

## Question Paper

### Accounting for Decision Making - II (MB2D2): October 2008

- Answer all 72 questions.
- Marks are indicated against each question.

**Total Marks : 100**

1. Consider the following particulars of Shalet Ltd.:

[<Answer>](#)

Margin of safety (representing 20% of sales)	Rs.15,000
P/V Ratio	40%

The break even sales of the company are

- (a) Rs.75,000
- (b) Rs.45,000
- (c) Rs.60,000
- (d) Rs.30,000
- (e) Rs.37,500.

**(2 marks)**

[<Answer>](#)

2. Fixed cost is the product of

- (a) Break-even sales and margin of safety
- (b) Sales and margin of safety
- (c) Sales and profit-volume ratio
- (d) Profit-volume ratio and break even sales
- (e) Profit-volume ratio and excess of sales over break even point.

**(1 mark)**

[<Answer>](#)

3. Basu Ltd., presents the following estimates pertaining to its Department A:

Particulars	Rs.
Sales	7,00,000
Fixed cost	3,50,000
Variable cost	4,20,000

The value of sales to be increased by the company to reach the break even sales is

- (a) Rs.1,13,865
- (b) Rs.1,23,725
- (c) Rs.1,33,600
- (d) Rs.1,75,000
- (e) Rs.1,72,040.

**(2 marks)**

[<Answer>](#)

4. Vaishali Ltd. has furnished the following data pertaining to its business:

Variable cost	–	Rs.38 per unit
Fixed overhead –	Rs. 8 per unit	
Normal production	–	15,000 units
Actual production	–	12,000 units
Sales	–	10,000 units
Sale price	–	Rs.60 per unit

The value of ending inventory using Absorption costing is

- (a) Rs.92,000
- (b) Rs.96,000
- (c) Rs.66,000
- (d) Rs.76,000
- (e) Rs.67,000.

**(2 marks)**

**(2 marks)** [<Answer>](#)

5. Sakshi Technologies Ltd. furnishes the following information pertaining to its product for last two years:

Year	Sales (Rs.)	Profit (Rs.)
2006-07	1,20,000	13,000
2007-08	1,30,000	15,000

If the company wants to earn a profit of Rs.55,000, desired sales would be

- (a) Rs.3,30,000
- (b) Rs.4,50,000
- (c) Rs.4,76,667
- (d) Rs.5,07,692
- (e) Rs.2,75,000.

6. Bakshi Ltd. has furnished the following data for the month of September 2008:

[<Answer>](#)

Particulars	Rs.
Sales	3,00,000
Fixed expenses	90,000
Direct materials	95,000
Direct labour	35,000
Direct expenses	35,000

The Margin of safety of the company is

- (a) Rs.1,20,000
- (b) Rs.1,85,000
- (c) Rs.1,00,000
- (d) Rs.1,35,000
- (e) Rs.1,80,000.

(2 marks)

[<Answer>](#)

7. Vinayaka Ltd. furnishes the following information for a period, pertaining to its product "T":

Cost of production (for 11,000 units)	Rs.44,000
Selling expenses (per unit)	Re. 0.40
Sales (for 9,000 units)	Rs.54,000

The profit per unit of the product was

- (a) Rs.1.15
- (b) Rs.1.20
- (c) Rs.2.60
- (d) Rs.1.60
- (e) Rs.1.25.

(2 marks)

[<Answer>](#)

8. Vijay Ltd. has furnished the following cost data for 600 units (which is its 50% capacity) of its product:

Variable overhead costs	Rs.3,00,000
Fixed overhead costs	Rs.5,00,000

The total cost for 950 units is

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

(2 marks)

[<Answer>](#)

9. Which of the following is **true** with respect to target costing?

- (a) It is a method of price skimming
- (b) It is used to develop a short run price
- (c) It is a method of penetration pricing
- (d) It is a process where the cost of the product is determined and then an appropriate price is chosen
- (e) It is the manufacturing cost for a product which is arrived at by subtracting the acceptable profit margin from the expected market price.

(1 mark)

[<Answer>](#)

10. Which of the following factors is to be multiplied with contribution margin ratio to calculate profit?

- (a) Unit contribution margin
- (b) Margin of safety
- (c) Variable costs per unit
- (d) Unit sales price
- (e) Change in sales volume.

(1 mark)

(2 marks) [<Answer>](#)

11. The current sales price of product of Teddy Ltd. is Rs.180 per unit. Variable costs are expected to increase from Rs.140 to Rs.150 per unit. Fixed costs of Rs.6,00,000 will not change. The number of additional sales units required in order to maintain the existing operating income of Rs.7,20,000 is

- (a) 10,000 units
- (b) 8,800 units
- (c) 8,000 units
- (d) 11,000 units
- (e) 2,800 units.

12. The operating results of M/s. Swastik Steels Ltd. for the year 2007-08 were as follows:

[<Answer>](#)

Product	Sales Mix (%)	PV Ratio (%)
A	34	16
B	22	6
C	44	13

Total sales value of all the products was Rs.550 lakh and fixed costs amounted to Rs.18 lakh. The composite Profit-Volume ratio of the company was

- (a) 12.48%
- (b) 14.75%
- (c) 15.20%
- (d) 11.25%
- (e) 10.75%.

(2 marks)

[<Answer>](#)

13. Khullar Appliances Ltd. has provided the following information for its product for a period:

Particulars	Rs.
Direct materials	65,200
Direct wages	53,300
Direct expenses	56,500
Manufacturing overhead costs	37,200
Administrative overhead costs	27,600

The prime cost of the product was

- (a) Rs.1,18,500
- (b) Rs.1,55,700
- (c) Rs.1,75,000
- (d) Rs.2,12,200
- (e) Rs.2,58,500.

(2 marks)

[<Answer>](#)

14. If the activity level is increased from 70% to 78%, the fixed cost

- (a) Will reduce by 8%
- (b) Will increase by 8%
- (c) Per unit will increase by 8%
- (d) Per unit will reduce by 8%
- (e) Per unit will reduce.

(1 mark)

[<Answer>](#)

15. Banta Ltd. manufactures product KDM for last ten years. The company maintains a margin of safety of 36% with an overall contribution to sales ratio of 35%. If fixed cost is Rs.8.4 lakh, the profit of the company is

- (a) Rs. 11.400 lakh
- (b) Rs. 24.000 lakh
- (c) Rs. 4.725 lakh
- (d) Rs. 37.500 lakh
- (e) Rs. 8.644 lakh.

(2 marks)

[<Answer>](#)

16. The following is an excerpt from the income statement of Sai Ltd. for a period:

Particulars	Rs.
Sales	1,00,000
Provision for tax	4,000
Interest on bank overdraft	2,000
Operating expenses	60,000
Excise duty	5,000

Value added by manufacturing is

- (a) Rs.39,000
- (b) Rs.35,000
- (c) Rs.33,000
- (d) Rs.29,000
- (e) Rs.57,000.

(2 marks)

[<Answer>](#)

17. Which of the following statements is **false** in respect of full cost pricing and contribution margin

pricing?

- (a) These cannot be considered as competing with each other
- (b) In both the methods, the selling prices proposed must be only tentative and they are always subject to adjustments
- (c) Fixed costs are important in both the pricing models
- (d) In both the methods, a normal mark-up on total costs is made and the volume of production is taken into consideration
- (e) They represent to a certain degree, cost plus pricing.

