
Average conversion period	ys
Finished Goods storage	8

period	da
Average collection period	ys
Average payment period	18
	da
	ys
	39
	da
	ys
	45
	da
	ys

The operating cycle of the firm is:

- (a) 180 days (b) 135 days (c) 90 days (d) 88 days (e) 45 days.

(1 mark)

62. HerbalLife Ltd., expects to have sales of Rs.30,000 in January, Rs.33,000 in February, and Rs.38,000 in March. If 20 percent of sales are for cash, 40 percent are credit sales paid in the month following the sale, and 40 percent are credit sales paid 2 months following the sale, what are the cash receipts from sales in March? ≤
[Answer](#)
≥

- (a) Rs.55,000 (b) Rs.47,400 (c) Rs.38,000 (d) Rs.32,800 (e) Rs.30,000.

(1 mark)

63. The following figures are collected from the annual report of Prafati Pharmaceuticals Ltd.: ≤
[Answer](#)
≥

Net profit	Rs.30 lakh
Outstanding Preference shares	Rs.100 lakh @ 12 percent per annum
Number of equity shares	300,000
Cost of equity shares	16 percent
Return on Investment	20 percent

What should be the approximate dividend pay out ratio, so as to keep the share price at Rs.42 by using Walter model?

- (a) Zero percent (b) 20 percent (c) 36 percent (d) 52 percent (e) 68 percent.

(2 marks)

64. Consider the following information:

Annual requirements	120 units
Carrying cost per unit	Rs.2/-
Number of orders	5
Total annual cost of inventory	Rs.427.5

≤
Answer
≥

Using the above information, the ordering cost per each order would be

- (a) Rs.40.50 (b) Rs.35.50 (c) Rs.37.50 (d) Rs.45.50 (e) Rs.50.50.

(2 marks)

65. The current price of a share of Kaykay Pharmaceuticals Ltd. is Rs.55. The company is planning to issue 1 right share for every 4 equity shares. If the company targets that the ex-rights value of a share shall not fall below Rs.52, the subscription price for one rights share should be more than or equal to

≤
Answer
≥

- (a) Rs.38 (b) Rs.40 (c) Rs.43 (d) Rs.48 (e) Rs.50.

(1 mark)

66. Two companies, Zee Ltd., and Pee Ltd., operate in a same industry and belong to the same group of companies. Both are identical in every respect, except that Zee Ltd uses debt while Pee Ltd does not. The levered company has Rs.5,00,000 debenture carrying 10% rate of interest. The cost of capital and the EBIT of both firm's are 15% and Rs.4,00,000 respectively. Both the companies pay tax at 40%. The total value of Zee Ltd., and Pee Ltd., as per MM approach would be

≤
Answer
≥

- (a) Rs.28,00,000 (b) Rs.34,00,000 (c) Rs.37,00,000 (d) Rs.40,00,000 (e) Rs.58,33,000.

(2 marks)

67. What is the IRR of a project that costs Rs.74,361.78 and provides cash inflows of Rs.25,000 annually for four years?

≤
Answer
≥

- (a) 9.85% (b) 11.02% (c) 13.00% (d) 14.85% (e) 17.50%.

(1 mark)

68. If the tax rate on stock income is 20%, the tax rate on debt income is

≤

20% and the corporate tax rate is 40%, the tax advantage associated with a debt capital of Rs.6,00,000 is

- (a) Nil (b) Rs.2,40,000 (c) Rs.2,62,500 (d) Rs.3,84,000 (e) Rs.5,62,500.

(2 marks)

69. Dolphin Ltd. is offering one rights share at a price of Rs.50 to its existing shareholders for every four shares held. The current market price of its share is Rs.70. What is the theoretical value of a right?

- (a) Rs.2.00 (b) Rs.4.00 (c) Rs.5.00 (d) Rs.10.00 (e) Rs.20.00.

(1 mark)

70. Find out the stock out acceptance factor from the following data:

Usage	= 20 units per day
Lead time	= 60 days
Reorder level	= 2130 units
Average quantity ordered	= 500 units

- (a) 1.2 (b) 1.3 (c) 1.4 (d) 1.5 (e) 2.2.

(1 mark)

71. Consider the following information regarding Super Toys Ltd:

Annual cost of sales	Rs.18,00,000
Opening stock of finished goods	Rs.60,000
Finished goods storage period	10 days

Assuming 360 days in a year, the closing stock of finished goods is

- (a) Rs.40,000 (b) Rs.50,000 (c) Rs.60,000 (d) Rs.1,20,000 (e) Rs.1,80,000.

(1 mark)

72. The following information is available from the books of Jahangir & Co.

Total assets of the company
Rs.8 crore
Return on asset
10%

Overall capitalization rate
16%
Equity capitalization rate
18%
Total interest on debt
Rs.6,00,000

According to the net operating income approach, the debt-equity ratio of Jahangir & Co. would be

- (a) 0.20 (b) 0.22 (c) 0.25 (d) 1 (e) 1.5.

