Reg. No. : ....

Name : ....

Fourth Semester B.Com. Degree Examination, August 2022

First Degree Programme Under CBCSS

Complementary Course

CO 1431/ CX 1431 / CC 1431 / HM 1431 : BUSINESS STATISTICS

(Common for Commerce/Commerce and Tax Procedure and Practice/Commerce with Computer Application/Commerce and Hotel Management and Catering)

(2019 Admission Onwards)

Time : 3 Hours   Max. Marks : 80

SECTION – A

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

1. What is statistics?

2. Write any two features of statistics

3. What is data?

4. What is Census method?

5. What is correlation?

6. What is range?

7. What is time series?

8. What is regression analysis?

9. What is price index?

10. What is a sample point?

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(10 × 1 = 10 Marks)

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SECTION – B

Answer any **eight** questions in not exceeding **one** paragraph each. Each question carries **2** marks.

11. What is primary data?

12. What is the use of measures of dispersion?

13. Write any two limitations of sampling.

14. What is classification of data?

15. Write the formula to find out standard deviation,

16. What is moving average?

17. Write any four uses of statistics

18. Explain the terms Sensex and nifty

19. What is a regression line?

20. What is wholesale Price index number?

21. Write a note on cost of living index.

22. What is class limit?

23. What is questionnaire?

24. What is random sampling?

25. What is positive correlation and negative correlation?

26. What is non sampling error?

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(8 × 2 = 16 Marks)

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SECTION – C

Answer any **six** questions in not exceeding **120** words each. Each question carries **4** marks.

27. Write the features of statistical methods.

28. Explain the importance of data.

29. What are the prerequisites of sampling?

30. What are the important non probability sampling methods?

31. What are the objectives of classification of data?

32. Explain the objects and importance of tabulation.

33. What are the types of dispersion? Explain.

34. What are the uses of index numbers?

35. The following table gives the proportion of married women in India under various ages. Represent the data by bar diagram.

Age :	16	18	20	22	24
Married women in % :	9	12	34.2	52.3	72.4

36. From the following data calculate standard deviation.

Marks :	24	28	32	36	40	44	48
No. of students :	12	24	36	52	32	20	16

37. Compute mean deviation from mean and also calculate coefficient of mean deviation.

    Marks: 18, 20, 25, 28, 29, 28, 33, 38, 41, 40

38. From the following data, construct a simple aggregative price index.

Commodities	Price in 2010	Price in 2018
A	25	28
B	30	33
C	6.50	8.00
D	14.00	19.00
E	21.00	21.00

(**6 × 4 = 24 Marks**)

SECTION – D

Answer any **two** questions in not exceeding **four** pages each. Each question carries **15** marks.

39. Define statistics. Explain its importance and functions.

40. What is time series analysis? Explain its components.

41. Explain (a) Correlation analysis and its importance (b) Regression analysis. What are the differences between correlation and regression?

42. From the prices of shares of P and Q, you are required to find out which is more stable in value.

    P : 30   49   47   48   51   53   46   45   47   44

    Q : 103 102 100 100 101 102 99   98   99   96

43. Construct index number by using Fisher's ideal formula and prove that it satisfies both the time reversal and factor reversal test.

Commodity	Base year		Current year	
	Quantity	Prices	Quantity	Prices
P	12	10	15	12
Q	15	7	20	5
R	24	5	20	9
S	5	16	5	14

44. The following tables gives age (X) in years of cars and annual maintenance cost Y (in hundred rupees)

    X 1   3   5   7   9

    Y 15 18 21 23 22

Estimate the maintenance cost for a 4 year old car after finding the regression equations.

(2 × 15 = 30 Marks)