18. Bill James Ltd. manufactures 1,200 units of product PC during the year 2007-08. The variable cost per unit and fixed costs per annum are Rs.35 and Rs.45,000 respectively. If the company expects an annual profit of Rs.30,000, the mark-up percentage on variable cost is

[<Answer>](#)

- (a) 107.14%
- (b) 178.57%
- (c) 278.57%
- (d) 171.43%
- (e) 207.14%.

(2 marks)

[<Answer>](#)

19. Hansley Ltd. has furnished the following data for the month of September 2008:

Particulars	Rs.
Sales	2,75,000
Fixed expenses	61,671
Direct materials	97,600
Direct labour	79,450
Direct expenses	14,075

The Profit-Volume ratio of the company is

- (a) 45.52%
- (b) 33.33%
- (c) 30.50%
- (d) 25.00%
- (e) 35.05%.

(2 marks)

[<Answer>](#)

20. If the sales of Precious Ltd. for two consecutive years were Rs.64,000 and Rs.72,000 respectively and profits for the same years were Rs.8,000 and Rs.11,200 respectively, the fixed cost of the company was

- (a) Rs.68,000
- (b) Rs.65,000
- (c) Rs.50,000
- (d) Rs.17,600
- (e) Rs.40,000.

(2 marks)

[<Answer>](#)

21. Under Subtractive Approach, which of the following items is **not** deducted from the sales revenue for computation of value added?

- (a) Raw materials
- (b) Bought-in components
- (c) Wages and salaries
- (d) Consumable stores
- (e) Repairs and maintenance of plant and machinery.

(1 mark)

[<Answer>](#)

22. If a company desires to earn a profit of 25% on selling price, the profit mark-up on cost should be

- (a) 20.00%
- (b) 33.33%
- (c) 75.00%
- (d) 30.00%
- (e) 50.00%.

(1 mark)

(1 mark) [<Answer>](#)

23. Richies Ltd. currently operates at 60% capacity level. The normal capacity is 3,00,000 units. The variable cost per unit is Rs.33 and the total fixed costs are Rs.18,60,000. If the company desires to earn a profit of Rs.3,00,000, the sale price of the product per unit is

- (a) Rs.28.92
- (b) Rs.32.40
- (c) Rs.45.00
- (d) Rs.20.40
- (e) Rs.47.17.

24. Cute Toys Ltd. produces and sells 50,000 toys at Rs.20 each with a profit of Rs.5 each. The company has furnished the following cost structure per unit for its product for the year 2008-09:

[<Answer>](#)

Particulars	Rs.
Direct material & labor costs	8
Works overhead	5 (50% fixed)
Sales expenses	2 (25% variable)

The direct material & labor costs are likely to increase by 35% during the next financial year. There will not be any change in the selling price and other costs. The company receives an offer to supply additional 20,000 toys. The contribution for additional 20,000 toys will be

- (a) Rs.4,00,000
- (b) Rs.2,00,000
- (c) Rs.2,50,000
- (d) Rs.2,76,000
- (e) Rs.1,24,000.

(2 marks)

[<Answer>](#)

25. A profit making firm can increase its return on investment by

- (a) Increasing sales revenue and operating expenses by the same amount in rupees
- (b) Increasing investment and operating expenses by the same amount in rupees
- (c) Decreasing sales revenue and operating expenses by the same percentage
- (d) Increasing sales revenue and operating expenses by the same percentage
- (e) Decreasing investment and sales by the same percentage.

(1 mark)

[<Answer>](#)

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

- (a) Under full cost pricing, the normal mark-up is based on sales value
- (b) Full cost pricing is designed to recover both fixed costs and variable costs
- (c) Under full cost pricing, sellers do not take advantage of buyers when latter's demand becomes acute
- (d) Pricing decisions may be influenced by internal factors such as cost and profit objectives
- (e) Contribution margin approach to pricing is concerned with cost, volume and profit.

(1 mark)

[<Answer>](#)

27. Notional rent charged on business premises owned by the proprietor is an example of

- (a) Programmed cost
- (b) Replacement cost
- (c) Imputed cost
- (d) Committed cost
- (e) Discretionary cost.

(1 mark)

[<Answer>](#)

28. Which of the following statements is **false** with regard to value added?

- (a) Gross value added is derived by deducting depreciation from the net value added
- (b) Value added is the most relevant concept of the social responsibility concept of the enterprise
- (c) Value added statements reflect the broader view of the company's objectives and responsibilities
- (d) It measures the value of increase in resources
- (e) Additive approach and subtractive approach are the approaches for computing value added.

(1 mark)

[<Answer>](#)

29. In a decision analysis situation, which of the following costs is generally **not** relevant?

- (a) Incremental cost
- (b) Differential cost
- (c) Replacement cost
- (d) Avoidable cost
- (e) Historical cost.

(1 mark)

[<Answer>](#)

30. While computing the profits of a business, which of the following measures considers the cost of debt as well as the cost of equity?

(1 mark)

[<Answer>](#)

- (a) Gross value added
- (b) Net value added
- (c) Economic value added
- (d) Market value added
- (e) Brand value added.

31. Which of the following is a period cost?

[<Answer>](#)

- (a) Research and development costs
- (b) Direct labor cost
- (c) Repair cost
- (d) Indirect material cost
- (e) Power cost.

(1 mark)

32. Saurav Ltd. has furnished the following data for the month of September 2008:

[<Answer>](#)

Particulars	Rs.
Sales price per unit	24
Variable manufacturing cost per unit	12
Variable selling cost per unit	4
Fixed factory overhead per annum	6,48,000
Fixed selling costs per annum	3,02,400

The number of units to be sold by the company at break-even point was

- (a) 1,18,800 units
- (b) 90,000 units
- (c) 88,000 units
- (d) 84,000 units
- (e) 60,000 units.

(2 marks)

33. All of the following are major considerations in fixing a selling price **except**

[<Answer>](#)

- (a) Competitors' price
- (b) Unique product features
- (c) Price of substitutes
- (d) Product costs which set a ceiling to the price
- (e) Capturing market share.

(1 mark)

34. The term relevant cost applies to all the following decisional situations, **except**

[<Answer>](#)

- (a) Determination of a product price
- (b) Replacement of equipment
- (c) Deletion of a product line
- (d) Manufacture or purchase of component parts
- (e) Acceptance of a special order.

(1 mark)

35. Which of the following costs is a semi variable cost?

[<Answer>](#)

- (a) Depreciation on machinery
- (b) Factory rent
- (c) Supplies and other indirect materials
- (d) Maintenance of machinery
- (e) Advertising.

(1 mark)

36. Target costing is based on the following premises, **except**

[<Answer>](#)

- (a) Orienting products to customer affordability
- (b) Orienting products to market driven pricing
- (c) Treating product cost as an independent variable during the definition of a product's requirements
- (d) Proactively working to achieve target cost during product and process development
- (e) Treating product cost as a dependent variable during the definition of a product's requirements.

(1 mark)

37. Which of the following items would be treated as an indirect cost in manufacture of a chair?

(1 mark) [<Answer>](#)

- (a) Wood used to make a chair
- (b) Metal used for the legs of a chair
- (c) Fabric to cover the seat of a chair
- (d) Staples to fix the fabric to the seat of a chair
- (e) Leather used for making handles of a chair.

