

2012

MASTER OF BUSINESS ADMINISTRATION

[Fourth Semester Examination]

**MARKETING RESEARCH AND
FORECASTING TECHNIQUES**

(Specialisation : *Marketing Management*)

PAPER – M-402

Full Marks : 100

Time : 3 hours

The figures in the right-hand margin indicate marks

***Candidates are required to give their answers in their
own words as far as practicable***

Illustrate the answers wherever necessary

**Write the answers to questions of each Half
in separate books**

FIRST HALF

[Marks : 50]

1. Answer any *four* of the following : 5 × 4
- (a) Write short note on 'Exploratory Research'.
 - (b) What is stratified random sampling method ?
 - (c) Discuss in brief graphic rating scale along with its limitations.
 - (d) State the significance of report writing in Marketing Research.
 - (e) What is ordinal scale and how does it differ from nominal scale ?
 - (f) What is the difference between Interval scale and ratio scale ?
2. Answer any *two* questions of the following : 10 × 2
- (a) Sketch a sample questionnaire to measure consumer attitude towards the service provided by Indian Railways.

- (b) Discuss multidimensional scaling with a suitable example.
- (c) On the basis of paired comparison of 5 given brands of shampoo the following information has been obtained :

Brands	Sunsilk	Clinic plus	Dove	Garnier	Head & Shoulder
Sunsilk	—	60	80	100	80
Clinic plus	70	—	80	90	80
Dove	50	50	—	70	30
Garnier	30	40	60	—	30
Head & Shoulder	50	50	100	100	—

The total number of respondents is 130. Find out the ranks of 5 given brands.

[Internal Assessment – 10 Marks]

SECOND HALF

[Marks : 50]

3. Answer any *four* of the following : 5 × 4

(a) Write a short note on 'cluster analysis'.

(b) Find the standard deviation of the following frequency distribution of the daily incentives of 500 salesman :

Daily Incentive : 25 35 45 55 65

Number of Salesman : 60 130 150 130 30

(c) How sales analysis is done on the basis of territory ?

(d) State the importance of 'Delphi technique' as one of the forecasting techniques.

(e) Write down the needs of forecasting in marketing research.

(f) If

$$r_{12} = .50, r_{13} = .60 \text{ and } r_{23} = .70$$

Find the value of R_{23}

4. Answer any *two* of the following : 10 × 2

(a) From the following data, fit a multiple regression equation :

Sales territory (Lakh Rs.)	Sales (Lakh Rs.)	Advertising ('000 Rs.)	Personal Selling (No. of selling agents)
1	100	40	10
2	80	30	10
3	60	20	7
4	120	50	15
5	150	60	20

(b) A firm is interested in an experiment to ascertain the effect of advertising on the sale of its product in different stores. It has devised four advertising treatments *A, B, C* and *D*. There are three blocks, each containing four stores of comparable sizes. As a result of the experiment, the following data emerge.

Block	Advertisement	Advertisement	Advertisement	Advertisement	Total
-stores	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	
Block I	20	24	28	26	98
Block II	32	40	48	50	170
Block III	35	41	52	55	183
Total	87	105	128	131	451

The firm is interested to know if advertisement treatments have a significant effect on the sale of the product. The critical value of $F(6, 3)$ with $\alpha = .05$ is 8.94 and $F(6, 2)$ with $\alpha = .05$ is 19.33.

(c) Forecast the sales (in units) if Advertising is Rs. 1,00,000 from the following data :

Sales territory	1	2	3	4	5
Advertising ('000 Rs.)	40	30	20	50	60
Sales (in units)	100	80	60	120	150

[Internal Assessment – 10 Marks]