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H – 2293

Reg. No. : .....

Name : .....

**First Semester B.B.A. Degree Examination, November 2019**

**Career Related First Degree Programme under CBCSS**

**BM 1131 : BUSINESS STATISTICS**

**(2014-2016 Admissions)**

Time : 3 Hours

Max. Marks : 80

**SECTION – A**

Answer **all** questions in **one** word or **two** sentences. Each question carries **1** mark.

1. What do you mean by random experiment?
2. State the meaning of statistics.
3. What is geometric mean?
4. What do you mean by Poisson distribution?
5. Define Variance.
6. What is non probability sampling?
7. What are the various measures of dispersion?
8. What is inter quartile range?
9. What do you mean by positive skewness?
10. What is mutually exclusive events?

**(10 × 1 = 10 Marks)**

P.T.O.

## SECTION – B

Answer any **eight** questions, not to exceed **One** paragraph. Each question carries **2** marks.

11. Explain the term coefficient of variation.
12. Write the uses of mean.
13. What is statistical errors?
14. Write a note on spearman rank correlation.
15. Explain symmetric distribution.
16. What is Bayes theorem?
17. What do you mean by Combinations?
18. What is tabulation?
19. What are the precautions to be take while using secondary data?
20. What is class interval?
21. State the empirical relationship between mean, median and mode.
22. What is range?

**(8 × 2 = 16 Marks)**

## SECTION – C

Answer any **six** questions, not to exceed **120** words. Each question carries **4** marks.

23. Discuss the scope of statistics.
24. From following data relates to values of  $x$  and  $y$ , find the regression equation of  $y$  on  $x$ .

$x$ : 2 3 4 5 6

$y$ : 3 5 4 8 9

25. Explain the application of statistics in Business and commerce.
26. Define median. Discuss the method of locating median graphically.
27. What is quartile deviation? Point out its merits and demerits.
28. What is mode? Discuss how mode is calculated in continuous series?
29. The marks obtained by seven students are 5, 10, 15, 20, 25, 30, 45. Find the Harmonic mean.
30. The measure of skewness of a distribution is 0.32. Its standard deviation is 6.5 and mean equal to 29.6. Estimate the mode and median.
31. The average rainfall of the city from Monday to Saturday is 3.3 cm. Due to heavy rainfall on Sunday the average rainfall for the week rose to 5.3 cm. Calculate the rainfall on Sunday.

**(6 × 4 = 24 Marks)**

### SECTION – D

Answer any **two** questions. Each question carries **15** marks.

32. What do you mean by data collection? Explain its sources and also the different methods used in primary data collection?
33. Calculate coefficient of variation and state which group is more consistent, boys or girls?

Age in yrs :	6	7	8	9	10	11	12	13
Boys :	3	6	9	14	17	19	7	5
Girls :	4	4	10	16	14	15	3	4

34. Calculate mean, mode, median and quartiles from the data :
 

Marks :	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of students :	2	18	30	45	35	20	6	4
35. Find the standard deviation and co-efficient of skewness from the data :
 

Variable :	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
Frequency :	2	5	7	13	21	16	8	3

**(2 × 15 = 30 Marks)**