38. During the year 2006-07, Metro Ltd., produced 14,500 units with the total cost of Rs.2,68,100. In the year 2007-08 it increased its production to 16,000 units. The total cost of production has been increased by Rs.19,200 from the total cost of 2006-07. The variable cost per unit during the year 2007-08 was

[<Answer>](#)

- (a) Rs.10.20
- (b) Rs.12.20
- (c) Rs.11.80
- (d) Rs.12.80
- (e) Rs.10.80.

(1 mark)

[<Answer>](#)

39. Which of the following statements is **true**?

- (a) Marginal costing and absorption costing are the same
- (b) In marginal costing technique, profit is the difference between sales and marginal cost
- (c) If marginal costing technique is used, only variable costs are charged to products
- (d) In marginal costing, under or over absorption of fixed overheads is bound to arise
- (e) In marginal costing technique, a portion of fixed overheads is carried over to the next period.

(1 mark)

[<Answer>](#)

40. Mirind Ltd. has furnished the following information pertaining to its production:

Normal capacity	80,000 units
Increase in inventory	3,650 units
Variable cost per unit	Rs.18
Selling price per unit	Rs.50
Fixed manufacturing overhead costs	Rs.9,60,000

If the profit under Absorption costing method is Rs.88,200, the profit under Marginal costing method would be

- (a) Rs. 53,160
- (b) Rs. 44,400
- (c) Rs.1,32,000
- (d) Rs.1,23,240
- (e) Rs. 35,040.

(2 marks)

[<Answer>](#)

41. Which of the following costs is **not** considered as a product cost under Absorption costing as well as Direct costing?

- (a) Freight-in
- (b) Direct labor cost
- (c) Insurance of factory
- (d) Manufacturing supplies
- (e) Shipping cost.

(1 mark)

[<Answer>](#)

42. Full-cost price is defined as

- (a) The price usually based on absorption costing
- (b) The price usually based on marginal costing
- (c) The price in the open market
- (d) The price representing the cash outflows of the supplying division plus the contribution to the supplying division from an outside sale
- (e) The price based on variable cost plus a lump sum.

(1 mark)

[<Answer>](#)

43. The opportunity cost of making a component in a factory with no excess capacity is the

- (a) Variable manufacturing cost of the component
- (b) Cost of production given up in order to manufacture the component
- (c) Net benefit given up from the best alternative use of the capacity
- (d) Total manufacturing cost of the component
- (e) Fixed manufacturing cost of the component.

(1 mark)

(1 mark) [<Answer>](#)

44. Which of the following is **false** with regard to Economic Value Added (EVA)?

- (a) The computation of EVA involves a complex procedure
- (b) EVA can be improved by downsizing profitable operations
- (c) EVA is a residual income measure that subtracts the cost of capital from the operating profit generated by a business
- (d) EVA can be used for making day-to-day decisions as well as for strategic planning
- (e) EVA is one variation of residual income with adjustments in the method of calculation.

[<Answer>](#)

45. Which of the following is **true** if the decision for establishment of branch sales office is chosen in comparison with employing selling agents?

- (a) Only variable cost is higher
- (b) Both fixed costs and variable costs are higher
- (c) The level of variable cost is more and fixed cost is less
- (d) The level of variable cost is less and fixed cost is more
- (e) The levels of both variable costs and fixed costs are less.

(1 mark)

[<Answer>](#)

46. Market Value Added is the difference between

- (a) Market value of invested capital and Net value added
- (b) Net value added and Economic value added
- (c) Book value of invested capital and Economic value added
- (d) Market value of invested capital and Gross value added
- (e) Market value of invested capital and Book value of invested capital.

(1 mark)

[<Answer>](#)

47. Varoon Ltd. has received an order for the supply of 2,00,000 units of its product Y. There is enough capacity available but additional balancing equipment have to be purchased for Rs.80,000. The total costs of manufacturing the product will be Rs.5,47,940. Working capital required will be 50% of the sales value. If the company expects a return of 20% on the additional capital requirement for the order, the price of the order should be

- (a) Rs.2,29,560
- (b) Rs.3,72,140
- (c) Rs.6,26,600
- (d) Rs.7,89,995
- (e) Rs.8,01,234.

(2 marks)

[<Answer>](#)

48. Maniyar Ltd. has furnished the following data relating to its product for the year 2007-08:

Units produced		2,250	
Direct material costs (Rs.)		4,05,000	
Direct labor costs (Rs.)		3,15,000	
Manufacturing overhead costs (Rs.)		1,20,000	(25% fixed)
Selling and administrative costs(Rs.)		1,50,000	(40% fixed)

The variable cost per unit

was

- (a) Rs.520
- (b) Rs.460
- (c) Rs.400
- (d) Rs.420
- (e) Rs.440.

(2 marks)

[<Answer>](#)

49. Consider the following data of Surabhi Ltd. for the year 2007-08:

Variable cost per unit (Rs.)	75
Fixed costs (Rs.)	12,00,000
Estimated profit (Rs.)	5,85,000
Production (Units)	10,000

The mark-up on total cost was

- (a) 78.00%
- (b) 48.75%
- (c) 40.00%
- (d) 30.00%
- (e) 25.00%.

(2 marks)

(1 mark) [<Answer>](#)

50. GMV Ltd. has furnished the following data pertaining to its product for the year 2007-08:



Particulars	Rs.
Purchases	6,20,250
Purchase returns	23,700
Opening stock	19,200
Closing stock	16,350
Freight in	9,300

The Cost of Goods Sold for the year was

- (a) Rs.6,25,050
- (b) Rs.6,08,700
- (c) Rs.6,11,100
- (d) Rs.5,99,400
- (e) Rs.6,03,000.

51. Sathya Ltd. has furnished the following data :

[<Answer>](#)

Fixed cost	Rs.45,000
Break even point	7,500 units
Variable costs	60% of sales

If sales are 20% above break even point, the contribution per unit is

- (a) Rs.30
- (b) Rs.12
- (c) Rs. 9
- (d) Rs.15
- (e) Rs. 6.

(2 marks)

52. Morey Ltd. has estimated the following data pertaining to its product 'CMC' for a period:

[<Answer>](#)

Total sales (Rs.)	45,00,000
Fixed cost (Rs.)	7,50,000
P/V ratio	30%

Margin of Safety as a percentage to total sales would be

- (a) 44.44%
- (b) 56.92%
- (c) 77.12%
- (d) 25.72%
- (e) 30.99%.

(2 marks)

53. If the production of a company is equal to break even point, profit will increase by the

[<Answer>](#)

- (a) Fixed costs per unit for each additional unit sold
- (b) Variable costs per unit for each additional unit sold
- (c) Net margin per unit for each additional unit sold
- (d) Gross margin per unit for each additional unit sold
- (e) Contribution margin per unit for each additional unit sold.

(1 mark)

54. The following information is provided by Mawai Ltd. for the year 2007-08:

[<Answer>](#)

Selling price per unit	Rs. 200
Fixed costs	Rs.3,50,000
Margin of safety	60% of sales
Variable cost per unit	Rs. 70

It is estimated that variable costs will increase by 15% and fixed costs are expected to increase by 8% in 2008-09. If the company wants to maintain the same Profit-Volume ratio as in 2007-08, the selling price per unit would be

- (a) Rs.230
- (b) Rs.290
- (c) Rs.305
- (d) Rs.325
- (e) Rs.190.

