



Reg. No. :

Name :

Second Semester B.B.A. LL.B. (Five Year Integrated) Degree Examination, April 2018

Paper – III : BUSINESS STATISTICS

Time : 3 Hours

Max. Marks : 80

I. Answer **any five** of the following. **Each** question carries 2 marks. Answer should **not exceed 50 words each.** (5×2=10 Marks)

- 1) What is sampling ?
- 2) What do you mean by Lorenz Curve ?
- 3) Define median.
- 4) What is an event in probability ?
- 5) What is a range ?
- 6) What do you mean by mutually exclusive events ?
- 7) What is a frequency polygon ?
- 8) Explain sure, impossible and uncertain events.

II. Answer **any four** of the following. **Each** question carries 4 marks. Answer should **not exceed 120 words each.** (4×4=16 Marks)

- 1) Explain the merits and demerits of standard deviation.
- 2) List out the various measures of dispersion.
- 3) Write notes on binomial distribution and give the important properties of binomial distribution.
- 4) Differentiate between questionnaire and schedule.
- 5) Explain the procedure for drawing a Lorenz Curve.
- 6) What is a bar diagram ? Explain the various types of bar diagram.

III. Answer **any four** of the following. **Each** question carries 6 marks. (4×6=24 Marks)

- 1) Discuss briefly the use of statistics in various spheres of human activity.
- 2) What is meant by kurtosis ? How do you measure kurtosis ?



- 3) Consider families with 4 children each. What percentage of families would you expect to have (a) two boys and two girls, (b) at least one boy, (c) no girls and (d) at the most two girls? (Assume equal probabilities for boys and girls)
- 4) Explain the rules to be observed in constructing a table.
- 5) Find mean from the following data.

Age	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80
No. of Persons dying	15	30	53	75	100	110	115	125

- 6) Obtain the quartile deviation for the data given below.

Wages (in Rs.)	10	20	30	40	50	60	70	80	90
No. of workers	600	580	490	340	240	170	120	70	25

IV. Answer **any three** of the following. **Each** question carries **10** marks.
(3×10=30 Marks)

- 1) Discuss the functions and importance of statistics.
- 2) What are the different graphs of frequency distribution?
- 3) Calculate standard deviation of the following two series and state which one is more variable.

Marks	Class A	Class B
20 - 30	5	7
30 - 40	10	15
40 - 50	25	30
50 - 60	5	15
60 - 70	5	8

- 4) Given a normal distribution with mean = 40 and SD = 10. Find the value of x that has (a) 15% of the area to its left, (b) 20% of the area to its right.