

**FACULTY OF MANAGEMENT****M.B.A. II – Semester (CBCS) Examination, May / June 2018****Subject: Business Research Methods****Paper – MBA – 203****Time: 3 Hours****Max.Marks: 80****Note: Answer all the questions from Part-A and Part-B.****Each question carries 4 marks in Part-A and 12 marks in Part-B.****PART – A (5x4 = 20 Marks)****[Short Answer Type]**

- 1 Discuss the nature of business research
- 2 Explain the properties of normal curve
- 3 What is multistage sampling?
- 4 What do you understand by Type – I and Type – II errors?
- 5 .State the essentials of a good research report.

**PART – B (5x12 = 60 Marks)****[Essay Answer Type]**

- 6 a) Explain the role of business research in managerial decision making.  
**OR**  
b) What is research design? Explain the requirements of a good research design.
- 7 a) Explain the addition and multiplication theorem of probability with suitable examples.  
**OR**  
b) What is the probability that a couple's second child will be
  - i) A girl, given that their first child was a girl
  - ii) A boy, given that their first child was a girl.
- 8 a) What are the different scales used in Business Research?  
**OR**  
b) How do you determine the sample size for research? Which sampling method do you feel the best? Justify.
- 9 a) Four technicians analyzed three samples each for the moisture content in the sample. The results are given below.

| Samples | Technicians |    |    |    |
|---------|-------------|----|----|----|
|         | A           | B  | C  | D  |
| X       | 9           | 12 | 10 | 11 |
| Y       | 12          | 11 | 15 | 12 |
| Z       | 9           | 10 | 12 | 14 |

Analyze the data and comment. Use 5% significance level.

**OR**

- b) Five coins are tossed 3200 times and the number of heads appearing each time is noted. At the end, the following results were obtained.

|              |    |     |      |     |     |    |
|--------------|----|-----|------|-----|-----|----|
| No. of heads | 0  | 1   | 2    | 3   | 4   | 5  |
| Frequency    | 80 | 570 | 1100 | 900 | 500 | 50 |

Test the goodness of fit to determine whether the coins are unbiased. Use 5% LOS.

- 10 a) The lines of regression are  $8X - 10Y = 0$ ;  $40X - 18Y = 214$  and variance of X is 9. Find
- Means of X and Y
  - Correlation "r"
  - Standard Deviation Y.

**OR**

- b) Below are the figures of production (in '000 tons) in a sugar factory.

|                           |      |      |      |      |      |      |      |
|---------------------------|------|------|------|------|------|------|------|
| Year                      | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Production (in '000 tons) | 77   | 88   | 94   | 85   | 91   | 98   | 90   |

Fit a straight line trend by least squares principle and show the trend line. What is the monthly increase in production? Also eliminate the trend.

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