B.Sc.DEGREE (CBCS) EXAMINATION, NOVEMBER 2019

## First Semester

B.Sc Psychology Model I

## Complementary Course - ST1CMT21 - BASIC STATISTICS- PAPER I

2017 Admission Onwards
72EF1791
Time: 3 Hours
Maximum Marks :80
Part A
Answer any ten questions. Each question carries 2 marks.

1. Write down any two limitations of Statistics.
2. Define Attributes.
3. Write down the difference between ordinal scale and interval scale.
4. Distinguish between primary and secondary data.
5. How will you construct a piediagram?
6. How will you construct a histogram?
7. Define census in data collection. Mention a situation in which census has no other alternatives.
8. Write any two limitations of sampling.
9. What is meant by systematic sampling.
10. Find the geometric mean of 1,6 and 2 .
11. If Mean $=20 \mathrm{Kgs}$, Median $=27 \mathrm{Kg}$ find Mode.
12. Give any four advantages of mode.
$(10 \times 2=20)$

## Part B

Answer any six questions.
Each question carries 5 marks.
13. Explain scope of Statistics.
14. Distinguish between qualitative classification and quantitative classification.
15. Distinguish between grouped and ungrouped frequency distributions. Give examples.
16. What are the advantages of diagrammatical presentation of data?
17. Construct the two ogives and hence obtain median.

| Class: | $10-15$ | $15-20$ | $20-25$ | $25-30$ | $30-35$ | $35-40$ | $40-45$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency: | 5 | 9 | 22 | 35 | 15 | 10 | 4 |

18. Distinguish between census and sampling method of collecting data and compare their merits and demerits.
19. Distinguish between systematic and stratified random sampling
20. Distinguish between sampling error and non-sampling error.
21. What are the requirements for a good measure of central tendency?
$(6 \times 5=30)$

## Part C <br> Answer any two questions.

Each question carries 15 marks.
22. (a) Distinguish between census and sampling.
(b) Briefly explain various random sampling techniques.
23. Distinguish between random sampling and non random sampling. Explain different methds used in both types of sampling with suitable examples.
24. Find median of the following distribution

| Size : $5-10$ | $10-15$ | $15-20$ | $20-25$ | $25-30$ | $30-35$ | $35-40$ | $40-45$ | $45-50$ | $50-55$ | $55-60$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Freq: | 8 | 10 | 20 | 25 | 30 | 26 | 24 | 20 | 18 | 14 |
| 10 |  |  |  |  |  |  |  |  |  |  |

25. Explain the properties of arithmetic mean.
