

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MBA – SEMESTER – I • EXAMINATION – SUMMER • 2014**

**Subject Code: 2810006**

**Date: 30-05-2014**

**Subject Name: Research Methodology**

**Time: 14.30 pm - 17.30 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** (a) Discuss the nature and scope of business research in the field of management. **07**  
(b) What are the four basic levels of measurement? Explain each one with suitable example. **07**
- Q.2** (a) What do you understand by descriptive research? Explain with example. **07**  
(b) Tata Nano division of Tata Motors wants to perform customer satisfaction survey in Gujarat. Develop the questionnaire for performing this research. **07**
- OR**
- (b) “Every business research starts with a problem statement.” Give your views relating to this statement with real life example. **07**
- Q.3** (a) Prepare a research proposal to study the students’ preference and satisfaction for semester system in Schools and colleges. **07**  
(b) Depict your understanding for non-probability sampling methods. Discuss any two non-probability sampling methods in brief. **07**
- OR**
- Q.3** (a) It is known from the past data that 10% of the families in Vadodara city subscribe “Outlook” magazine. Of late, there has been some apprehension that this subscription rate has declined. To test this, a random sample of 100 families is chosen and it is found that the sample proportion is 0.07. Can it be concluded that the subscription rate has really declined assuming a 5% level of significance? **07**  
(b) Explain the concept of one-tail and two-tail tests with examples. **07**
- Q.4** (a) In which situation observation method of data collection is applicable? Explain using example and also write its advantages and disadvantages. **07**  
(b) A potential buyer wants to decide which of the two brands of electric bulbs he should buy as he has to buy them in bulk. As a specimen, he buys 100 bulbs of each of the two brands – X and Y. On using these bulbs, he found that brand X has a mean life of 1000 hours with a standard deviation of 30 hours and brand Y has a mean life of 1050 hours with a variance of 2500 hours. Do the two brands differ significantly in quality at 5% level of significance? **07**

**OR**

- Q.4 (a)** Suppose a producer of a breakfast food is interested to know the effectiveness of three different types of packaging. He puts each kind of packaged food into five different stores. He found that during a given week the number of packages sold were as follows: **07**

	Packages sold				
Package 1	25	28	21	30	26
Package 2	27	25	25	33	30
Package 3	22	29	26	20	23

At 5% level of significance, test whether these three packaging types makes any difference in sales?

- (b)** Depict your understanding for univariate and bivariate data analysis methods. **07**
- Q.5 (a)** Write a note on “Reliability and Validity of scales”. **07**
- (b)** What are the key points to keep in mind while writing a research report? **07**

**OR**

- Q.5 (a)** Briefly explain the major contents of a research report. **07**
- (b)** In business research, it is better to take a sample instead of taking the data from whole population. Do you agree with this statement? Support your answer with example. **07**

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