(2 marks)

73. The following information is given about the debentures issued by Darwin Ltd.:

≤
Answer
≥

Face Value	Rs.100
Coupon Rate percent	9
Amount realized per debenture Rs.97.50	
Corporate tax rate percent	40

Debenture is redeemable at a premium of 5 percent after 5 years. The difference between the redemption price and the net amount realized can be written off over the life of the debenture and the amount thus written off is also tax-deductible. The cost of debenture capital to the company by the approximation method is:

- (a) 6.12 percent (b) 6.22 percent (c) 6.32 percent
(d) 6.42 percent (e) 6.52 percent.

(2 marks)

74. The following information relates to the sources of long term finance used by Pioneer Industries Ltd.:

≤
Answer
≥

Source	Book value (Rs. in lakh)	Market value (Rs. in lakh)
Paid-up equity share capital	200	400
Reserves and surplus	400	
Preference shares	150	159
Debentures	250	241

Cost of equity share capital	19.25%
Cost of preference share capital	12.19%
Cost of debenture capital	8%

The difference between the weighted average cost using book value weights and market value weights would be

- (a) 0.52% (b) 0.77% (c) 0.92% (d) 1.23% (e) 1.5%.

(2 marks)

75. As per the records of Mittal group of companies, the following information is available ≤
Answer
≥

Total assets	Rs.1200 crore
Return on assets	15%
Cost of equity capital	12%

The total market value of the equity of Mittal group of companies as per net income approach is

- (a) Rs.1200 crore (b) Rs.1500 crore (c) Rs.1800 crore (d) Rs.2000 crore (e) Rs.2700 crore.

(1 mark)

76. The following figures are collected from annual report of Hyderabad Textiles: ≤
Answer
≥

	2002 (in Rs.000s)	2003 (in Rs.00 0s)
Raw materials inventory – Closing	180	212
Balance	25	45
Work in process inventory – Closing	1085	1192
Balance	1165	1280
Purchases of raw materials during the year	75	100
Manufacturing expenses during the year		

Depreciation

What should be the average conversion period of Hyderabad Textiles for the year 2003? (Assume 360 days in a year)

- (a) 3 days (b) 5 days (c) 7 days (d) 9 days (e) 11 days.

(2 marks)

77. In order to reach the sales target quickly, the sales manager of Jaipur Golden is contemplating to take a liberal credit standard by offering discount of 5 percent on the selling price to those who are buying cash. He is also considering reducing the collection effort. As a result, the sales volume is expected to go up by 25 percent from the present level of Rs.300 lakh but the average collection period will be lengthened from 30 days to 45 days. The amount of bad debt losses will increase from 3 percent to 5 percent of the total sales value. The contribution margin is 30 percent, the cost of funds is 14 percent and 20 percent of the customers are expected to make cash purchase under the new scheme. The incremental benefit will be (Assume 360 days in a year)

- (a) Rs.2.80 lakh (b) Rs.6.20 lakh (c) Rs.9.00 lakh (d) Rs.18.75 lakh (e) Rs.22.50 lakh.

(2 marks)

Suggested Answers

Financial Management - II (142) : October 2004

1. Answer : (d)

Reason : Making the credit standards more stringent one will result in lower volume of sales turnover thereby decreasing the collection costs due to the reduced number of customers, which in turn reduces the bad debt losses. As a consequence of the above event, the outstanding debtors in the balance sheet will also come down. Hence, the option (d) is correct.

[TOP](#) [<](#)
[>](#)

2. Answer : (d)

Reason : Over the planning period in some periods the firm will have a surplus and a deficit in some other periods. If there is a deficit, it has to get it financed from external sources. The availability and extent of such funds will affect a firm's target cash balance.

[TOP](#) [<](#)
[>](#)

3. Answer : (d)

Reason : Statements a, b, c, and e are all true statements. Statement d is false, and thus the appropriate choice. Holding minimal levels of inventory may result in lost sales.

[TOP](#) [<](#)
[>](#)

4. Answer : (a)

Reason : Positive value to the firm, which adds debt to the capital structure in the presence of corporate taxes is due to the extra cash flow going to the investors of the firm instead of the tax authorities.

[TOP](#) [<](#)
[>](#)

5. Answer : (c)

Reason : The WACC includes all investor supplied capital which includes long-term debt, preferred stock, and common stock. It is due to the fact that capital budgeting decision is long term in nature where as accounts payable and accruals are short term in nature. Hence, they will not be considered.

[TOP](#) [<](#)
[>](#)

6. Answer : (b)

Reason : As per Walter Model

[TOP](#) [<](#)
[>](#)

$$P_0 = \frac{D + (E - D)r / k}{k}$$

Where, the notations are in their standard use.

As the given return on investment (r) > cost of equity (k), the

company will maximize the value of share, if no dividends are paid.

