ALL SAINTS COLLEGE LIBRARY
No.
TRIVANDRUM

L – 2615

(Pages : 4)

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 and Tax Procedure and Practice / Commerce with Computer Application / Hotel Management)

(2018 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

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

1. What does a correlation analysis measure?
2. State how Index number is computed using Paasche's formula?
3. What is meant by secular trend?
4. Write any two uses of Range.
5. How Interquartile range is computed?
6. What is a Regression line?
7. What is a discrete frequency distribution?
8. Which are the statistical methods used for forecasting ?

P.T.O.

9. What is the objective of time series analysis?

10. What is a perfect positive correlation?

(10 × 1 = 10 Marks)

SECTION – B

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

11. What are the reasons for distrust of statistics?

12. Which are the different sectors where statistical tools are used?

13. How linear and non linear correlations are different?

14. What are Regression equations?

15. State the Law of Inertia of Large Numbers.

16. Which are the methods of selecting random samples?

17. When Rank Correlation is useful?

18. What is Time reversal test?

19. What is Aggregative Expenditure Method?

20. How time series analysis is helpful?

21. What is the Principle of Least squares?

22. Which are the graphic method of studying correlation?

(8 × 2 = 16 Marks)

SECTION – C

Answer any **six** questions. **Each** question carries **4** marks.

23. The coefficient of rank correlation of the marks obtained by 10 students in Economics and Management was 0.2. It was later discovered that the difference in ranks in the two subjects of one of the students was wrongly taken as 7 instead of 9. Find the correct result.

24. What are Properties of Pearson's Co-efficient of Correlation?

25. Which are the different methods for collecting data?

26. From the following data, find regression equations.

	X	Y
Arithmetic mean	36	85
Standard deviation	11	8

Correlation coefficient between x and y 0.66. Also estimate the value of x when y =75

27. What are the uses of Index Numbers?

28. Calculate 7 yearly moving average for the following data during 1992- 2007.

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000
No. of families	23	26	28	32	20	12	12	10	9
Year	2001	2002	2003	2004	2005	2006	2007		
No. of families	13	11	14	12	9	3	1		

29. Which are the types of Index Numbers?

30. Which are the different types of regression?

31. What are the functions of statistics?

(6 × 4 = 24 Marks)

SECTION – D

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

32. Compute Coefficient of correlation between X and Y and comment

X	1.2	1.1	1.9	1.8	1.0	0.9
Y	15	10	20	10	10	5

33. Compute the trend values by the method of least squares from the data given below. Also estimate the number of Cows in 2009.

Year	2000	2001	2002	2003	2004	2005	2006	2007
No. of Cows in Lakhs	56	55	51	47	42	38	35	32

34. From the fixed base index numbers given below, prepare chain base index numbers

Year	2004	2005	2006	2007	2008
Index numbers	94	98	102	95	98

35. How statistical investigation is conducted?

(2 × 15 = 30 Marks)