(2 marks)

55. The following information is furnished by Nowin Ltd.:

(2 marks) [<Answer>](#)

Particulars	Rs.
Contribution per unit	20
Fixed cost	1,00,000
Capital employed	10,00,000

If the desired rate of return is 35% of the capital employed, the number of units to be produced and sold are

- (a) 36,100 units
- (b) 55,000 units
- (c) 17,500 units
- (d) 22,500 units
- (e) 18,150 units.

56. Swami Ltd. has furnished the following details:

[<Answer>](#)

P/V ratio	50%
Margin of safety	65% of sales
Sales	Rs.37,50,000

The net profit of the company is

- (a) Rs.12,18,750
- (b) Rs. 9,75,000
- (c) Rs. 2,15,620
- (d) Rs. 3,50,000
- (e) Rs.11,12,130.

(1 mark)

[<Answer>](#)

57. Which of the following items is **not** included in preparation of a cost sheet?

- (a) Carriage inward
- (b) Purchase returns
- (c) Sales commission
- (d) Interest paid
- (e) Depreciation on plant and machinery.

(1 mark)

[<Answer>](#)

58. Which of the following is a limitation of the absorption costing?

- (a) Price based on absorption costing ensures that all costs are covered
- (b) It confirms accrual and matching concepts which require matching costs with revenue for a particular period
- (c) Efficient or inefficient utilization of production resources is disclosed by indicating under or over absorption of factory overheads
- (d) Closing stocks are valued at cost of production (i.e., fixed cost and variable cost), which means a portion of fixed cost is carried forward to the next period
- (e) Computation of gross profit and net profit separately is possible in income statement.

(1 mark)

[<Answer>](#)

59. Which of the following statements is **true**?

- (a) Management accounting is prepared in accordance with the Generally Accepted Accounting Principles
- (b) Management accounting is mandatory for business organizations because it should be maintained as per various legal statutes
- (c) The application of Management accounting cannot be extended beyond the traditional accounting system
- (d) Management accounting focuses more on a company as a whole and less on the parts or segments of a company
- (e) Management accounting focuses on providing information for internal users.

(1 mark)

[<Answer>](#)

60. A cost that can be substantially influenced by a manager is often referred to as which of the following?

- (a) Sunk cost
- (b) Direct cost
- (c) Opportunity cost
- (d) Controllable cost
- (e) Indirect cost.

(1 mark)

(1 mark) [<Answer>](#)

61. A company's approach to make or buy decision

- (a) Depends on whether the company is operating at or below normal volume
- (b) Depends on whether the company is operating at or below break even point
- (c) Involves an analysis of fixed costs
- (d) Involves an analysis of historical costs
- (e) Involves an analysis of avoidable costs.

62. The term 'variable cost' refers to

[<Answer>](#)

- (a) All costs which are likely to respond to the amount of attention devoted to them by a specified manager
- (b) All costs which are associated with marketing, shipping, warehousing and billing activities
- (c) All costs which do not change in total for a given period of time and relevant range but become progressively smaller on a per unit basis as volume increases
- (d) All manufacturing costs incurred to produce units of output
- (e) All costs which fluctuate in total in response to small change in the rate of utilization of capacity.

(1 mark)

[<Answer>](#)

63. Cost-volume-profit analysis is most important for the determination of

- (a) Volume of operations necessary to break even
- (b) Margin of safety necessary to equal fixed costs
- (c) Sales revenue necessary to equal fixed costs
- (d) Relationship between revenues and costs at various levels of operations
- (e) Sales revenue necessary to equal total costs.

(1 mark)

[<Answer>](#)

64. For product A of Shilpa Ltd., the prime cost is Rs.20 per unit, factory overheads are 20% of prime cost and administration overheads are 25% of Works cost. If the company desires to earn a profit of 25% on selling price, the selling price per unit of product A would be

- (a) Rs.40
- (b) Rs.33
- (c) Rs.90
- (d) Rs.30
- (e) Rs.24.

(2 marks)

[<Answer>](#)

65. Which of the following is **not** an example of finance module of application of Enterprise Resource Planning (ERP) system?

- (a) Accounts receivable
- (b) Treasury management
- (c) Production planning
- (d) Cost control
- (e) General ledger.

(1 mark)

[<Answer>](#)

66. Which of the following statements is **true**?

- (a) All costs are controllable
- (b) Fixed cost per unit remains constant
- (c) Depreciation is an out-of-pocket cost
- (d) Variable cost per unit varies with the increase in the volume of output
- (e) An item of cost that is direct for one business may be indirect for another.

(1 mark)

[<Answer>](#)

67. The following are the advantages of Enterprise Resource Planning **except**

- (a) Flexibility to allow for customization
- (b) Adaptability to a changing business environment
- (c) Elimination of redundant data and procedural operations
- (d) Commitment to a single vendor
- (e) Reduced cycle times.

(1 mark)

[<Answer>](#)

68. Which of the following methods is used for Brand Valuation of a company?

- (a) Earnings Valuation Method
- (b) Super Profits Method
- (c) Normal Profit method
- (d) Average Profit method
- (e) Gross value method.

(1 mark)

(2 marks) [<Answer>](#)

69. The accountant of Katrina Ltd. is reviewing the profitability of the company's two products Q and R.

The following is an excerpt from the income statement of the two products:

Particulars	Q	R
Sales (Rs.)	18,000	12,600
Cost of goods sold (Rs.)	7,056	13,968
Gross profit (Rs.)	10,944	(1,368)
Operating expenses (Rs.)	2,976	2,826
Income before income taxes (Rs.)	7,968	(4,194)
Units sold (Units)	1,200	1,800
Sales price per unit (Rs.)	15	7
Variable cost of goods sold per unit (Rs.)	3.00	6.50
Variable operating expenses per unit (Rs.)	1.25	1.00

If product R is discontinued, the income will be

- (a) Increased by Rs.900
- (b) Decreased by Rs.900
- (c) Increased by Rs.4,194
- (d) Decreased by Rs.4,194
- (e) Increased by Rs.1,368.

70. Preksha Ltd. has furnished the following information relating to the manufacture of its product B:

[<Answer>](#)

Particulars	Rs.
Opening stock:	
Raw materials	4,000
Work-in-progress	6,000
Raw materials purchased	49,000
Direct wages	20,000
Factory overheads	9,000
Direct expenses	9,000
Closing Stock:	
Raw materials	3,000
Work-in-progress	5,000

The works cost of product B is

- (a) Rs.50,000
- (b) Rs.89,000
- (c) Rs.90,000
- (d) Rs.49,000
- (e) Rs.88,000.

(2marks)

71. The following factors influence the Brand Strength of a company **except**

[<Answer>](#)

- (a) Customer loyalty
- (b) Statutory protection
- (c) Brand Management by the company
- (d) Short term trends
- (e) The markets in which it operates.

