E – 3422

(Pages : 3)

Reg. No. : .....

Name : .....

Fourth Semester B.Com. Degree Examination, July 2018
First Degree Programme under CBCSS
Complementary Course : CO 1431/CX 1431/CC 1431
BUSINESS STATISTICS
(Common for Commerce/Commerce & Tax Procedure and Practice/ Commerce with Computer Application)
(2014 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A

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

1. Define dispersion.
2. What is index number ?
3. What is probable error ?
4. Define Arithmatic Mean.
5. What is moving average ?
6. What is interpolation ?
7. Define coefficient of concurrent deviation.
8. What do you mean by line of best fit ?
9. What is dependant variable ?
10. List out different methods of classification.

(10×1=10 Marks)

SECTION – B

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

11. What are the uses of index numbers ?
12. Distinguish between relative and absolute measures of dispersion.

P.T.O.

13. Calculate median from the following.
    35 23 45 50 80 61 92 40 52 61
14. State the functions of tabulation.
15. State the difference between questionnaire and schedule.
16. Write a brief note on
    a) sensex and
    b) nifty.
17. Distinguish between correlation and regression.
18. What are the stages in statistical enquiry ?
19. Explain the properties of good measures of variation.
20. What is linear and non-linear correlation ?
21. Define primary and secondary data.
22. Explain descriptive statistics and inferential statistics. **(8×2=16 Marks)**

SECTION – C

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

23. What are the steps in the construction of index numbers ?
24. Explain different types of bar diagrams.
25. A panel of two judges P and Q graded seven performances by independently awarding marks as follows.

Performance	:	1	2	3	4	5	6	7
P	:	46	42	44	40	43	41	45
Q	:	40	38	36	35	39	37	41

The eighth performance, for which judge Q could not attend, was awarded 37 marks by Judge P. If Judge Q has also been present, how many marks would be expected to have been awarded by him to the eighth performance ?

26. State different types of random sampling.
27. Find Quartile Deviation for the following values.

Size	:	5	8	10	12	19	20	32
Frequency	:	3	10	15	20	8	7	6

28. If r = 0.6 and n = 64. Find probable error and standard error.

29. What are methods of studying correlation ?

30. Explain the components of frequency distribution.

31. Fit a straight line trend to the following series by the method of least square.

Estimate the most likely production for the year 2019

Year :	2010	2011	2012	2013	2014	2015	2016
Production ('000 ton) :	10	13	12	14	12	16	14

(6×4=24 Marks)

SECTION – D

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

32. Define statistics. Explain the functions and limitations of statistics.

33. Calculate S.D and coefficient of variation.

Income :	Above 0	10	20	30	40	50	60	70	80
No. of Persons :	100	97	89	7	57	27	12	5	0

34. Find Coefficient of correlation between age and playing habit of following students.

Age :	14.5 – 15.5	15.5 – 16.5	16.5 – 17.5	17.5 – 18.5	18.5 – 19.5	19.5 – 20.5
No. of Students :	250	200	150	120	100	80
Regular players :	200	150	90	48	30	12

35. From the following data find Fisher's Index number and show that the Time and Factor Reversal Test are satisfied by it.

Commodity	**Base Year**		**Current Year**	
	Price	**Expenditure**	**Price**	**Expenditure**
A	8	180	10	120
B	10	120	12	96
C	5	40	5	50
D	4	56	3	60
E	20	100	25	150

(2×15=30 Marks)