

Reg. No. : .....

Name : .....

Fourth Semester B.Com. Degree Examination, May 2021

First Degree Programme under CBCSS

Complementary Course: CO 1431/ CX 1431/CC 1431/HM 1431

**BUSINESS STATISTICS**

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

(2019 Admission Regular)

Time : 3 Hours

Max. Marks : 80

SECTION – A

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

1. Define Statistics.
2. What is sampling?
3. What is regression analysis?
4. What is co-efficient of variation?
5. Define correlation.
6. State the different methods of studying correlation.
7. What are index numbers?
8. What is secular trend?

9. What is standard deviation?
10. What is class interval?

(10 × 1 = 10 Marks)

### SECTION – B

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

11. What is quota sampling?
12. What is primary data?
13. What is classification?
14. What is tabulation?
15. What is a questionnaire?
16. Give examples for published sources of data.
17. What is cluster sampling?
18. What is class limit?
19. What is multiple correlation?
20. What is median?
21. What is histogram?
22. What are cyclical variations?
23. How price index number is computed?
24. What is time reversal test?
25. What is mode?
26. What is stratified sampling?

(8 × 2 = 16 Marks)

## SECTION – C

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

27. Distinguish between primary data and secondary data
28. State the use of correlation analysis.
29. Differentiate census method from sampling method.
30. What are the stages in statistical investigation?
31. What are the characteristics of statistics?
32. What are the essential qualities of a good questionnaire?
33. Explain the various random sampling methods.
34. What are the various methods of studying deviation and dispersion?
35. Calculate mean from the following data.

Roll No	1	2	3	4	5	6	7	8	9	10
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Marks	40	50	55	78	58	60	73	35	43	48
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36. Calculate Karl Pearson's co-efficient of correlation from the following data

Wages	100	101	102	102	100	99	97	98	96	95
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Cost of living	98	99	99	97	95	92	95	94	90	91
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37. Calculate trend values from the following data using the method of least square

Year	2002	2003	2004	2005	2006	2007
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Production	7	9	12	15	18	23
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38. Calculate mean and standard deviation from the following data

14	22	9	15	20	17	12	11
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**(6 × 4 = 24 Marks)**

SECTION – D

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

39. Discuss the functions of statistics.
40. Explain the uses of index numbers.
41. Explain the various methods of studying trend.
42. Construct quantity index numbers under Laspeyre's method and Fisher's method.

Commodity	Price		Quantity	
	Base year	Current year	Base year	Current year
A	10	12	8	7
B	8	12	6	7
C	9	15	6	5
D	10	16	4	6

43. Find the most likely production corresponding to a rainfall of 40" from the following data

Measures	Rainfall	Production
Average	30"	500 Kgs
Standard deviation	5"	100 Kgs
Co-efficient of Correlation		0.8

44. Calculate Spearman's co-efficient of correlation from the following data

X	53	98	95	81	75	61	59	55
Y	47	25	32	37	30	40	39	45

(2 × 15 = 30 Marks)