(1 mark)

72. Under which of the following cases the margin of safety decreases?

[<Answer>](#)

- (a) Reduction in fixed cost
- (b) Increase in variable cost
- (c) Increase in the level of production or selling price or both
- (d) Change in the sales mix in order to increase the contribution
- (e) Substitute the existing unprofitable product with the profitable ones.

(1 mark)

END OF QUESTION PAPER

## Suggested Answers

### Accounting for Decision Making - II (MB2D2): October 2008

Answer

- Reason**
1. C Margin of safety = 20% of sales = Rs.15,000  
 Sales = Rs. 15,000 × 100 ÷ 20 = Rs. 75,000.  
 Break even sales = Sales – Margin of safety  
 = Rs.75,000 – Rs. 15,000 = Rs.60,000.
  2. D 
$$\text{Break-even point} = \frac{\text{Fixed cost}}{\text{Profit - volume ratio}}$$

$$\therefore \text{Fixed cost} = \text{Profit-volume ratio} \times \text{Break-even sales}$$
 Hence, (d) is true.
  3. D 
$$\text{P/V Ratio} = \frac{\text{Contribution}}{\text{Sales}} \times 100 = \frac{\text{Rs.}\mathcal{Y}, \dots, \dots - \text{Rs.}\mathcal{E}, \mathcal{Y}, \dots}{\text{Rs.}\mathcal{Y}, \dots, \dots} \times 100 = 40\%$$

$$\text{B E P Sales (in value)} = \frac{\text{Fixed cost}}{\text{P/V ratio}} = \frac{\text{Rs.}\mathcal{Y}, \mathcal{O}, \dots}{\mathcal{E}\%} = \text{Rs.}8,75,000$$
 Sales to be increased to reach the Break even  
 = BEP sales – Actual sales  
 = Rs.8,75,000 – Rs.7,00,000 = Rs.1,75,000.
  4. B Total fixed overhead  
 = 15,000 units × Rs.8 = Rs.1,20,000.  
 Fixed overhead per unit  
 = Rs.1,20,000 actual overhead ÷ 12,000 units actual production = Rs.10.  
 Total cost per unit  
 = Variable cost Rs.38 + Fixed overhead Rs.10 = Rs.48  
 Cost of ending inventory  
 = Rs.48 × 2,000 units (12,000 units produced – 10,000 units sold) = Rs.96,000.
  5. A Sales required to earn a profit of Rs.55,000:  

$$\text{P/V Ratio} = \frac{\text{Fixed cost} + \text{Profit}}{\text{Desired sales}}$$

$$\left\{ \text{P/V Ratio} = \frac{\text{Change in profit}}{\text{Change in Sales}} \right\} = \frac{\text{Rs.}\mathcal{Y}, \dots}{\text{Rs.}\mathcal{I}, \dots} = \mathcal{Y}\%$$
 Contribution = Sales × P/V Ratio  
 = Rs. 1,20,000 × 0.20 = Rs. 24,000  
 Fixed cost = Contribution – Profit  
 = Rs.24,000 – Rs.13,000 = Rs.11,000  

$$\text{Desired sales} = \frac{\text{Fixed cost} + \text{profit}}{\text{P/V Ratio}} = \frac{\text{Rs.}\mathcal{I}, \dots + \text{Rs.}\mathcal{O}, \dots}{\mathcal{Y}\%} = \text{Rs.}3,30,000.$$
  6. C Contribution = Sales – (Direct Materials + Direct Labour + Direct Expenses)  
 = Rs.3,00,000 – (Rs.95,000 + Rs.35,000 + Rs.35,000)  
 = Rs.3,00,000 – Rs.1,65,000  
 = Rs.1,35,000.  
 Margin of safety = Sales – Break-even sales  

$$\text{Break-even sales} = \frac{\text{Fixed cost}}{\text{P/V Ratio}} = \frac{\text{Rs.}\mathcal{I}, \dots}{\mathcal{E}\%} = \text{Rs.}2,00,000.$$

$$\left[ \text{P/V Ratio} = \frac{\text{Contribution}}{\text{Sales}} \times 100 = \frac{\text{Rs.}1,35,000}{\text{Rs.}3,00,000} \times 100 = 45\% \right]$$

 Margin of safety = Rs.3,00,000 – Rs.2,00,000 = Rs.1,00,000.

7. D

Particulars	Rs.	Rs. (per unit)
Cost of production (11,000 units)	44,000	4.00
Less: Closing stock 2,000 units	8,000	
Cost of goods sold	36,000	4.00
Add: Selling expenses (9,000 units) @ Rs.0.40 per unit	3,600	0.40
	39,600	4.40
Profit (balancing figure)	14,400	1.60
Sales	54,000	6.00

8. D  $\frac{\text{Rs. } 3,00,000}{100 \text{ units}}$

Variable overhead costs =  $100 \text{ units} \times 950 \text{ units} = \text{Rs. } 4,75,000$   
 Add: Fixed overhead cost = Rs. 5,00,000  
 Total cost of 950 units = Rs. 9,75,000

9. E Target cost = Sale price (for the target market share) – Desired profit. In competitive industries, a unit sale price would be established independent of the initial product cost. Management decides that the cost of a product should be based on marketing factors rather than manufacturing. Hence (e) is true.

10. B Profit = Margin of safety  $\times$  Contribution margin ratio.

11. D Projected unit sales = (Fixed costs + Target operating income)  $\div$  Unit contribution  
 Projected unit sales = (Rs. 6,00,000 + Rs. 7,20,000)  $\div$  Rs. 30. = 44,000 units.  
 Current sales units = (Rs. 6,00,000 + Rs. 7,20,000)  $\div$  Rs. 40 = 33,000 units.  
 Increase in units: 44,000 – 33,000 = 11,000 units.

12. A

Product	Sales Mix (%)	Sales (Rs. Lakh)	Contribution (Rs. Lakh)
A	34	187	29.92
B	22	121	7.26
C	44	242	31.46
Total	100	550	68.64

P/V Ratio =

$$\frac{\text{Contribution}}{\text{Sales}} \times 100 = \frac{\text{Rs. } 68.64 \text{ lakhs} \times 100}{\text{Rs. } 550 \text{ lakhs}} = 12.48\%$$

13. C Prime Cost = Direct materials + Direct wages + Direct expenses  
 Therefore prime cost = Rs. 65,200 + Rs. 53,300 + Rs. 56,500 = Rs. 1,75,000.

14. E If the activity level is increased from 70% to 78%, the total fixed costs remain fixed. Hence, the fixed cost per unit will reduce but not in the same proportion of 8%. Fixed cost per unit or in total does not increase with an increase in the activity level. Therefore (e) is correct.

15. C Break-even sales = Rs. 8.4 lakh  $\div$  35% = Rs. 24 lakh;  
 Break-even sales = Total sales – Margin of safety = 100% – 36% = 64%  
 Total sales = Rs. 24 lakh  $\div$  64% = Rs. 37.5 lakh  
 Profit of the company = 36% of Rs. 37.5 lakh  $\times$  35% = Rs. 13.5 lakh  $\times$  0.35 = Rs. 4.725 lakh.

16. C Value added = Sales – Operating expenses – Excise duty – Interest on bank overdraft  
 = Rs. 1,00,000 – Rs. 60,000 – Rs. 5,000 – Rs. 2,000 = Rs. 33,000

Provision for taxation does not come under value added statement. Hence, it is to be ignored.

