FIRST SEMESTER INTEGRATED P.G. DEGREE (REGULAR/ SUPPLEMENTARY/IMPROVEMENT) EXAMINATION NOVEMBER 2024 AND NOVEMBER 2023

(CBCSS)

M.Sc. Psychology

STA 1IC 02—DESCRIPTIVE STATISTICS

Time: Two Hours

Maximum: 60 Marks

Use of Calculator and Statistical table are permitted.

Part A (Short Answer Type Questions)

Maximum marks that can be scored from this Part is 20. Each question carries 2 marks.

- 1. Briefly explain primary data.
- 2. Explain bar diagram.
- 3. What are the disadvantages of harmonic mean?
- 4. Define standard deviation.
- 5. Write a short note on cumulative frequency distribution.
- 6. Find co-efficient of variation if mean = 118 and variance = 64.
- 7. Describe measures of dispersion.
- 8. What are the merits of mode?
- 9. Define frequency polygon.
- 10. Demonstrate the term Kurtosis.
- 11. Describe the term quartiles.
- 12. What is Bowley's co-efficient of skewness?

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Part B (Short Essay/Paragraph Type Questions)

Maximum marks that can be scored from this Part is 30. Each question carries 5 marks.

- 13. What is secondary data? Describe the methods for collecting secondary data.
- 14. Define Histogram. Briefly explain the steps of constructing a histogram.
- 15. Briefly explain skewness. Describe Bowley's coefficient of skewness and Pearson's co-efficient of skewness.
- 16. Define mean deviation. What are the merits and demerits of mean deviation?
- 17. Find the median for the following data:

0-20100-120 120- 140 140- 160 Class 20-40 40-60 60-80 80-100 45 Frequency: 12 23 26 32 41 36 25

18. Draw less than ogive and greater than ogive for the following data.

Marks : 14.5- 19.5 19.5- 24.5 24.5- 29.5 29.5- 34.5 34.5-39- 5 39.5- 44.5

Frequency: 9 11 10 44 45 54

Marks : 44.5-49.5 49.5-54.5 54.5-59.5 59.5-64.5 64.5-69.5

Frequency : 37 28 8 5

19. Find the co-efficient of variation for the following data:

Class : 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100

Frequency: 23 29 34 38 47 54 32 28 25

Part C (Essay Type Questions)

Answer any one question.

The question carries 10 marks.

Maximum marks that can be scored from this Part is 10.

20. For the following data calculate Bowley's co-efficient of skewness and co-efficient of kurtosis:

Class : 100- 110 110- 120 120- 130 130- 140 140- 150 150- 160 160- 170 170- 180

Frequency: 25 49 54 61 76 51 49 45

21. Describe measures of central tendency. Briefly explain arithmetic mean, median, mode, geometric mean and hannonic mean. What are the characteristics for an ideal measure of central tendency?

 $(1 \times 10 = 10 \text{ marks})$