

BUSINESS MATHEMATICS AND STATISTICS

(For those who joined in July 2006 and after)

Time : Three hours

Maximum : 100 marks

SECTION A — (4 × 10 = 40 marks)

Answer any FOUR questions.

Each question carries 10 marks.

1. Find the equation of the line passing through the point $(-1, 2)$ and the origin.
2. Prove that $\frac{d}{dx}(x^n) = n x^{n-1}$.
3. A firm has the revenue function $R = 200x - 0.01x^2$ and cost function $T = 50x + 20,000$. Obtain maximum profit.
4. Integrate $\left(\sqrt{x} - \frac{1}{\sqrt{x}}\right)^2$ with respect to x .

5. Find the inverse of the matrix $\begin{pmatrix} 1 & 3 & 3 \\ 1 & 4 & 3 \\ 1 & 3 & 4 \end{pmatrix}$.

6. Discuss the usefulness of Statistics.

7. Find the mean and median of the following distribution :

Size of the firm (acres) :	0-50	50-100	100-150
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Number of occupiers :	57	256	132
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Size of the firm (acres) :	150-200	200-250	250-300
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Number of occupiers :	25	10	12
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8. A distribution consists of three components with 200, 250, 300 items having mean 25, 10 and 15 and standard deviation 3, 4 and 5. Find the standard deviation of the combined distribution.

SECTION B — (3 × 20 = 60 marks)

Answer any THREE questions.

Each question carries 20 marks.

9. (a) Find $\frac{d}{dx} \{ (x-4)^5 + \log 3x + 7e^{x-1} \}$.

(b) If $y = \frac{(x-3)^2}{x+1}$ find $\frac{d^2y}{dx^2}$ at $x = 1$.

10. A firm's demand function is $3p + x = 48$. Find the level of output where total revenue is maximised. Also if the average cost function is given by $AC = x^2 - 2x + 10$, find the level of output which minimises marginal costs.

11. Solve the system of equations :

$$x - 3y + z = -1$$

$$2x + y - 4z = -1$$

$$6x - 7y + 8z = 7.$$

12. Two cricketers scored the following runs in the several innings. Find who is a better run getter and who is more consistent player.

A : 42 17 83 59 72 76 64 45 40 32

B : 28 70 31 0 59 108 82 14 3 95

13. Calculate the two regression equations of X on Y and Y on X from the data given taking deviations from actual means of X and Y :

Price (Rs.) : 10 12 13 12 16 15

Amount demanded : 40 38 43 37 45 43

Estimate the likely demand when the price is Rs. 20.

14. From the data given below show that Fisher's Ideal Index satisfied both Time Reversal Test and Factor Reversal Tests :

Commodities	2005		2006	
	p_0	q_0	p_1	q_1
<i>A</i>	6	10	8	12
<i>B</i>	10	5	10	8
<i>C</i>	5	8	7	10
<i>D</i>	15	12	20	15
<i>E</i>	20	15	25	10

BUSINESS COMMUNICATION.

(For those who joined in July 2006 and after)

Time : Three hours

Maximum : 100 marks

SECTION A — ($4 \times 10 = 40$ marks)

Answer any **FOUR** questions.

Each question carries 10 marks.

1. "Communication is the lifeblood of any business organisation". Elucidate.
2. What are the various types of non-verbal communication? How can non-verbal communication be used effectively?
3. Elaborate various steps involved in Mastering Communication skills.
4. Describe the process of listening in detail.
5. 'Bodies don't lie; they tell the truth'. Discuss the relevance of this in context of a presentation.
6. What is the objective of a good sales letter and how does one ensure its effectiveness?

7. How is internal communication different from external communication?
8. What is a report? State various kinds of reports relevant to your organisation.

SECTION B — ($3 \times 20 = 60$ marks)

Answer any THREE questions.

Each question carries 20 marks.

9. Discuss the various dimensions of an organizational body language.
10. Elaborate the ten commandments of listening.
11. If the presenter has to 'grab the audience', what skills must he employ?
12. 'Reminders and follow-up letters are by their very nature avoidable and wasteful'. Discuss.
13. As a Managing Director of a company, draft a memo to sales officer for customer's complaints.
14. Draft a circular letter announcing clearance sales.

RETAIL MARKETING MANAGEMENT

(For those who joined in July 2006 and after)

Time : Three hours

Maximum : 100 marks

SECTION A — ($4 \times 10 = 40$ marks)

Answer any **FOUR** questions.

Each question carries 10 marks.

1. Discuss the concept of selling.
2. Mention any four components of external environment.
3. State any four drawbacks of marketing research.
4. What is meant by consumer decision?
5. Define positioning in retail sector.
6. Give the meaning of the product with illustration.
7. Explain retail location strategies.
8. What is meant by consumer responsiveness to prices?

SECTION B — ($3 \times 20 = 60$ marks)

Answer any THREE questions.

Each question carries 20 marks.

9. Discuss the competition in retail sector.
10. State and explain the significance of marketing information system.
11. Explain the concept of retail marketing mix.
12. Discuss the need for marketing planning. State its requisites.
13. Explain the various aspects of visual merchandising.
14. Describe the relationship marketing strategies in retailing.

STORE OPERATIONS MANAGEMENT

(For those who joined in July 2006 and after)

Time : Three hours

Maximum : 100 marks

SECTION A — ($4 \times 10 = 40$ marks)

Answer any FOUR questions.

1. What do you mean by store management? Explain.
2. Explain the concept of instore merchandising.
3. When to reorder instore merchandising?
4. Write a note on case receiving.
5. What are self service operations? Discuss.
6. Briefly explain the concept of customer complaints.
7. Discuss the utility of store direct system.
8. Discuss the need for utilisation of personnel in stores.

SECTION B — (3 × 20 = 60 marks)

Answer any THREE questions.

9. Assess the role of store manager.
10. Write an essay on promotional ordering.
11. Explain in detail the steps involved in selling.
12. What are the advantages and disadvantages of multiple distribution centre system?
13. Write an elaborate note on store layout and design.
14. Discuss the importance of inventory management.

ORGANISATIONAL BEHAVIOUR AND
PERSONALITY DEVELOPMENT

(For those who joined in July 2006 and after)

Time : Three hours

Maximum : 100 marks

SECTION A — ($4 \times 10 = 40$ marks)

Answer any FOUR questions.

Each question carries 10 marks.

1. Critically evaluate the essence of scientific management of F.W. Taylor.
2. Describe briefly the role of S-O- B model as a basic input-output system of behaviour.
3. Distinguish between trait theory and social learning theory with suitable examples.
4. What are the major influences on the perception process?
5. Enunciate the significance V-room expectancy model in understanding attitude formation.

6. Explain the various stages in Maslow's Hierarchy of needs theory.
7. Write about the advantages of committees as a form of formal group.
8. What are the different bases of power in an organization?

SECTION B — (3 × 20 = 60 marks)

Answer any THREE questions.

Each question carries 20 marks.

9. Critically examine the causes of human behaviour with examples.
 10. Discuss in detail the various factors determining the personality Development.
 11. Enumerate the factors that usually act as sources of Job satisfaction.
 12. Critically evaluate the various types of leaderships with relevant examples.
 13. Explain the meaning, importance and relevance of transactional analysis.
 14. Trace the reasons for resistance to change and also suggest the steps to be taken to overcome such resistance.
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