17. D When we look into the relationship between full cost pricing and contribution margin pricing we can conclude that although the full cost pricing and contribution margin based approach for pricing are considered distinctively different approaches, by and large, they represent to a certain degree, cost plus pricing. Hence statement (e) is true. They are considered complementary to each other but not competing. Hence statement (a) is true. In both the pricing models fixed costs are considered important. Hence option (c) is true. In both the methods, the selling prices proposed must be only tentative and they are always subjective. Hence statement (b) is also true. However, Full cost pricing makes a normal mark up on total costs and it does

not take volume of production into consideration. On the other hand contribution margin approach to pricing is concerned about cost volume and profit. Hence statement (d) which states that contribution margin method also makes a normal markup on total costs is false.

18.B

$$\begin{aligned} \text{Mark-up percentage} &= \frac{\text{Sales} - \text{Variable costs}}{\text{Variable costs}} \times 100 \\ \text{Now sales} &= 1,200 \text{ units} \times \text{Rs.}35 + \text{Rs.}45,000 + \text{Rs.}30,000 \\ &= \text{Rs.}42,000 + \text{Rs.}45,000 + \text{Rs.}30,000 = \text{Rs.}1,17,000 \\ \text{Variable cost} &= \text{Rs.}35 \times 1,200 = \text{Rs.}42,000 \\ &= \frac{\text{Rs.}1,17,000 - \text{Rs.}42,000}{\text{Rs.}42,000} \times 100 \\ \therefore \text{Mark-up percentage} &= \frac{\text{Rs.}75,000}{\text{Rs.}42,000} = 178.57\% \end{aligned}$$

19.C

$$\begin{aligned} \text{Contribution} &= \text{Sales} - (\text{Direct Materials} + \text{Direct Labour} + \text{Direct Expenses}) \\ &= \text{Rs.}2,75,000 - (\text{Rs.}97,600 + \text{Rs.}79,450 + \text{Rs.}14,075) \\ &= \text{Rs.}2,75,000 - \text{Rs.}1,91,125 = \text{Rs.}83,875 \end{aligned}$$

20.D

$$\begin{aligned} \text{P/V Ratio} &= \frac{\text{Contribution}}{\text{Sales}} \times 100 = \frac{83,875}{2,75,000} \times 100 = 30.50\% \\ \text{Contribution to sales ratio} &= \text{Change of profit} \div \text{Change of sales} \\ &= \text{Rs.}3,200 \div \text{Rs.}8,000 = 0.40 = 40\% \end{aligned}$$

Break-even point:

$$\text{Sales} \times \text{contribution to sales ratio} = \text{Fixed cost} + \text{Profit}$$

$$\text{Rs.}64,000 \times 40\% = \text{Fixed cost} + \text{Rs.}8,000$$

$$\text{Fixed cost} = \text{Rs.}25,600 - \text{Rs.}8,000 = \text{Rs.}17,600$$

21.

All the items mentioned in (a), (b), (d) and (e), come under the subtractive approach for computation for value added except wages and salaries. This item comes under additive approach. Hence (c) is the correct answer.

22.

B

If the sale price is Rs.100, the profit is 25% i.e. Rs.25. Therefore, the cost is Rs.75. So, the profit mark-up on cost is Rs.25 ÷ Rs.75 i.e. 33.33%.

23.C

$$\text{Total fixed cost} = \text{Rs.}18,60,000$$

$$\text{Expected profit} = \text{Rs.}3,00,000$$

Variable cost at 60% level

$$(60\% \times 3,00,000 \text{ units} \times \text{Rs.}33) = \text{Rs.}59,40,000$$

$$\text{Total price} = \text{Rs.}18,60,000 + \text{Rs.}3,00,000 + \text{Rs.}59,40,000 = \text{Rs.}81,00,000$$

$$\text{Sale per unit price at 60\% level} = \text{Rs.}81,00,000 / (3,00,000 \times 60\%) = \text{Rs.}45$$

24.E

Particulars	Present		Future
	Per unit (Rs.)	50,000 units (Rs.)	Per unit (Rs.)
Sales	20.00	10,00,000	20.00
Direct material and labor cost	8.00		10.80
Works overhead	2.50		2.50
Sales expenses	0.50		0.50
Total Variable costs	11.00	5,50,000	13.80
Contribution	9.00	4,50,000	6.20

Contribution for additional 20,000 toys will be Rs.6.20 × 20,000 toys = Rs.1,24,000.

25.D

Return on investment (ROI) equals to income divided by invested capital. If a firm is already profitable, increasing sales and expenses by the same percentage will increase the ROI. Other options given in (a), (b), (c) and (e) are not correct.

26.A

Under full cost pricing, the normal mark-up is not based on sales value. It is generally based on total cost or variable cost to recover profit and/or fixed cost. Under full cost pricing, sellers do not take advantage of the buyers when demand for the goods is very high, pricing decision may be influenced by internal factors and contribution margin approach to pricing is concerned with the cost, volume and profit. Therefore (a) is correct answer.

27.C

The costs which are not incurred but appeared in cost accounts only are called imputed costs. e.g. the notional rent charged on business premises owned by the proprietor is imputed cost.

28.

A

Net value added is derived by deducting depreciation from the gross value added and

- not vice versa. Thus statement in alternative (a) is false. The value added is the most relevant concept and the statement forms part of social responsibility reporting (b). Value added statements reflect the broader view of the company's objectives and responsibilities (c). It measures the value of increase in resources (d). The approaches adopted are additive approach and subtractive approach in computing value added (e). Thus, the alternatives (b), (c), (d) and (e) are true statements.
- 29.E Management decision analysis is based on the concept of relevant costs. Relevant costs differ among decision choices. Thus, incremental (differential or avoidable) costs are always relevant. Replacement cost is also relevant. Historical costs occurred in the past, are sunk costs and not relevant to most management decision analysis.
- 30.C Economic value added measure considers the cost of debt as well as the cost of equity while computing profit of a business. Gross Value added (a) is arrived at by deducting from sales revenue and any other direct income and investment income, the cost of all materials and services and other extraordinary expenses and thus it includes other expenses in addition to the cost of debt and equity. And is not the correct answer. Net value added (b) is derived by deducting depreciation from the gross value added. Market value added (d) is the difference between the market value of the invested capital and book value of invested capital. It is a measure of shareholders' value. And is not the correct answer. Brand Value Added (e) is a tool that quantifies the economic value of a brand. And is not the correct answer. Thus, (c) is the correct answer.
31. A All research, administrative and selling costs are treated as period costs.  
 i. Direct labor costs and Direct material costs are product or inventorial costs.  
 ii. Indirect materials costs are treated as manufacturing overhead costs.  
 iii. Power costs and repair costs are treated as product costs.  
 The correct answer is (a).
32. A Variable cost per unit = Rs.12 + Rs.4 = Rs.16  
 Contribution per unit = Rs.24 – Rs.16 = Rs.8  
 Fixed costs = Rs.6,48,000 + Rs.3,02,400 = Rs.9,50,400  

