

Seat No. : _____

ZI-109

May-2014

MBA, (Sem.-II)

Business Research Methodology

Time : 2 Hours]

[Max. Marks : 100

- Instruction :** (1) The question paper contains **five** questions.
(2) **All** the questions carry equal marks.

1. Answer any **two** :

- (A) Explain the methods of data collection. Describe the difference between survey and experiment.
- (B) What is research problem ? Define the main issues, which should receive the attention of the researcher in formulating the research problem. Give suitable examples to elucidate your points.
- (C) "Research design in exploratory studies must be flexible but in descriptive studies, it must minimize bias and maximize reliability." Discuss. Also explain the merits and demerits of both designs.

2. Answer the following :

- (A) "Scaling describes the procedures by which numbers are assigned to various degrees of opinion, attitude and other concepts." Discuss. Also point out the basis for scale classification.

Are the following nominal, ordinal, interval or ratio data ? Explain your answers :

- (a) Temperatures measured on the Kelvin scale.
- (b) Military ranks.
- (c) Social security numbers.
- (d) Number of passengers on buses from Delhi to Mumbai.
- (e) Code numbers given to the religion of persons attempting suicide.
- (B) Determine the size of the sample for estimating the true weight of the cereal containers for the universe with $N = 5000$ on the basis of the following information :
 - (1) The variance of weight = 4 ounces on the basis of past records.
 - (2) Estimate should be within 0.8 ounces of the true average weight with 99% probability.

Will there be a change in the size of the sample if we assume infinite population in the given case ? If so, explain by how much ?

3. Discuss in detail any **two** :

- (A) Factor Analysis
- (B) Computer Aided Research
- (C) Sampling Methods

4. Answer the following :

- (A) Raju Restaurant near the railway station at Falna has been having average sales of 500 tea cups per day. Because of the development of bus stand nearby, it expects to increase its sales. During the first 12 days after the start of the bus stand, the daily sales were as under :

550, 570, 490, 615, 505, 580, 570, 460, 600, 580, 530, 526

On the basis of this sample information, can one conclude that Raju Restaurant's sales have increased ? Use 5 per cent level of significance.

- (B) A certain process produces 10 percent defective articles. A supplier of new raw material claims that the use of his material would reduce the proportion of defectives. A random sample of 400 units using this new material was taken out of which 34 were defective units. Can the supplier's claim be accepted ? Test at 1 per cent level of significance.

5. Answer the following :

- (A) Describe, in brief, the layout of a research report, covering all relevant points.
- (B) In the following table are recorded data showing the experience of machine operators and their performance rating as given by the number of good parts turned out per 100 pieces :

Operator	1	2	3	4	5	6	7	8
Experience (years)	16	12	18	4	3	10	5	12
Performance Rating	87	88	89	68	78	80	75	82

Obtain the regression equation of performance rating on experience. Use this equation to estimate the probable performance if an operator has 7 years of experience.