7. Answer : (d) [TOP](#) [<](#) [>](#)
Reason : Commercial paper is a type of unsecured promissory note issued by large firms with good credit rating. Statements a, b, c, and e are all accurate statements. Statement d is false, and therefore the appropriate answer.
8. Answer : (a) [TOP](#) [<](#) [>](#)
Reason : Increasing the disbursement or payment float and decreasing the collections float will lead to better synchronization of cash flows and will lead to lower cash management costs.
9. Answer : (b) [TOP](#) [<](#) [>](#)
Reason : High-growth firms will have lower debt ratios than low-growth firms because the amount of debt that can be added today is limited by the current ability to pay, not the increases in firm value from greater growth.
10. Answer : (d) [TOP](#) [<](#) [>](#)
Reason : A sensitivity analysis is useful for determining the impact of assumptions made about critical variables in calculating NPV.
11. Answer : (e) [TOP](#) [<](#) [>](#)
Reason : All the three statements given are correct for the bond yield risk premium approach of estimation of the cost of the capital
12. Answer : (d) [TOP](#) [<](#) [>](#)
Reason : The retention ratio remains constant and hence the growth rate also is constant, this is the assumption of Gordon's dividend capitalization model not Walter model. Others are the assumption of Walter model.
13. Answer : (b) [TOP](#) [<](#) [>](#)
Reason : The example of a capitalized expenditure is installation costs necessary to use a machine that is just purchased.
14. Answer : (a) [TOP](#) [<](#) [>](#)
Reason : Secured premium note is a kind of non-convertible debenture with an attached warrant. The warrant attached to the SPN gives the holder the right to apply for and get allotment of equity shares. Hence, option (a) is the correct choice.

15. Answer : (c)
Reason : Forecasting risk best describes the likelihood of making a bad investment decision because of errors in projected cash flows. [TOP](#) [<](#) [>](#)
16. Answer : (b)
Reason : Assessing the cost of equity capital is a difficult and complex task because the dividend stream receivable by the shareholders is not specified by any legal contract as in the case of borrowed funds. [TOP](#) [<](#) [>](#)
17. Answer : (c)
Reason : The advantages of the NPV-payback approach to risk analysis are it is easy and inexpensive to apply, it considers a project's liquidity, it is consistent with the notion that risk increases with futurity and it consider the time value of money but it doesn't explicitly considers the variability of a project's return. Hence option (c) is the answer. [TOP](#) [<](#) [>](#)
18. Answer : (b)
Reason : Cheques deposited by a firm in the bank, but not cleared by the bank results in a collection float. [TOP](#) [<](#) [>](#)
19. Answer : (d)
Reason : Decreasing the balance of operating assets would lead to a too restrictive credit policy which will translate into a loss. [TOP](#) [<](#) [>](#)
20. Answer : (d)
Reason : Statement (III) is not correct as private placement route is available to public limited companies also. [TOP](#) [<](#) [>](#)
21. Answer : (d)
Reason : A company may change from LIFO to FIFO to increase reported inventory and hence improve various accounting constructs such as working capital. A tax has no relation with methods of inventory valuations. Obsolescence risk increases in FIFO method. Reported inventory increases in FIFO method. Hence all the other options are incorrect. Hence (d) is the correct answer. [TOP](#) [<](#) [>](#)
22. Answer : (c)
Reason : An increase in the capital gains tax rate is likely to cause the average firm to increase the amount of debt in the firm's capital [TOP](#) [<](#) [>](#)

structure.

23. Answer : (b)
Reason : If the material is priced at the value that is realizable at the time of issue, such pricing method is called replacement method . [TOP](#) [≤](#) [≥](#)
24. Answer : (c)
Reason : Use of lockbox, synchronization of cash flows and shorter credit terms will result into quick and efficient collection of outstanding sales and hence an unusually high turnover of accounts receivables. [TOP](#) [≤](#) [≥](#)
25. Answer : (d)
Reason : The interest of the debenture holders is looked after by a trustee set up by the company, not assured by SEBI. Debenture redemption reserve should be at least 50 percent of the issue amount prior to the commencement of the redemption process. Debenture redemption reserve is to be created, only if the maturity of the debentures is more than 18 months. Call option on debentures allow the issuer to redeem the debentures at a certain price before maturity while put option on debentures allow the debenture holders to redeem the debentures at a certain price before maturity. [TOP](#) [≤](#) [≥](#)
26. Answer : (c)
Reason : Delay of payment by a customer will lead to increase in accounts receivables and lengthen the cash conversion cycle. [TOP](#) [≤](#) [≥](#)
27. Answer : (b)
Reason : EOQ is the tradeoff between the costs of carrying inventory and the order costs of inventory. [TOP](#) [≤](#) [≥](#)
28. Answer : (b)
Reason : A primary factor in dividend policy is the maintenance of stability of dividend payments and most of the firm's shareholders prefer it. Hence, the answer is (b). [TOP](#) [≤](#) [≥](#)
29. Answer : (d)
Reason : Manufacturing firms generally hold three types of inventory raw materials, work-in-process, and finished goods inventories. [TOP](#) [≤](#) [≥](#)
30. Answer : (e)
Reason : Preference capital (a) equity capital (b), debenture capital (c) [TOP](#) [≤](#) [≥](#)

and term loan (d) are all long-term sources of funds which are tapped from outside the firm. Reserves and surplus (e) represent retained earnings which are generated out of profits of the firm and they are available to the firm over the long-term.