$$\frac{\text{Rs. } 9,50,400}{\text{Rs. } 12.80} = 74,250 \text{ units}$$
33. D Break even point in units =  $\frac{\text{Rs. } 1,18,800}{\text{Rs. } 12.80} = 9,281.25 \text{ units}$   
 In fixing selling price - competitors' price, unique product feature, price of the substitutes and capturing market share are considered. Product costs sets a floor to the price. Product costs, which set a ceiling to the price, are not correct. Therefore, (d) is the answer.
- 34.A Relevant costs are those expected future costs that vary with the action taken. All other costs are assumed to be constant and thus have no effect on the decision. It is considered in the analysis of decisions to make or buy a product, accept a special order, replace capital equipment or delete a product line. It applies to many special decisions but not in determining a product price.
- 35.D Depreciation on a machinery and factory rent are fixed costs. Suppliers and other indirect materials are variable costs and advertising is a discretionary fixed cost. Maintenance of machinery is a semi-variable costs consisting of planned maintenance that is undertaken whatever the level of the activity and a variable component that is directly related to the level of activity. So (d) is correct.
36. E Target costing is based on the premises of (i) Orienting products to customer affordability, (ii) Orienting products to market driven pricing, (iii) Treating product cost as an independent variable during the definition of a product's requirements and (iv) Proactively working to achieve target cost during product and process development. It is not based on the premise of treating product cost as a dependent variable during the definition of a product's requirements. Therefore, (e) is correct option.
- 37.D Wood, Metal, Fabric and Leather used in the chair would be treated as direct cost but the staples used to fix the fabric will be treated as indirect cost.
38. D 
$$\frac{\text{Change of costs}}{\text{Change of units}} = \frac{\text{Rs. } 19,200}{16,000 \text{ units} - 14,000 \text{ units}} = \frac{\text{Rs. } 19,200}{2,000 \text{ units}} = \text{Rs. } 9.60$$
- 39.C Under marginal costing technique, products are valued at variable cost. Fixed costs are not considered for valuation of product. Therefore, this statement is correct. Other statements given in (a), (b), (d) and (e) are not correct.



- 40.B Fixed overhead cost per unit = Rs.9,60,000 ÷ 80,000 units = Rs.12.  
Profit under absorption costing = Rs.88,200  
Fixed manufacturing overhead costs of increased inventory  
= 3,650 units × Rs.12 = Rs.43,800  
Profit under marginal costing = Rs.88,200 – Rs.43,800 = Rs.44,400.
- 41.E Under absorption costing, all manufacturing costs, both fixed and variable are treated as product costs. Under direct costing, only variable cost of manufacturing is inventoried as product costs. Fixed manufacturing costs are expensed as period costs. Packaging and shipping costs are not product costs under either method because they are incurred after the goods have been manufactured. Instead they are included in selling and administrative expenses for the period. Other options (a), (b), (c) and (d) are as product cost under respective costing method.
- 42.A The correct answer is (a). Full-cost price is the price usually set based on absorption costing calculation and includes materials, labor and a full allocation of production overhead.  
(b) is not correct because it is variable cost.  
(c) is not correct because the market price is the price in the open market.  
(d) is not correct because it is the outlay cost plus opportunity cost.  
(e) is not correct because it is the variable cost plus pricing.
- 43.C Opportunity cost is the maximum possible alternative earning that might have been earned if the productive capacity had been put to some alternative use. Hence, it can also be defined as the benefit foregone on choosing a particular course of action.
- 44.B EVA can be improved by downsizing non-profitable operations, units or by selling off sub-standard assets. Hence, (b) is false. The computation of EVA involves a complex procedure. Stern and Stewart suggested 175 different assumptions and adjustments on the basic measure. EVA is a residual income measure that subtracts the cost of capital from the operating profit generated by a business. In other words, EVA measures whether the operating profit is enough competed to the total cost of capital. EVA is simply after-tax operating profit minus the total annual cost of capital. EVA is one variation if residual income with adjustments in the method of calculation. Unlike the traditional measure of accounting profit where only part of the cost of capital (cost of debt) is deducted, EVA requires deduction of full cost of capital (Cost of debt as well as cost of equity). EVA can be used for making day-to-day decisions as well as for strategic planning. For this purpose, EVA points have to be identified. An EVA point is one which has revenue, expenditure and capital issue attached to it. EVA destroyers for each EVA point are identified and steps are taken to improve them. EVA analysis is made for each and every EVA point for decision-making. Thus (a), (c), (d) and (e) are true.
- 45.D If establishment of branch sales office is chosen, fixed cost is more and the level of variable cost is less. If selling agents are employed, then the level of variable cost is more and fixed cost is less. Hence, option (d) is true.
- 46.E Market Value Added is the difference between the market value of invested capital and book value of invested capital. MVA is a measure of shareholders' value. MVA measures how the executives managing the company have fared with regard to the optimal utilization of capital under their control.
- 47.C Capital employed = Fixed assets + Working capital  
Working capital = 50% of Sales (given)  
Capital employed = Rs.80,000 + 50% (sales) : let sales be X  
X = Total Cost + 20% of capital employed  
X = Rs.5,47,940 + 0.20(Rs.80,000 + 0.5 X)  
X = Rs.5,63,940 + 0.1 X  
X = Rs.5,63,940 / 0.9  
X = Rs.6,26,600  
The price to be quoted is Rs.6,26,600.
- 48.C

Particulars	Rs.
Direct materials	4,05,000
Direct labor	3,15,000
Manufacturing overheads	90,000
Selling and administrative overheads	90,000
Total variable cost	9,00,000
Variable cost per unit	400

49.D

Particulars	Rs.
Total variable cost – 10,000 units × Rs.75	7,50,000
Fixed cost	12,00,000
Total cost	19,50,000

Mark-up % on total cost

$$\frac{\text{Estimated profit}}{\text{Total cost}} \times 100 = \frac{\text{Rs. } 2,00,000}{\text{Rs. } 19,50,000} \times 100 = 10.26\%$$

50.B

Cost of goods sold

$$= \text{Opening stock} + (\text{Purchases} - \text{Purchase returns}) - \text{Closing stock} + \text{Freight in}$$

$$= \text{Rs. } 19,200 + (\text{Rs. } 6,20,250 - \text{Rs. } 23,700) - \text{Rs. } 16,350 + \text{Rs. } 9,300 = \text{Rs. } 6,08,700$$

51.E

Let selling price be Rs.100

Variable cost is 60% of selling price Rs.60

Contribution Rs.40

P/V ratio is contribution/sales = 40%

$$\frac{\text{Fixed cost}}{\text{P/V ratio}} = \frac{\text{Rs. } 12,00,000}{40\%} = \text{Rs. } 30,00,000$$

$$\text{Break even sales} = \frac{\text{Rs. } 30,00,000}{40\%} = \text{Rs. } 75,00,000$$

$$7,500 \text{ units} \times \text{Selling price per unit} = \text{Rs. } 75,00,000$$

$$\text{Selling price per unit} = \frac{\text{Rs. } 75,00,000}{7,500 \text{ units}} = \text{Rs. } 10$$

Therefore, variable cost per unit is Rs.10 × 60% = Rs.6

Contribution per unit = Rs.4

52.A

$$\text{Break even sales (Rs.)} = \frac{\text{Fixed cost}}{\text{P/V ratio}} = \frac{\text{Rs. } 7,50,000}{30\%} = \text{Rs. } 25,00,000$$

$$\text{Margin of safety} = \text{Total sales} - \text{Break even sales}$$

$$= \text{Rs. } 45,00,000 - \text{Rs. } 25,00,000 = \text{Rs. } 20,00,000$$

Margin of safety as a percentage to total sales

$$\frac{\text{Margin of safety}}{\text{Total sales}} \times 100 = \frac{\text{Rs. } 20,00,000}{\text{Rs. } 45,00,000} \times 100 = 44.44\%$$

53.E

At the breakeven point, total revenue equals the fixed cost plus the variable cost. Beyond the BEP each unit sale will increase operating income by the unit contribution margin because fixed costs have been recovered already.

