0023738

K19U 3202

Reg. No. :

Name :

I Semester B.Sc. Degree (CBCSS- Supplementary/ Improvement)

Examination, November-2019

(2014 - 2018 Admissions)

COMPLEMENTARY COURSE IN STATISTICS FOR GEOGRAPHY/ PSYCHOLOGY CORE

1C01STA : DESCRIPTIVE STATISTICS

Time: 3 Hours

Max. Marks:40

PART - A

(Short Answer) (Answer ALL the questions)

 $(6 \times 1 = 6)$

- 1. What do you mean by primary data?
- 2. Find the geometric mean of 8,4 and 2.
- 3. What is the median of 21,18,20,17,14 and 15.
- 4. Define quartile deviation.
- 5. Define a leptokurtic curve.
- 6. Mention a situation where stratified sampling can be used,

PART-B

(Short Essay) (Answer any SIX questions)

 $(6 \times 2 = 12)$

- 7. Distinguish between primary and secondary data.
- 8. What are the differences between bar diagram and histogram?
- 9. Mention the importance of weighted averages than simple averages.
- **10.** If the mean of 8 observations is 50, and one observation is wrongly entered as 34 instead of 43, then find the corrected mean.
- 11. Define a Lorenz curve and mention any one of its use.

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- The mean, median and standard deviation of a data set is 25, 20 and 2.5 respectively. Calculate Karl Pearsons coefficient of skewness.
- 13. Briefly explain about sampling errors.
- 14. Define Simple random sampling with replacement

PART - C

(Essay) (Answer any FOUR questions)

 $(4 \times 3 = 12)$

- 15. What are the advantages of diagrammatic representation of a data?
- 16. Explain the method of constructing a pie diagram.
- Following data shows the summary measures obtained from two shops.

 $\overline{X}_{1} = 51, \overline{X}_{2} = 105, \sigma_{1} = 5.916, \sigma_{2} = 2$

Which shop shows more consistency?

- 18. Distinguish between absolute and relative measures of dispersion.
- 19. Define the terms:
 - a) population and
 - b) sample. Also give one example for each.
- 20. What do you mean by judgement sampling?

PART - D

(Long Essay) (Answer any two questions) · (2×5=10)

- 21. Describe the construction of a subdivided bar diagram. Illustrate with an example.
- 22. Find the median of the following data:

| Profits: | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
|----------------|------|-------|-------|-------|-------|-------|
| No , of shops: | 12 | 18 | 27 | 20 | 17 | 6 |

- Define raw moments and central moments. Establish the relationship between these two.
- 24. Discuss on the advantages of sampling over census.