K21U 6587

Reg. No. : .....

Name : .....

I Semester B.B.A./B.B.A.(T.T.M.)/B.B.A.(R.T.M.) Degree

(C.B.C.S.S. – Supplementary) Examination, November 2021

(2015-2018 Admissions)

Complementary Course

1C01BBA/BBA(TTM)/BBA(RTM) : BUSINESS STATISTICS

Time : 3 Hours Max. Marks : 40

SECTION – A

Answer the **4** questions. **Each** question carries ½ marks.

1. What is an attribute ?
2. What is arithmetic mean ?
3. What is P-Value ?
4. What do you mean by seasonal effects ?

SECTION – B

Answer **any 4** questions. **Each** question carries **1** mark.

5. What is sampling ? What are the methods of sampling ?
6. What are the types of measures of central tendency ?
7. What are the mathematical methods of measuring correlation between two variables ?
8. Which are the major components of time series ?
9. What are the methods of collecting data ?
10. Explain secular trend.

P.T.O.

SECTION – C

Answer **any six** questions. **Each** question carries **3** marks.

11. Find the arithmetic mean of the following numbers :

    5, 8, 10, 15, 24 and 28

12. Find the median of the following series.

    77, 73, 72, 70, 75, 79, 78

13. Draw a histogram to represent the following distribution :

Weight :	90 – 100	100 – 110	110 – 120	120 – 130	130 – 140
No. of Students :	500	700	300	400	100

14. Find Karl Pearson's coefficient of correlation from the following :

X :	2	3	4	5	6	7	8
Y :	4	5	6	8	9	7	10

15. Find the coefficient of correlation from the following data :

X :	1	2	3	4	5	6	7
Y :	6	8	11	9	12	10	14

16. Determine median from the following distribution :

Wages :	20	21	22	23	24	25	26	27	28
No. of Workers :	8	10	11	16	20	25	19	9	6

17. From the following find three yearly weighted moving average taking 1, 2, 3 as weights :

Years :	1	2	3	4	5	6	7
Sales (lakhs) :	1	2	3	4	5	6	7

18. What are the bases for classification of data ?

SECTION – D

Answer **any two** questions. **Each** question carries **8** marks.

19. What are the various types of graphs used for presenting a frequency distribution ? Explain its various methods that are used for graphical representation of frequency distribution.

20. The following data relate to annual production in a fertilizer factory (in thousand tones) :

Year	1977	1978	1979	1980	1981	1982	1983
Production	70	75	90	91	95	98	100

i) Fit a linear trend by the method of least squares and estimate the trend values.

ii) Convert the annual trend equation to monthly trend equation.

21. Determine Q. D. and Coeff. of Q. D. for the following data :

Weight	30 –34	35 – 39	40 – 44	45 – 49	50 – 54
No. of boys	5	11	26	10	8