## FACULTY OF MANAGEMENT

# M.B.A. (CBCS) II - Semester (New) Examination, July / August 2017 <br> Subject: Business Research Methods 

Paper - MB - 203
Max.Marks: 80
Time: 3 Hours
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 ( $5 \times 4=20$ Marks)
[Short Answer Type]
Note: Answer all the questions in not more than one page each.
1 What is standard error?
2 Explain Joint probability.
3 What is Stratified Random Sampling?
4 Explain confidential interval.
5 Discuss the concept of correlation analysis.
PART-B ( $5 \times 12=60$ Marks)

## [Essay Answer Type]

## Note: Answer all the questions by using internal choice.

6 a) Distinguish between exploratory research and descriptive research with suitable examples.

OR
b) Find the mean and median of the following distribution.

| Wages (Rs) | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No. of workers | 3 | 5 | 20 | 10 | 5 |

7 a) A husband and wife appear in an interview for two vacancies in the same post. The probability of husband's selection is $1 / 7$ and that of wife's selection is $1 / 5$. What is the probability that only one of them will be selected?

## OR

b) An automatic machine makes paper clips from coils of wire. On the average, 1 in 400 paper clips is defective. If the paper clips are packed in boxes of 100 . What is the probability that any given box of clips will contain i) no defective, ii) one or more defective and iii) less than two defectives.

8 a) What are the different sources of primary data and secondary data?
OR
b) Explain various probabilistic sampling methods.

9 a) A company wanted to introduce a new plan of work and a survey was conducted for this purpose. Out of sample of 500 workers in one group $62 \%$ favoured the new plan and another group of sample of 400 workers $41 \%$ were against the new plan. Is there any significant difference between the two groups in their attitude towards the new plan at $5 \%$ significance level?

OR
b) 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.

10 a) Find Karl Pearson's coefficient correlation to the following:

| X | 48 | 39 | 65 | 80 | 73 | 60 | 52 | 120 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Y | 10 | 50 | 120 | 225 | 90 | 60 | 55 | 25 |

## OR

b) Find both regression lines to the following. Estimate the coefficient correlation and comment.

| X | 13 | 48 | 88 | 42 | 22 | 10 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Y | 8 | 52 | 82 | 84 | 22 | 10 | 6 |