54.A

P/V ratio for the year 2007-08:

$$= \frac{\text{Rs. } 200 - \text{Rs. } 70}{\text{Rs. } 200} \times 100 = 65\%$$

For the year 2008-09:

$$\text{Variable cost per unit} = \text{Rs. } 70 + 15\% \text{ of Rs. } 70$$

$$= \text{Rs. } 80.50$$

$$\text{Fixed cost} = \text{Rs. } 3,50,000 + 8\% \text{ of Rs. } 3,50,000$$

$$= \text{Rs. } 3,78,000$$

$$\text{P/V ratio in 2007-08} = 65\%$$

Variable cost percentage to sales = 35%

$$\text{Selling price required to maintain same P/V ratio as in 2007-08} = \frac{\text{Rs. } 80.50}{65\%} = \text{Rs. } 123.85$$

55.D

$$\text{Desired profit} = \text{Rs. } 10,00,000 \times 35\% = \text{Rs. } 3,50,000$$

Number of units to be sold in order to earn a profit of Rs.3,50,000

$$= \frac{\text{Fixed costs} + \text{Desired profit}}{\text{Contribution per unit}} = \frac{\text{Rs. } 1,00,000 + \text{Rs. } 3,00,000}{\text{Rs. } 20} = 22,500 \text{ units.}$$

56.A

Margin of safety is 65% of sales  
 Margin of safety = Rs.37,50,000 x 65% = Rs.24,37,500

$$\text{Margin of safety} = \frac{\text{Net Profit}}{\text{P/V ratio}}$$

$$\text{Rs.24,37,500} = \frac{\text{Net Profit}}{50\%}$$

$$\text{Net Profit} = \text{Rs.24,37,500} \times 50\% = \text{Rs.12,18,750.}$$

57.

D Interest paid is not included while preparing a cost sheet and all other items mentioned in options (a), (b), (c) and (e) are included in the cost sheet.

58.

D The merits of absorption costing are (a) Price based on absorption costing ensures that all costs are covered, (b) It confirms accrual and matching concepts which require matching costs with revenue for a particular period, (c) Efficient or inefficient utilization of production resources is disclosed by indicating under or over absorption of factory overheads and (e) Computation of gross profit and net profit separately is possible in income statement. (d) Closing stocks are valued at cost of production (i.e., fixed cost and variable cost), which means a portion of fixed cost is carried forward to the next period is the limitation of absorption costing. Hence, the answer is (d)

59.

E Management accounting is not mandatory. The applications of management accounting can be extended beyond the traditional accounting system. It focuses more on the parts/segments of a company and less on the company as a whole. It is not governed by GAAP. It prepares reports to fulfill the needs of management. Therefore, correct answer is (e), because management accounting focuses on providing information for internal users.

60.D

A sunk cost is a cost that has been incurred in the past and cannot be altered by any current or future decision. A direct cost is a cost that can be directly traced to a particular department. A cost that is not direct cost is called indirect cost. An opportunity cost is a potential benefit given up when the choice of one action precludes selection of a different action. A cost that can be substantially influenced by a manager is called a controllable cost. Hence, the correct answer is (d).

61.E

In a make or buy decision, the company analyses the costs that can be avoided in a particular situation.

62.E

Variable costs refer to all costs which fluctuate in total in response to small change in the rate of utilization of capacity. Other statements given in (a), (b), (c) and (d) are not correct in respect of meaning of variable cost. Therefore, (e) is correct.

63.D

Cost-volume-profit analysis is important for the determination of relationship between revenues and costs at various level of operation. Other options (a), (b), (c) and (e) are not correct in respect of cost-volume-profit analysis. Therefore, (d) is correct.

64.A

Particulars	Per unit (Rs.)
Prime Cost	20
Factory Overheads (20% × Rs.20)	4
Works Cost	24
Administrative Overheads (25% × Rs.24)	6
Total Cost	30
Profit @ 25% on Selling Price or 33.33% on cost	10
*Selling price per unit	40

\*Thus if selling price = Rs.100, Profit = Rs.25; Cost = Rs.100 – Rs.25 = Rs.75. if cost is  $\frac{(\text{Rs. } 75 \times \text{Rs. } 40)}{\text{Rs. } 30}$

$$\text{Rs. } 75, \text{ Profit is Rs. } 25. \text{ If Cost} = \text{Rs. } 30 \text{ then Profit} = \frac{\text{Rs. } 75}{\text{Rs. } 30} = \text{Rs. } 10$$

Hence Selling Price = Cost + Profit = Rs.30 + Rs.10 = Rs.40.

65.C

Examples of Finance Modules of ERP applications are:

- Accounts receivable – Tracks payments from its customers to a company.
- Accounts payable – Schedules payments to suppliers and distributors.

- iii. Treasury management – Analyzes and monitors financial deals, investment risk, and cash holdings.
  - iv. General ledger – Manages centralized charts of accounts and corporate financial balances.
  - v. Fixed assets – Handles costs related with tangible assets, including depreciation.
  - vi. Cost control – Handles corporate costs related to overhead, products, and manufacturing orders.
- Production planning is a part of Manufacturing and Logistics module of ERP. Therefore, option (c) is correct answer.

66.E An item of cost that is direct for one business may be indirect for another is a true statement. Other statements are not correct. Therefore, (e) is correct.

67.D Commitment to a single vendor is one of the limitations associated with ERP but not advantage. Alternatives (a), (b), (c) and (e) are the advantages of ERP.

68. A Brand valuation is a tool that quantifies the economic value of a brand. Earnings valuation method is the correct answer.

69.

Particulars	Rs.
Selling price of R	7.00
Unit variable cost of R	7.50
Contribution margin per unit of R	(0.50)
Units sold of R	1,800
Increase in profits if R is discontinued	900

70. Computation of works cost:

Particulars	(Rs.)
Opening Stock of raw materials	4,000
Add: Raw materials purchased	49,000
	53,000
Less: Closing stock of raw materials	3,000
Direct materials consumed	50,000
Direct labor	20,000
Direct expenses	9,000
Prime Cost	79,000
Factory overheads	9,000
Add: Opening work-in progress	6,000
Less: Closing work-in progress	5,000
Works cost	89,000

71. The brand strength of a company is based on its positioning, customer loyalty, the markets in which it operates, competition, stability, statutory protection, brand management by the company and long-term trends but not on short term trends. Therefore, option (d) is correct answer.

72. The margin of safety decreases with increase in the variable cost. All the other options (a) Reduction in fixed cost, (c) Increase in the level of production or selling price or both, (d) Change in the sales mix in order to increase the contribution and (e) Substitute the existing unprofitable product with the profitable ones increase the margin of safety. Hence, the answer is (b).