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 **07** 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:

	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 **07** whole population. Do you agree with this statement? Support your answer with example.

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