≥

31. Answer : (d)

Reason : A sensitivity analysis is useful for determining the impact of assumptions made about critical variables in calculating NPV.

≤
TOP
≥

32. Answer : (e)

Reason : As per net operating income approach the cost of capital of the company reduces with the increasing introduction of debt and becomes asymptotic to k_d parallel to X-axis. As per traditional approach cost of capital decreases upto a certain point, remains more or less unchanged for moderate increases in leverage and rises beyond a certain point. This advocates an optimum capital structure for the firm. Both, Net Operating Income approach and Miller and Modigliani approach advocate that overall capitalization rate remains constant for all degrees of leverage. Therefore, there is no optimal capital structure.

≤
TOP
≥

33. Answer : (e)

Reason : If easing a firm's credit policy lengthens the collection period and results in a worsening of the aging schedule, still the firms go for relaxing the credit policy because It normally stimulates sales, it helps in meeting competitive pressures and it increases the firm's deferral period for payables.

≤
TOP
≥

34. Answer : (a)

Reason : Work in process cannot be converted into cash instantaneously. It is to be converted into finished goods and sold against cash or credit, as may be the case. But the other items are cash or may be liquidated within a short time. So, the option (a) is answer.

≤
TOP
≥

35. Answer : (a)

Reason : The payback period is easy to understand and places a heavy emphasis on liquidity.

≤
TOP
≥

36. Answer : (e)

Reason : Working capital margin is generally financed by the long-term sources of funds that mostly comprises of the equity capital and

≤
TOP
≥

part of the term loan. Cash credit and overdraft are the short-term bank borrowing to finance the current assets, not to finance the working capital margin.

37. Answer : (c)

Reason : The basic EOQ model makes a number of assumptions, including. Zero lead-time .

[TOP](#) $\leq$
 $\geq$

38. Answer : (d)

Reason : If the yield curve is upward sloping, then a firm's marketable securities portfolio, assumed to be held for liquidity purposes, should be weighted towards short-term securities to avoid interest rate risk.

[TOP](#) $\leq$
 $\geq$

39. Answer : (d)

Reason : The gross operating cycle of a business entity is defined as the sum of raw material storage period, work-in-process period, finished goods storage period and average collection period. An increase in the consumption of the raw materials will reduce the raw materials storage period while synchronization of the various processes of productions for a better volume will reduce the work in process period. Incremental demand for the product of the company will reduce the finished goods storage period and the proposition for selling the products against cash payment will shorten the debtors' payment period. The average payment period is to be deducted from the gross operating cycle to get the net operating cycle. Hence a decrease in the average payment period will increase the net operating cycle.

[TOP](#) $\leq$
 $\geq$

40. Answer : (a)

Reason : To make a good financial decision, the project with the higher risk-adjusted net present value should be chosen.

[TOP](#) $\leq$
 $\geq$

41. Answer : (c)

Reason : Reduction in collection time = $(3.5 - 2) + (5 - 1.5) = 5.0$ days

[TOP](#) $\leq$
 $\geq$

Amount of funds released = $(\text{Rs.}547,500,000/365) \times 5.0 + \text{Rs.}500,000 = \text{Rs.}8,000,000$

Cost of new system = $1,100,000 \times 10 \times (\text{Rs.}0.05) + \text{Rs.}150,000 - \text{Rs.}250,000$

= Rs.450,000

$$\text{Net pretax benefits} = \text{Rs.8,000,000} \times 0.15 - \text{Rs.450,000} = \text{Rs.750,000}$$

42. Answer : (d)

$$\begin{aligned} \text{Reason : Realized yield} &= (1.12 \times 1.26 \times 1.4)^{1/3} - 1 \\ &= 1.2548 - 1 \\ &= 25.48\%. \end{aligned}$$

<
TOP
>

43. Answer: (a)

Reason: Existing cost of carrying receivables

$$= \frac{100}{360} \times 25 \times 0.12 = \text{Rs.0.8333 crore}$$

Cost of carrying receivables after liberalization

$$= \frac{100}{360} \times 15 \times 0.12 + \frac{15}{360} \times 15 \times 0.8 \times 0.12 = \text{Rs.0.56 crore}$$

Saving in the cost of carrying receivables

$$= 0.833 - 0.560 = \text{Rs.0.273 crore} \dots \dots \dots (A)$$

Amount of discount presently paid

$$= \text{Rs.100} \times 0.01 \times \frac{50}{100} = \text{Rs.0.5 Crore}$$

Amount of discount payable after liberalization

$$= 115 \times 0.02 \times 0.80 = \text{Rs.1.84 crore}$$

The additional amount of discount payable

$$= 1.84 - 0.50 = \text{Rs.1.34 crore} \dots \dots \dots (B)$$

Thus the total incremental cost = B – A

$$= 1.34 - 0.273 = \text{Rs.1.067 crore}$$

<
TOP
>

44. Answer : (b)

Reason: The optimal capital structure will be the point where overall cost of capital (K) is the minimum.

