

1125

Master of Business Economics
First SemesterMBE-6102/MB-6102: Research Methodology and Business Statistics
(Common with M.Com – Business Economics, First Semester)

Max. Marks: 80

Time allowed: 3 Hours

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

Unit-I

(8)

- (a) Explain the role of marketing research in decision making. (8)
(b) Discuss the factors that affect the marketing research decisions. (8)
- Explain the ways in which exploratory, descriptive and causal research connected to each other? How they differ? Identify the appropriate data collection methods associated with each type of research.

Unit-II

Consumers without access to garage tend to polish their cars more frequently. Is the lack of garage a good variable for predicting sales of car polish? Are there other hypothesis that might explain this finding? Discuss in-depth interviews, focus group and projective techniques in detail.

Unit-III

How would you select a set of phrases or adjectives for use in semantic differential scale to evaluate the image of banks? Would the procedure differ if Likert scale is used? Explain by discussing the similarities and differences between two scales.

- Discuss the difference between simple random, stratified random and cluster sampling techniques. (8)
- Briefly describe the concept of sampling efficiency of above mentioned sampling methods and discuss the ways in which it could be improved. (8)

Unit IV

- Compare mean, median and mode as measures of central tendency. What purpose do they serve? Why are averages called as a measure of central tendency? (8)
- A time study was conducted in a factory with the help of two samples of 10 workers. The times taken by each respondent was recorded and presented as given in the table. Evaluate which of the sample is more variable. (8)

	Time (mins.)							
Sample A	130	125	120	135	140	130	145	140
Sample B	132	146	137	145	130	125	138	143

- What are the four properties of Binomial and Poisson distributions?
- Suppose that three individuals go to a drive-through restaurant and each one of them places an order. What are the possibilities that all three, none of the three and at least two of the three orders will be filled accurately. Consider percentage of correct orders filled to be 88%.

Unit-V

- What do you understand by sampling distribution of the means? Show with the help of an example the relationship between sample means and population mean. (8)
- 45% of all graduates in a college are married. If a sample of 150 graduates is selected at random, what is the probability that the proportion of married students in the sample to be between 40% and 48%. (8)

- What are some of the criteria used in the selection of a particular hypothesis-testing procedure? (8)
- For the following data evaluate at 5% level of significance that is there enough evidence available that the mean delivery time for local restaurant is less than mean delivery time for national restaurant.

	16.8	11.7	15.6	16.7	17.5	18.1	14.1	21.8	13.9	20.8
Local	16.8	11.7	15.6	16.7	17.5	18.1	14.1	21.8	13.9	20.8
National	22.0	15.2	18.7	15.6	20.8	19.5	17.0	19.5	16.5	24.0

(8)