Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA – SEMESTER 2 – EXAMINATION – WINTER 2018

Subject Code: 3529207   **Date: 28/12/2018**
Subject Name: Research Methodology (RM)
Time: 02:30pm To 05:30pm   **Total Marks: 70**
Instructions:
1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q. No.			**Marks**
Q.1		**Define the following**	**14**
	1.	Stratified Random Sampling	
	2.	Sampling Frame	
	3.	Exploratory Research	
	4.	Causal Research	
	5.	Descriptive research	
	6.	Secondary Data	
	7.	Sampling Error	

Q.2 **(a)** Explain various criteria researcher should consider while writing Research Report. **07**

(b) The HR Manager of the firm has received a complaint from the employee of the production department that their weekly compensation is less that the employees of marketing department. To verify this claim HR manager has taken a random sample of 8 employees from production and 9 from marketing department. The data collected is shown below: **07**

Production Department	Marketing Department
5000	5500
5200	5600
4800	5170
5300	5020
4930	4990
5100	5250
4900	5350
5220	5150
	4960

OR

(b) What are the different types of rating scales? **07**

Q.3 **(a)** The Vice President sales of a garment company want to determine whether sales of the company's brand of Jeans is independent of age group. He has appointed a marketing researcher for this purpose. This marketing researcher has taken a random sample of 703 consumers **07**

who have purchased jeans. The researcher conducted survey for three brands namely brand 1, 2, and 3. The researcher has also divided age groups into four categories: 15-25, 26-35, 36-45 and 46-55. Determine whether brand preference is independent of age group, level of significance is .05.

Age\Brand	Brand 1	Brand 1	Brand 1	Row Total
15-25	65	75	72	**212**
26-35	60	40	64	**164**
36-45	45	52	50	**147**
46-55	55	65	60	**180**
Column Total	**225**	**232**	**246**	**703**

(b) Distinguish between the following: **07**
   a Parametric tests and nonparametric tests.
   b Type I error and Type II error.
   c One-tailed tests and two-tailed tests.
   d Acceptance region and rejection region.

OR

Q.3 **(a)** 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**

(b) Two consumer durables companies market two brands of irons A and B respectively. A researcher has taken a random sample of size 35 from the first company and the size of 40 from the second company and computed the average life of both the brands in months. Is there a significant difference between the average life of the two brands A and B? Take 95% as the confidence level.   **07**

Average life of electronic iron in months (Brand A)

61	62	62	61	62
62	63	63	62	61
60	61	62	64	63
63	62	62	62	64
62	67	64	61	61
61	65	65	62	62
64	62	62	63	60

Average life of electronic iron in months (Brand B)

61	61	65	63	62
62	61	67	62	64
60	63	64	65	62
63	65	62	64	65
64	64	64	61	62
62	66	65	62	63
61	64	63	66	61
60	62	61	63	65

Q.4 **(a)** What is the need of sampling? Discuss various probability sample techniques by giving their merits and demerits.   **07**

(b) Define questionnaire. Pantaloons is conducting a survey regarding the Customers' behaviour towards merchandize available in the store. Prepare & develop a questionnaire which meets the mentioned criteria.   **07**

Q.4 **(a)** One of the leading newspapers wants to identify the social - cultural   **07**
and behavioral parameter of people of Tribal region of Gujarat.
Which secondary data sources they can use and also describes criteria
for evaluating secondary data.

(b) Explain various criteria for good research   **07**

Q.5   **CASE STUDY:**

Mr Mohan Mehata has a chain of restaurants in many cities of
northern India and was interested in diversifying his business. His
only son, Kamal, never wanted to be in the hospitality line. To settle
Kamal into a line, which would interest him? Mr. Mehta decided to
venture into garment manufacturing. He gave this idea to his son,
who liked it very much. Kamal had already done a course in fashion
designing and wanted to do something different for the consumers of
this industry. An idea struck him that he should design garments for
people who are very bulky but want a lean back look after wearing
readymade garments. The first thing that came to his mind was to
have an estimate of people who wore large sized shirts (40 size and
above) and large sized trousers (38 size and above).

A meeting was called of experts from the garment industry and a
number of fashion designers to discuss on how they should proceed.
A common concern for many of them was to know the size of such a
market. Another issue that was bothering them was how to approach
the respondents. It was believed that asking people about the size of
their shirt or trouser may put them off and there may not be any
worthwhile response. A suggestion that came up was that they should
employ some observers at entrances of various malls and their job
would be look at people who walked into the malls and see whether
the concerned person was wearing a big sized shirt of trouser. This
would be a better way of approaching the respondents. This
procedure would help them to estimate in a very simple way the
proportion of people who wore big sized garments.

(a) Name the sampling design that is being used in the study.   **07**

(b) What are the limitations of the design so chosen?   **07**

OR

Q.5 (a) Can you suggest a better design?   **07**

(b) What method of data collection is being employed?   **07**

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