

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA – SEMESTER 01– • EXAMINATION – SUMMER 2016**Subject Code: 2810006****Date: 26/05/2016****Subject Name: Research Methodology (RM)****Time: 10:30 AM to 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 Multiple Choice Question** **06**
- In a study of the effect of the amount of TV viewing on children's aggressiveness, amount of TV viewing would be what type of variable?
1. A. Independent variable B. Dependent variable
 - C. Control variable D. Extraneous variable
- Which type of research takes the form of a pilot study?
2. A. Pure Research B. Applied Research
 - C. Exploratory Research D. Descriptive Study
- "Number of cars in a parking lot", "Number of students in a class" are examples of :
3. A. Dichotomous variable B. Discrete variable
 - C. Continuous variable D. None of the above
- When we try to explain the relationships among variables, the study is called
4. A. Exploratory study B. Longitudinal study
 - C. Causal study D. Cross sectional study
- The significance level reported in a research study can be explained by which of the following?
- A. importance of the results to the benefit of society B. A statistical method
 5. C. risk associated with not being 100% confident the difference is due to the treatment D. importance of the results to the benefit of an individual
- Respondents are asked to rate an attitude object on a number of multiple-point rating scales bounded at each end by one of two bipolar adjectives or phrases. This type of question is called:
6. A. Dichotomous B. A semantic differential
 - C. Rating scale D. A likert scale
- Q.1 (b) Define the following terms:** **04**
1. Cluster Sampling
 2. Secondary Data
 3. Likert Scale
 4. Sampling Error
- Q.1 (C) Differentiate between the following terms:** **04**
- (i) Type I & Type II error
 - (ii) Univariate & Bivariate data analysis
- Q.2 (a) Explain the reason for sampling/ Describe the various steps of sampling design** **07**
- (b) When is observation as method of data collection used in research? Explain in detail the strengths and limitation of observation method of data collection.** **07**
- OR**
- (b) What is the need of sampling? Discuss various probability sample techniques by giving their merits and demerits.** **07**

- Q.3 (a) Explain difference between qualitative and quantitative research with examples. 07
 (b) What do you mean by scaling in research? Describe different scaling techniques pointing out merits and demerits of each. 07

OR

- Q.3 (a) Define null hypothesis. State all the of hypothesis testing procedure. 07
 (b) Distinguish between cross-sectional and longitudinal designs. In what situations would you recommend the usage of one over the other? 07

- Q.4 (a) During the economic boom, the average monthly income of software professionals touched Rs. 75,000. A researcher is conducting a study on the impact of economic recession in 2008. The researcher believes that the economic recession may have an adverse impact on Average monthly salary of software professionals. For verifying his belief, the researcher has taken a random sample of 20 software professionals and computed their average income. The average income of these 20 professionals is computed as Rs. 60,000. The sample standard deviation is computed as Rs. 3000. Use $\alpha=0.10$ to test whether the average income of software professionals is Rs. 75,000 or it has gone down. 07
 (b) What is report writing? Discuss the layout of a research report covering all relevant points. 07

OR

- Q.4 (a) "Processing of data implies Editing, Coding, Classification and Tabulation". Describe in brief these four operations pointing out the significance of each in context of research study. 07
 (b) The production manager of a company that manufactures electric heaters believes that at least 10% of the heaters are defective. For testing his belief, he takes a random sample of 100 heaters and finds that 12 heaters are defective. He takes the level of significance as 5% for testing the hypothesis. Test the hypothesis. 07

- Q.5 Prestige consulting services offer personalized investment advice to their customers. They are located at a prime location where corporate offices of major multinational companies are located. Thus, the organization has a huge customer base of 2,450 platinum and 3,400 gold customers (based on the investment of over Rs. 10 lakh and between Rs. 5 to 10 lakh respectively). The management of Prestige is looking at expanding its operation in the other metros. Management is concerned with how its customers rate the service and the personnel at the consultancy, and they would like to know the customers impressions of Prestige. Design a mail questionnaire that can be sent to the bank's customers to obtain the desired information. 14

OR

- Q.5 Stiff competition: 14
 "Vijay Auto" one of the leading automobile companies in India, lost market share to its competitor Hero Honda in the late 1990's. In order to regain its market share, the company plans to find out the reason for its failure in the market. You are appointed as a research to M/s Vijay Auto.

Questions:

- a) What type of research design would you prefer? Support your answer with reasons.
 b) State the sources through which Vijay Auto can obtain primary data.
 c) Prepare a research proposal for the same.
