Reg. No. : ....

Name : ....

I Semester B.B.A./B.B.A.R.T.M./B.B.A.T.T.M. Degree (CBCSS – Reg./ Supple./Improv.) Examination, November 2017
Complementary Course
1C01 BBA/BBA (RTM)/BBA(TTM) : BUSINESS STATISTICS
(2014 Admn. Onwards)

Time : 3 Hours

Max. Marks : 40

SECTION – A

Answer **all 4** questions. **Each** question carries ½ mark.

1. Define mode.

2. What is time series ?

3. Define kurtosis.

4. Define statistics.

(½×4=2)

SECTION – B

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

5. Difference between mean, deviation and standard deviation.

6. What are the limitations of statistics ?

7. What are the merits and demerits of mode ?

8. Explain any two measures of skewness commonly used.

9. What are the properties of Dispersion ?

10. State the components of time series analysis.

(1×4=4)

P.T.O.

SECTION – C

Answer **any 6** questions. **Each** question carries **3** marks.

11. There were 500 workers working in a factory. Their mean wages was calculated as Rs. 200. Later on it was discovered that the wages of two workers were misread as 180 and 20 instead of 80 and 220. Find the correct mean.

12. Calculate mean wages of the labourers from the following table :

Wages	No. of Labourers
Above 0	675
Above 10	625
Above 20	550
Above 30	450
Above 40	275
Above 50	150
Above 60	75
Above 70	25

13. Find the missing frequency if arithmetic mean is 28. Also find the median.

Marks	No. of Students
0 – 10	12
10 – 20	18
20 – 30	27
30 – 40	?
40 – 50	17
50 – 60	6

14. What are the mathematical properties of arithmetic mean as a measure of central tendency ?

15. From the following frequency distribution calculate mode

Monthly wages :	25	30	35	40	45	50	55
No. of workers :	50	70	80	180	100	80	70

16. What are the functions of statistics ?

17. Calculate Karl Pearson's co-efficient of skewness from the data given below :

Value	Frequency
10	1
20	5
30	12
40	22
50	17
60	9
70	4

18. Calculate the co-efficient of skewness based on mean and median from the following distribution :

Marks :	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70	70 – 80
No. of Students :	6	12	22	48	56	32	18	6

(3×6=18)

SECTION – D

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

19. Fit a straight line trend by the method of least square and calculate the trend values. Estimate the production of the year 2007.

Year	Production (in tonnes)
2001	70
2002	85
2003	94
2004	83
2005	90
2006	100
2007	98

20. Define measure of central tendency. What are the important measures of central tendency ? Explain each.

21. The score of two batsman Lara and Sachin in 10 innings during a certain season are given below :

Lara :	32	28	47	63	71	39	10	60	96	14
Sachin :	19	31	48	53	67	90	10	62	40	80

Find which of the two batsmen, Lara or Sachin is more consistent in scoring ? Also state who is better run getter ?   (8×2=16)

_____