

BRAINWARE UNIVERSITY

Course - MBA

Marketing Research (MM303)

(Semester - 3)

Time allotted: 3 Hours Full Marks: 70

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group -A

(Multiple Choice Type Question)

1. Choose the correct alternatives for the following: $10 \times 1 = 10$ i) Likert Scale is a d) Sequential Scale a) Dichotomous Scale b) Rating Scale c) Liking Scale ii) Which of the following is a non – probability sampling? a) Random Sampling b) Judgement Sampling c) Quota Sampling d) Convenience Sampling iii) Type I error occurs when a) Null hypothesis is true but rejected b) Null hypothesis is true but accepted c) Null hypothesis is false but accepted d) None of these iv) Research on human observation and analysis is a) Qualitative Research b) Exploratory Research c) Statistical Research d) Sampling v) All the 50 employees of an office were interviewed to find out their job satisfaction. This sample is called a) Heterogeneous Sample b) Universe Sample c) Random Sample d) Convenience Sample

- vi) A company manufacturing a seasonal product looks for
- a) Immediate weather report
- b) Time series data on weather

c) Market data

- d) None of these
- vii) Which is a probability based sampling method?
- a) Stratified Sampling
- b) Snowball Sampling
- c) Quota Sampling

Judgement Sampling

- viii) Secondary data cannot be obtained from
- a) Trade journals
- b) Government Reports
- c) Yellow Pages
- d) Surveys

- ix) Which is not a research design?
- a) Exploratory
- b) Casual
- c) Descriptive
- d) Causal
- x) In depth interviews should be conducted
- a) by telephone
- b) personally
- c) by mail
- d) over internet

Group - B

(Short Answer Type Questions)

Answer any three of the following

 $3 \times 5 = 15$

- 2. Write a short note on judgement sampling.
- 3. What are the different types of questionnaire?
- 4. A random sample of 400 containers is found to have a mean weight of 82 kg and standard deviation of 18 kg. Find 95% confidence limits for the mean of the population from which the sample is drawn (Value of z for 95% confidence interval is 1.96).
- 5. Discuss the internal sources of secondary data?
- 6. A firm has appointed a large number of dealers all over the country to sell its bicycles. It is interested in knowing the average sales per dealer. A random sample of 25 dealers is chosen for this purpose. The sample mean is Rs.30000 and the sample standard deviation is Rs.10000. Construct an interval estimate with 95% confidence. (95% confidence interval value for t distribution is 2.064)

Group - C

(Long Answer Type Questions)

Answer any three of the following

 $3 \times 15 = 45$

- 7. What is research design? Discuss the different components of marketing research design. [15]
- 8. a) Suppose that a random sample of 400 families shows that 120 families own a television set and 280 do not. In other words, 30 percent of families own a television set. Construct a confidence interval with 95% confidence. (Z value for 95% confidence interval is 1.96).
- b) A firm, manufacturing steel furniture desired to estimate the proportion of the population that uses its product. In a sample of 100 families it is found that 20 families use its product. Estimate the proportion of the population using steel furniture of the firm, assuming the confidence level of 90%. (Z value for 90% confidence interval is 1.64).
- c) What are the characteristics of a good questionnaire?

[5+5+5]

9. Explain the following types of scales with suitable example.

 $[3 \times 5 = 15]$

- a) Itemized Rating Scale
- b) Rank Order Scale
- c) Constant Sum Scale
- 10. a) An accountant wants to test the hypothesis that the proportion of incorrect transactions at four client accounts is about the same. A random sample of 80 transactions of one client reveals the following results:

Transactions	Client 1	Client 2	Client 3	Client 4	Client 5
Incorrect	21	25	30	40	116
Transactions					
Correct	59	75	60	70	264
Transactions					
Total	80	100	90	110	380

Conduct the test at $\alpha = 0.05$ (χ with 3 degrees of freedom at 5% level of significance equals 7.815)

b) What is exploratory research?

[10 + 5]

- 11. a) Explain the differences between parametric and non parametric tests.
- b) A filling machine at a soft drink factory is defined to fill bottles of 200 ml with a standard deviation of 10 ml. A random sample of 50 filled bottles was taken and the average volume of soft drink was computed to be 198 ml per bottle. Test the hypothesis that the mean volume of soft drink per bottle is not less than 200 ml at 5% level of significance. (Z value at $\alpha = 0.05$ is 1.96).
- c) It is known from the past studies that the monthly average household expenditure on the food items in a locality is Rs.2700 with a standard deviation of Rs.160. An economist took a random sample of 25 households from the locality and found their monthly household expenditure of food items to be Rs.2790. At 0.01 level of significance, can we conclude that the average household expenditure on the food items is greater than Rs.2700? (Z value at $\alpha = 0.01$ is 2.33).

[5+5+5]