

GUJARAT TECHNOLOGICAL UNIVERSITY**M.B.A -Ist SEMESTER-EXAMINATION -JUNE- 2012****Subject code: 2810006****Date: 13/06/2012****Subject Name: Research Methodology (RM)****Time: 02:30 pm – 05:30 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)	A two-wheeler manufacturing company wants to study the satisfaction level of its customers. The company appoints you as researcher for this project. Prepare a questionnaire for conducting this survey.	07
	(b)	Discuss various steps of business research process.	07
Q.2	(a)	What are the four basic levels of measurement? Explain each one with suitable example.	07
	(b)	Depict your understanding for research design. How descriptive research is differing from casual research?	07
		OR	
	(b)	What do you understand by extraneous variables? Discuss some of the extraneous variables that affects the validity of experiment.	07
Q.3	(a)	In business research errors occurs other than sampling error. What are different non-sampling errors?	07
	(b)	Explain stratified sampling and cluster sampling methods.	07
		OR	
Q.3	(a)	Data coding and data editing are two important activities in business research. Do you agree? Support your answer with proper explanation.	07
	(b)	Explain univariate, bivariate and multivariate analysis with examples.	07
Q.4	(a)	Prepare a research proposal to study the consumer preference and satisfaction for Tata Nano in the state of Gujarat.	07
	(b)	A consumer research firm routinely selects several car models each year and evaluates their fuel efficiency. In this year's study of two similar sub-compact models from two different automakers, the average mileage of 12 cars of brand 'A' was 27.2 kmpl, and standard deviation was 3.8 kmpl. The nine brand 'B' cars that were tested averaged 32.1 kmpl, and the standard deviation was 4.3 kmpl. At $\alpha = 0.01$, should it conclude that brand 'A' cars have lower mileage than do brand 'B' cars?	07
		OR	
Q.4	(a)	A shampoo manufacturing firm wanted to test the claim that its brand is used more by male than female. A sample of 100 consumers was drawn at random in which there were 60 females and 40 males. It was found that 30 females and 24 males used the brand regularly. Do the results support the aforesaid hypothesis at 5% level of significance?	07
	(b)	From the following table find out if there is any association between the family size and the size of the soft drink bottle purchased by the consumer family. Use 5% level of significance.	07

	Bottle size	Family size				
		1-2	3-4	5 or more	Total	
	250 ml	30	20	10	60	
	500 ml	15	60	65	140	
	1000 ml	05	50	90	145	
	Total	50	130	165	345	
Q.5	(a)	What do you understand by hypothesis testing? Discuss step by step hypothesis testing process.				07
	(b)	What are the key points to keep in mind while writing a research report?				07
		OR				
Q.5	(a)	Distinguish between qualitative and quantitative research.				07
	(b)	What are the different data collection methods? Discuss any two in detail.				07
