2015

M B A

4th Semester Examination

Subject : MARKETING RESEARCH AND FORECASTING TECHNIQUES

(Specialization : Marketing Management)

PAPER—M-402

Full Marks : 100

Time : 3 Hours

The figures in the right-hand margin indicate full 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 followings : 4×5

(a) Classify the scaling level in terms of the four

characteristics of the number system. Name the mathematical/statistical techniques which are permissible on data from each type of scale.

(b) How does 'Stapel scale' differs from 'Semantic Differential (SD) scale'?

(c) Explain in brief, Descriptive Research with example.

(d) Write a short note on Continuous Diary Panel Design or Four Group Six Study Design.

(e) Explain the term 'non-probability sampling'.

(f) Describe Focus Group Interview Method as a technique of data collection.

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

(a) What do you mean by sound measurement? Which scale would you use in order to measure the taste of soft drinks? Give valid reasons for your answer.

(b) State the characteristics of good research. Explain the steps involved in marketing research process with example.

(c) How does Stratified random sampling differ from Cluster random samplings? Explain with suitable examples.

[***Internal Assessment : 10 Marks***]

(Second Half)

(Marks : 50)

3. Answer any *four* questions : 4×5

(a) Given the following coefficients r_{12} = .40, r_{23} = .70, r_{13} = .5. Find the value of $R_{1.23}$ and interprete the result.

(b) R^2 = .79, what does it imply?

(c) A restaurant is interested in knowing the average amount a customer spends for lunch. A random sample of 64 customers is taken and the sample mean is found to be Rs. 36 and σ = 2. Find out an interval estimate with a confidence level of 95%.

(d) Explain Type I and Type II error in hypothesis testing.

(e) Distinguish between regression analysis and discriminant analysis.

(f) What is customer based sales analysis ?

4. Answer any *two* questions : 2×10

(a) A company has employed a large number of typists in its head office, It has developed a new training programme for them and has claimed that it has increased their typing test speed by 15 words per minute. A random sample of 9 typists is taken and their speed is observed. It is noticed that the average increase has been 10 words a minute. The estimated standard deviation is 8 words per minute. Can it be concluded that the company has made a legitimate claim ?

[Critical value of t for 8 *d.f.* and 5% level of significance is 1.86]

(b) A survey of farmers in a certain territory revealed that of the total 400 respondent farmers, one-half of them used fertilizers. As many as 240 farmers rented the farms while the remaining owned them. 100 farmers in each of the two categories namely, farmers who owned farms and farmers who rented farms used

fertilizers. Can it be said that the use of fertilizers is related to the ownership of farms ?

[The critical value of f^2 with 1 *d.f.* of 5% α is 3.841]

(c) A firm is interested in an experiment to ascertain the effect of advertising on the sale of its product in different stores. As a result of the experiment, the following data emerge.

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

Is there any significant effect of advertisement on the sale of the product ?

[The critical value of F(6,3) with $\alpha = 0.05$ is 8.94 and F(6,2) with $\alpha = 0.05$ is 19.33]

[*Internal Assessment : 10 Marks*]

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