<
TOP
>

$$K = (\text{cost of debt} \times \text{proportion of debt}) + (\text{cost of equity} \times \text{proportion of equity})$$

$$= 0 + 10 \times 1 = 10$$

$$= 5.5 \times 0.10 + 10 \times 0.90 = 9.55$$

$$= 6 \times 0.20 + 10.5 \times 0.80 = 9.6$$

$$= 6.5 \times 0.30 + 11 \times 0.70 = 9.65$$

$$= 7 \times 0.40 + 11.5 \times 0.60 = 9.7$$

In the given problem K is minimum where 90% equity and 10% debt are used Thus it is the optimal capital structure.

45. Answer : (e)

Reason : Annual benefit = Rs.50,000 × 5 × 0.12 = Rs.30,000.

<
TOP
≥

46. Answer : (d)

Reason : Operating cash flows = 500,000(1-0.35) + 100,000
= 325,000 + 100,000 = 425,000

<
TOP
≥

47. Answer : (c)

Reason :

	Sales	Rs300,000	
Collections (same month's sales)	1,17,600	(0.98 × 0.40 × Rs.300,000)	
Collections (last month's sales)	<u>1,80,000</u>	(1.00 × 0.60 × Rs.300,000)	
Total collections	2,97,600		
Purchases payments	1,50,000		
Other payments	<u>70,000</u>		
Total payments	<u>2,20,000</u>		
Net cash gain (loss)		<u>Rs. 77,600</u>	

<
TOP
≥

48. Answer : (c)

Reason : Let project's cost = X

Then, X = 15000 x PVIFA(11%,6)
= 4.233 x 15,000 = Rs.63,495

<
TOP
≥

49. Answer: (c)

Reason : Nominal cost of trade credit = Periodic cost of trade credit x number of periods

Nominal cost of trade credit =
(Discount % / (1 - Discount %)) x (360 days / (credit period - discount period))
Substituting the given values, we get
Nominal cost of trade credit = (3% / (1-3%)) x (360 / (30-10))
Nominal cost of trade credit = 55.67%

<
TOP
≥

50. Answer : (c)

<
TOP

Reason : $2500 \times PVIFA(7.5\%,5) = 6500 + X \times PVIFA(7.5\%,5)$
or, $10116.25 = 6500 + (4.0465x)$
or, $x = 893.6735$
Difference = $2500 - 893.6735 = 1606.32$

>

51. Answer : (a)

Reason : $EOQ = (2FU/PC)^{1/2} = (2 \times 1000 \times 500,000 / 500 \times 0.1)^{1/2} = 4472$ units

EOQ when carrying cost double

$EOQ^* = (2 \times 1000 \times 500,000 / 500 \times 0.2)^{1/2} = 3162$ units.

Elasticity of EOQ in response to doubling of carrying costs

$= \% \text{ change in EOQ} / \% \text{ change in costs} = \frac{3162 - 4472}{4472} \times \frac{50}{100 - 50} = -29.29\%$

<
TOP
>

52. Answer : (c)

Reason : Raw material storage period

$$= \frac{\text{Average stock of raw materials}}{\text{Daily consumption of RMs}}$$

Daily consumption of RMs = $\frac{6,51,000}{50} = \text{Rs.}13,020$

Annual consumption = $13,020 \times 360 = \text{Rs.}46,87,200$

Annual consumption = Opening stock + purchases – closing stock

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

Where opening stock = S and Closing stock = 1.1 S

$6,51,000 = \frac{S + 1.1S}{2}$

S = Rs.6,20,000 = Opening stock

Closing stock = Rs.6,82,000

Annual consumption = $6,20,000 + P - 6,82,000$

$46,87,200 = 6,20,000 + P - 6,82,000$

P = 47,49,200

Average payment period = $\frac{\text{Average balance of creditors}}{\text{Purchases} / 360} = \frac{2,65,000}{47,49,200 / 360} = 20$ days

<
TOP
>

53. Answer : (c)

<

Reason : Let the amount of replacement = X

Then, $X + 3575x \text{ PVIFA}(15,4) = 7750x \text{ PVIFA}(15,4)$

Or, $X + 10210.2 = 22134$

Or, $X = \text{Rs.}11923.8$

[TOP](#)
[≥](#)

54. Answer : (c)

Reason : Step 1:

Calculate net fixed assets, which will be the same under either policy.

