Reg. No. : ....

Name : ....

I Semester B.Sc. Degree (CBCSS – Reg./Supple/.Improv.) Examination, November 2018
COMPLEMENTARY COURSE IN STATISTICS FOR GEOGRAPHY/ PSYCHOLOGY CORE
1C01 STA : Descriptive Statistics
(2014 Admn. Onwards)

Time : 3 Hours

Max. Marks: 40

*Instruction : Use of Calculators and Statistical tables are **permitted.***

PART – A (Short Answer)

Answer all the 6 questions.

(6×1=6)

1. What are the different sources of data ?

2. What is a random sample ?

3. Define Median.

4. Determine Mode of
   420, 395, 342, 444, 551, 395, 425, 417, 395, 417.

5. What is an inter quartile range ?

6. Give the formula for quartile coefficient of skewness.

PART – B (Short Essay)

Answer any 6 questions.

(6×2=12)

7. Explain partition values.

8. Define sampling unit and sampling frame.

P.T.O.

9. Define Primary data and Secondary data.

10. Distinguish between absolute and relative measures of dispersion.

11. Find the average rate of motion of a cyclist who rides the first mile at 8mph, second mile at 7 mph and third mile at 6 mph ?

12. Calculate combined mean and combined S.D. from the following data :

Sample	No.	Mean	S.D.
A	50	113	6.5
B	60	120	8.2

13. For a group of 10 items $\Sigma x = 452$, $\Sigma X^2 = 24270$ Mode = 43.7. Find Karl Pearson's coefficient of skewness.

14. Define simple random sampling and systematic random sampling with example.

PART – C (Essay)

Answer **any 4** questions.   (4×3=12)

15. Define census and sampling. What are the advantages of sampling over census ?

16. Explain different types of bar diagrams.

17. Define weighted average and simple average. How does weighted average differ from simple average ?

18. Calculate Mean deviation about mean for the following data :

Class :	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50
frequency :	5	15	17	11	2

19. The first three moments of a distribution about the value 5 of the variable are 2, 20 and 40. Find mean, variance and μ_3.

20. Explain Lorenz curve.

PART – D (Long Essay)

Answer **any 2** questions. $(2 \times 5 = 10)$

21. Calculate Quartiles, Quartile deviation and quartile coefficient of dispersion for the following data.

Class :	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
frequency :	5	10	20	10	5

22. Draw a line diagram and histogram.

Class :	0 – 5	5 – 10	10 – 15	15 – 20	20 – 25	25 – 30	30 – 35
frequency :	7	10	20	13	17	10	9

23. Find which series is more consistent ?

Series A :	10	12	80	70	60	100	0	4
Series B :	8	9	7	10	5	9	10	8

24. What is central tendency ? Explain any 4 measures of central tendency.