E	6	1	0



Reg. No
Name

B.B.A. DEGREE (C.B.C.S.S.) EXAMINATION, SEPTEMBER 2024

First Semester

Complementary Course—FUNDAMENTALS OF BUSINESS STATISTICS [2013—2016 Admissions]

Time: Three Hours Maximum Marks: 80

Part A

Answer all questions.

Each questions carries 1 mark.

- 1. Weighted Mean.
- 2. Sample Design.
- 3. Secondary Data.
- 4. Dispersion.
- 5. Quartiles.
- 6. Coding of Data.
- 7. Variance.
- 8. Questionnaire.
- 9. Footnote.
- 10. Class Interval.

 $(10 \times 1 = 10)$

Part B

Answer any **eight** questions. Each questions carries 2 marks.

11. Define Classification.

Turn over





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- 12. Given Mean = 50. Co-efficient of variation (CV) = 40 %, Skewness = 0.4. Find SD and Mode.
- 13. Define Mode?
- 14. Compute Standard Deviation: 15, 18, 22, 26, 30?
- 15. What is Interpolation?
- 16. Write a short note on Univariate Data?
- 17. What is an Absolute Measure Of Dispersion?
- 18. Find the Geometric Mean of 3.8 and 9?
- 19. Write a note on Stratified Sampling.
- 20. Find the Range and Co-efficient of range of 2, 24, 21, 45, 37, 40 and 38?
- 21. What are Stubs and Captions?
- 22. Show how foot note appears in a Statistical table?

 $(8 \times 2 = 16)$

Part C

Answer any six questions.

Each questions carries 4 marks.

- 23. Explain Various Errors in Statistics.
- 24. Statistics can prove anything'. Explain.
- 25. Explain the rules to be observed in constructing tables.
- 26. Determine mode from the following data:

Weekly Salary (Rs.)	:	15	16	17	18	19	20
No of workers	:	6	12	23	30	90	1





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27. From the following data compute arithmetic mean by direct method:

Marks		No. of Students
0 – 10	•••	5
10 - 20	•••	10
20 - 30	•••	25
30 - 40		30
40 - 50	•••	20
50 - 60		10

28. Interpolate the missing figures.

Year : 1931 1941 1951 1961 1971

Production : 360 ? 425 450 465

- 29. Explain relative measures of dispersion along with its formula?
- 30. Compute Median from the following data:

Mid-value	=	115	125	135	145	155	165	175	185	195
F	=	6	25	48	72	116	60	38	22	3

31. Form a frequency distribution from the following data by exclusive method taking 5 as the magnitude of class intervals:

10, 17,15, 22, 11, 16, 19, 24, 29, 18, 25, 26, 32, 14, 17, 20, 23, 27, 30, 12, 15, 18, 24, 36, 18, 15, 21, 28, 33, 38, 34, 13, 10, 16, 20, 22, 29, 19, 23, 31.

 $(6 \times 4 = 24)$

Turn over





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Part D

Answer any **two** questions.

Each questions carries 15 marks.

32. Determine Quartiles from the following distribution:

Marks : 5 - 10 10 - 15 15 - 20 20 - 25 25 - 30 30 - 35 35 - 40 40 - 45

No of Students : 5 6 15 10 5 4 2 2

33. Calculate Karl Pearson's Co-efficient of skewness from the following data:

Size (above) : 0 10 20 30 40 50 60 70

Frequency: 150 140 100 80 80 70 30 14

34. The following data gives the weekly wages of workers in a firm, their total working hours and the average working hours per worker. Calculate the average weekly wage per worker

Wages Group (Rs.) : 80 - 100 100 - 120 120 - 140 140 - 160 160 - 180 180 - 200

Total Hours Worked : 168 170 225 272 126 91

Average no. of hours

worked per worker : 12 10 9 8.5 7 6.5

35. Define Average? What are the features of an Average? Explain the Importance and Essential Properties of a good Average?

 $(2 \times 15 = 30)$