FA turnover = 4.0

FA = Rs.900,000.

Step 2:

Determine total assets under each policy, given the total assets turnover ratio for each one.

Restricted: Total assets turnover = 2.5

TA = Rs1,440,000.

Relaxed: $2.2 = \text{TA} = \text{Rs}1,636,364$.

Step 3:

Develop balance sheets for each policy to determine the debt level.

	Restricted	Relaxed
Current assets	Rs 540,000	736,364
Fixed assets	900,000	900,000
Total assets	Rs1,440,000	1,636,364
Debt	Rs 720,000	818,182
Equity	720,000	818,182
Total liabilities & equity	Rs1,440,000	Rs1,636,364

Step 4:

Determine interest under each policy:

Restricted: $\text{Rs}720,000 \times 0.10 = \text{Rs}72,000$.

Relaxed: $\text{Rs}818,182 \times 0.10 = \text{Rs}81,818$.

Step 5:

Calculate the difference in interest expense (the savings) between the 2 policies:

$\text{Rs.}81,818 - \text{Rs.}72,000 = \text{Rs.}9,818$.

[TOP](#)
[≤](#)
[≥](#)

55. Answer : (b)

[≤](#)

Reason : Total market value of the firm=Rs(275+375+150)=Rs800Crore. [TOP](#)

The cost of term loan=15(1-0.35)=9.75%

The weighted average cost of

$$\text{capital} = \frac{275}{800} \times 0.13 + \frac{375}{800} \times 0.11 + \frac{150}{800} \times 0.0975$$

$$= 0.1145$$

$$= 11.45\%$$

56. Answer : (a)

Reason : According to the Traditional approach

$$P = m \left(D + \frac{E}{3} \right)$$

where symbols are in their standard use

Substituting the values, we get

$$P = 6 \left(0.40E + \frac{E}{3} \right) = E(2.4 + 2)$$

$$\therefore \frac{P}{E} = 4.4$$

57. Answer : (a)

Reason : The accounting rate of return = 18/50 = 36%; The payback period = 50/18 = 2.78 years.

58. Answer : (c)

Reason :

	Programme A	Programme B
Annual Collection	75,000	1,50,000
expenditure (in Rs)	48,000	24,000
Bad Debt losses (in Rs)	42,000	28,000
Cost of investment in Debtors (in Rs)	165,000	2,02,000
Total		

Cost of Investment in Debtors for programme A = $\frac{1.5}{12}$

$$12 \times 24,00,000 \times 0.7 \times 0.2 = \text{Rs } 42,000$$

Cost of Investment in Debtors for programme A =

$$\frac{1}{12} \times 24,00,000 \times 0.7 \times 0.20 = \text{Rs } 28,000$$

59. Answer : (a)

Reason : Let us first arrange the data contained in the problem in accordance with the notation familiar to us by now. TOP
≤
≥

U = 40,000 units

F = Rs.200 per order

P = Rs.50 per unit

C = 20%

D = Rs.2 per unit

F = Rs.200 per order

C = 0.20

E.O.Q. without discount,

$$\begin{aligned} Q^* &= \sqrt{\frac{2UF}{PC}} \\ &= \sqrt{\frac{2 \times 40,000 \times 200}{50 \times 0.2}} \\ &= 1,265 \text{ units} \end{aligned}$$

For utilizing discount the minimum order size = 1500 units. As Q* is less than 1500, we have to calculate the incremental benefits and incremental costs.

Total amount of discount available with an order size of 1500 units.

= UD or 40,000 units x Rs.2 per unit.

= Rs.80,000.....(1)

Savings due to reduction in ordering costs

$$\begin{aligned} &= \text{Rs.} \left(\frac{U}{Q^*} - \frac{U}{Q'} \right) \times F \\ &= \text{Rs.} \left(\frac{40,000}{1,265} - \frac{40,000}{1,500} \right) \times \text{Rs.}200 \\ &= (32 - 27) \times \text{Rs.}200 \\ &= \text{Rs.}1,000.....(2) \end{aligned}$$

Incremental carrying cost

$$= \frac{Q'(P-D)C}{2} - \frac{Q^*PC}{2}$$

$$= \frac{1,500 \times 48 \times 0.2}{2} - \frac{1,265 \times 50 \times 0.2}{2}$$

$$= \text{Rs.}7,200 - \text{Rs.}6,325$$

$$= \text{Rs.}875 \dots\dots\dots(3)$$

Net incremental benefits (= 1 + 2 – 3)

$$= \text{Rs.}80,000 + \text{Rs.}1,000 - \text{Rs.}875 = \text{Rs.}80,125$$

60. Answer : (c)

Reason : EPS= PAT/ No. of share

$$= 30/4 = 7.5$$

$$P/E = 7.2$$

$$MPS = 7.2 \times 7.5 = 54$$

Total market value is= (MPS) x No of shares

$$= 54 \times 4 = 216 \text{ crore.}$$

[TOP](#)

61. Answer : (c)

Reason : The operating cycle of a firm is defined as:

Raw material storage period + Average conversion period +
Finished Goods storage period + Average collection period –
Average payment period = 70 + 8 + 18 + 39 - 45 = 90 days

[TOP](#)

62. Answer : (d)

Reason : March Receipts = (0.20)(Rs38,000) + (0.40)(Rs33,000) +
(0.40)(Rs30,000) = Rs32,800.

