Name: $\qquad$
$\qquad$

# FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2021 

 (CUCBCSS-UG) CC15U PSY1 C02 - PSYCHOLOGICAL STATISTICS(Statistics - Complementary Course)
(2016 to 2018 Admissions - Supplementary)
Time: Three Hours
Maximum: 80 marks

## PART A

Answer all questions. Each question carries 1 mark.
(a) Multiple choices. Choose correct answer:

1. Mean is a measure of $\qquad$
(a) Location or central value
(b) dispersion
(c) correlation
(d) None of the above.
2. For a symmetrical distribution $\qquad$
(a) $\mathrm{AM}=\mathrm{GM}=\mathrm{HM}$
(b) $\mathrm{AM}>\mathrm{GM}>\mathrm{HM}$
(c) $\mathrm{AM}<\mathrm{GM}<\mathrm{HM}$
(d) None of the above.
3. The formula for coefficient of variation is $\qquad$
(a) $\frac{\text { mean }}{S D} \times 100$
(b) $\frac{S D}{\text { mean }} \times 100$
(c) $\frac{\operatorname{mean} X S D}{100}$
(d) $\frac{100}{S D X \operatorname{mean}}$
4. A less than ogive is a -------- curve
(a) Falling
(b) Raising
(c) Symmetric
(d) None of the above
5. Kurtosis is a measure of $\qquad$
(a) Location
(b) Dispersion
(c) Symmetry
(d) Flatness
(b) Fill in the blanks:
6. The intersection point of two ogives is $\qquad$
7. The measure of dispersion which involves positive and negative values $\qquad$
8. Skewness is defined as $\qquad$
9. The formula used to find coefficient of quartile deviation is $\qquad$
10. Mode is a measure of $\qquad$
( $10 \times 1=10$ Marks $)$

## PART B

Answer all questions. Each question carries 2 marks.
11. Define geometric mean.
12. Distinguish between primary and secondary data.
13. Write any two advantages of median.
14. What are the properties of a good average?
15. Compute HM of $12,13,15,16,17,19$.

16 . What is meant by measure of dispersion?
17. Define partition values.
18. Define skewness.
19. What are the merits of range?
20. Find range of $15,26,11,21,36,15,96,50,3$.
( $\mathbf{1 0} \times \mathbf{2}=\mathbf{2 0}$ Marks)

## PART C

Answer any six questions. Each question carries 5 marks.
21. Explain skewness and kurtosis.
22. Calculate MD about median for the following data

| Marks | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| No. of Students | 20 | 26 | 30 | 32 | 12 |

23. The mean of a set of 48 students in Statistics is 20.42 and that of 43 students is16.53. Find combined mean.
24. What are the methods of collecting primary data and what are its merits?
25. Compare graphs and diagrams.
26. Discuss important components of frequency distribution.
27. Calculate mean from the following data

| Class | $5-10$ | $10-15$ | $15-20$ | $20-25$ | $25-30$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Frequency | 1 | 6 | 11 | 5 | 2 |

28. Explain different methods of classification of data.
( $6 \times 5=30$ Marks)

## PART D

Answer any two questions. Each question carries 10 marks
29. Explain different methods of measures of variability with its merits and demerits.
30. Draw histogram for the following data

| Class | $0-5$ | $5-10$ | $10-15$ | $15-20$ | $20-25$ | $25-30$ | $35-40$ | $40-45$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 5 | 8 | 12 | 15 | 18 | 13 | 6 | 3 |

31. Explain measures of central tendency with its merits and demerits.
32. From the data given below, find which series is more consistent.

| Classes | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Series A | 20 | 25 | 30 | 40 | 27 | 18 |
| Series B | 15 | 23 | 32 | 34 | 18 | 10 |

( $\mathbf{2} \times \mathbf{1 0}=\mathbf{2 0}$ Marks)