[TOP](#)

63. Answer : (d)

Reason : Net profit = Rs.30 lakh

Less: Preference Dividends = Rs.12 lakh

Earnings for the equity shareholders = Rs.18 lakh

Therefore, earnings per share = 18/3 = Rs.6.00

Let, the dividend pay out ratio be x and so the share price will be:

$$P = \frac{D}{k_c} + \frac{r(E-D)/k_c}{k_c}$$

Here, D = 6x, E = Rs.6, r = 0.20 and $k_e = 0.16$ and P = Rs.42

$$\text{Hence, Rs.}42 = \frac{6x}{0.16} + \frac{0.2(6-6x)}{0.16 \times 0.16}$$

Or, Rs.42 = 37.50 x + 46.875 (1 – x) or, 9.375 x = 4.875 or, x = 0.52.

[TOP](#)

So, the required dividend pay-out ratio will be = 52 percent.

64. Answer : (c)

Reason : Total cost = ordering cost + carrying cost

$$427.50 = 5x + 120x \cdot 2$$

$$x = 187.5/5 = 37.50.$$

[TOP](#)

65. Answer : (b)

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

[TOP](#)

Where,

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

P_0 is the cum rights price per share

S is the subscription price

$$\therefore 52 \leq \frac{4 \times 55 + S}{4+1}$$

$$S \geq 52 \times 5 - 4 \times 55 \geq \text{Rs.}40.$$

Hence option (b) is the answer.

66. Answer : (b)

Reason : The value of Pee Ltd (unlevered firm) = $\text{EBIT}(1-t)/k$
 $= 400000(1-0.40)/0.15$
 $= 240000/0.15$
 $= \text{Rs.}1600000$

[TOP](#)

The value of Zee Ltd (levered firm) = value of unlevered firm + $(t \times \text{value of debt})$

$$= 1600000 + (0.40 \times 500000)$$

$$= 1600000 + 200000$$

$$= \text{Rs.}1800000$$

The total value = Rs. (1600000 + 1800000) = Rs.3400000

67. Answer : (c)

Reason : $25,000 \text{PVIFA}(r\%, 4) = 74361.78$. By simplification, r is 13 %.

Hence, IRR of the project is 13%

[TOP](#)

68. Answer : (b)

Reason : Tax advantage associated with debt capital =

[TOP](#)

$$\left[1 - \frac{(1-t_c)(1-t_{ps})}{(1-t_{pd})} \right] \times B$$

$$= \left[1 - \frac{(1-0.4)(1-0.20)}{(1-0.20)} \right] \times 6,00,000 = \text{Rs. } 2,40,000.$$

69. Answer :

Reason : The theoretical value of a right = $\frac{P_0 - S}{N+1} = \frac{70-50}{4+1} = \text{Rs. } 4$

70. Answer : (a)

Reason : Reorder level = $S(L) + F \sqrt{SRL}$

$$= 20 \times 60 + F \sqrt{20 \times 500 \times 60} = 2130 \text{ units}$$

$$= 1200 + F 775 = 2130$$

$$F = 1.2$$

71. Answer : (a)

Reason : Finished goods storage period = $\frac{\text{Average stock of finished goods}}{\text{Average daily cost of sales}}$

$$\therefore 10 = \frac{\text{Average stock of finished goods}}{\left(\frac{18,00,000}{360} \right)}$$

or Average stock of finished goods = $10 \times 5,000 = \text{Rs. } 50,000$

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

or Closing stock = $2 \text{ Average stock} - \text{Opening stock}$

$$= 2 \times 50,000 - 60,000 = \text{Rs. } 40,000.$$

72. Answer : (b)

Reason : According to the net operating income approach –

$$\begin{aligned} \text{The net operating income} &= \text{Total assets} \times \text{RoA} \\ &= 800,00,000 \times 0.10 \\ &= 80 \text{ lakh} \end{aligned}$$

$$\begin{aligned} \text{Total market value of firm} &= \frac{\text{Net operating income}}{\text{Overall capitalization rate}} \\ &= 80 / 0.16 = \text{Rs. } 500 \text{ lakh} \end{aligned}$$

$$\text{Market value of equity} = \frac{\text{Equity income}}{\text{Equity capitalization rate}}$$

[TOP](#)

[TOP](#)

[TOP](#)

[TOP](#)

$$= \frac{\text{Net operating income} - \text{Interest on debt}}{\text{Equity capitalization rate}}$$

$$= (80-6)/0.18 = \text{Rs. 411.11 lakh}$$

$$\text{Market value of debt} = \text{Total market value of firm} - \text{Market value of equity}$$

$$= 500 - 411.11 = \text{Rs. 88.89 lakh}$$

$$\therefore \text{Debt equity ratio} = 88.89/411.11 = 0.216219 = \text{say } 0.22$$

73. Answer : (b)

Reason : Face Value = Rs.100 while the redemption price is Rs.105.

Coupon interest amount payable by the company is Rs.9.00 per year.

So, the approximate cost of debenture capital to the company is:

$$k_d = \frac{\left[9 + \frac{105 - 97.50}{5} \right] \times (1 - 0.40)}{(105 + 97.50) / 2} = \frac{10.50 \times 0.60}{101.25} = 0.0622 \text{ percent} = 6.22 \text{ percent.}$$

Hence, the required cost of debentures to the company is 6.22 percent.

74. Answer : (c)

Reason : Weighted Average Cost of Capital (WACC) using book value weights

Sum of book values of all sources of capital used is

$$200 + 400 + 150 + 250 = 1000$$

$$\therefore \text{Weight for equity capital } (w_e) = 200/1000 = 0.2$$

$$\text{Weight for reserves and surplus } (w_r) = 400/1000 = 0.4$$

$$\text{Weight for preference capital } (w_p) = 150/1000 = 0.15$$

$$\text{Weight for debenture capital } (w_d) = 250/1000 = 0.25$$

$$\therefore \text{WAC} = w_e k_e + w_r k_r + w_p k_p + w_d k_d = 0.2 \times 19.25 + 0.4 \times$$

$$19.25 + 0.15 \times 12.19 + 0.25 \times 8.00$$

$$= 15.38\% \text{ (approx.)}$$

Weighted average cost of capital (WAC) using market value weights

Sum of market values of all sources of capital used = 400 + 159 + 241 = 800

$$\begin{aligned} \text{Weight of equity capital} &= 400/800 = 0.5 \\ \text{Weight of preference capital} &= 159/800 = 0.19875 \approx 0.20 \\ \text{Weight of debenture capital} &= 241/800 = 0.30125 \approx 0.30 \end{aligned}$$

$$\begin{aligned} \therefore \text{WAC} &= 0.5 \times 19.25 + 0.2 \times 12.19 + 0.3 \times 8.00 \\ &= 14.46\% \text{ (approx.)} \end{aligned}$$

The difference between the WAC using book value weights and market value weights =
 $(15.38 - 14.46)\% = 0.92\%$

75. Answer : (b)

Reason : Net operating income = Total asset $\times$ Return on asset
 $= 1200 \times 0.15 = 180$

Market value of equity = Net operating income / cost of equity capital
 $= 180 / 0.12 = \text{Rs.}1500 \text{ crore}$

[< TOP >](#)

76. Answer :

Reason : The amount of raw materials consumed = Opening balance + Purchases during the year – Closing balance
 $= (180,000 + 1192,000 - 212,000) = \text{Rs.}1160,000$

The average stock of work in process = $(25,000 + 45,000) / 2 = \text{Rs.}35,000$

Annual cost of production = Opening work in process + Consumption of raw materials + Manufacturing expenses + Depreciation – Closing work in process
 $= 25,000 + 1160,000 + 1280,000 + 100,000 - 45,000 = \text{Rs.}2520,000$

So, the average daily cost of production = Rs.7000

Hence, the average conversion period = $35,000 / 7000 = 5 \text{ days}$

[< TOP >](#)

77. Answer: (b)

Reason:

Present sales value = Rs.300 lakh	Expected sales = Rs.375 lakh
Bad debt losses	Discount cost
	$= \text{Rs.}375 \times 0.20 \times 0.05 = \text{Rs.}3.75$

[< TOP >](#)

$= \text{Rs.}300 \text{ lakh} \times 0.03 =$ Rs.9 lakh	lakh Bad debt losses = $\text{Rs.}375 \times 0.05 =$ Rs.18.75 lakh
---	--

Incremental contribution = $\text{Rs.}75 \times 0.30 = \text{Rs.}22.5 \text{ lakh}$

Incremental cost of funds

$= \text{Rs.}300 \text{ lakh} \times (45 - 30)/360 \times 0.14 + \text{Rs.}75 \text{ lakh} \times 45/360 \times 0.80$
 $\times 0.14 = \text{Rs.} 2.80 \text{ lakh}$

Net incremental benefits = $22.5 - 2.80 - (18.75 + 3.75 - 9) =$
Rs.6.2 lakh.

[< TOP OF THE DOCUMENT >](#)