Reg. No ..... Name **22U162**

B. Sc. DEGREE END SEMESTER EXAMINATION : OCTOBER 2022

SEMESTER 1 : COMPLEMENTARY STATISTICS FOR B. Sc. PSYCHOLOGY

COURSE : **19U1CPSTP1 : BASIC STATISTICS PAPER I**

(For Regular – 2022 Admission and Improvement / Supplementary - 2021/2020 Admissions)

Time : Three Hours Max. Marks: 75

PART A

Answer All (1 mark each)

1. Name the process of collecting information from the units of the population.
2. Name a mode of graphical representation of Ungrouped Data.
3. Name a mode of graphical representation of Grouped Data.
4. Classification of data based on the period to which the value is associated is called ----------.
5. ---------- is the value of the item that is repeated the maximum number of times in a data.
6. The difference between the upper and lower boundaries of any class is called ----------.
7. Collection of a set of numerical values collected over a period of time refers to which type of data?
8. The formula for calculating the mean of an ungrouped data is ----------.
9. If the sample is so chosen that every possible sample of size 'n' has a specified probability of being selected, the method of sampling is called ----------.
10. Number of stars in the sky is an example of which type of population?

(1 x 10 = 10)

PART B

Answer any 8 (2 marks each)

11. State the uses of ogives.
12. Explain the lottery method of sampling.
13. Eleven candidates appeared for a test. When result was declared,4 of them got disqualified. The scores of the qualified candidates are 43,52,63,37,81,68,41. Find the median score of the candidates.
14. Find the mean IQ for the eight students whose individual IQ scores are:
    80 100 105 90 112 115 110 120
15. What are the major advantages of a frequency distribution table?
16. What do you understand by the term mode of a data? Point out the methods of its computation in the case of grouped as well as ungrouped data.
17. Calculate the range of the following scores.
    14 22 19 46 58 82 72 65 37 85
18. What is an arithmetic mean? How can it be computed in the case of ungrouped as well as grouped data?

19. Differentiate between inclusive and exclusive classification.

20. Define population with example.

(2 x 8 = 16)

PART C
Answer any 5 (5 marks each)

21. Compute the mode for the following distribution.

Scores	f
0-10	6
10-20	15
20-30	25
30-40	30
40-50	17
50-60	5
60-70	2

22. What are line graphs? Discuss their utility in the presentation of statistical data.

23. What do you understand by the term cumulative frequency? Discuss the process of construction of a cumulative frequency curve.

24. The following table shows the number of internet users in the world by geographic regions in 2021. Create a bar graph for the following data.

Region	Internet users (in millions)
Asia	2762
Europe	737
Africa	594
Latin America	498
North America	348
Middle East	199
Oceania / Australia	30

25. Plot histogram and frequency polygon for the following distribution.

Scores	f
0-10	9
10-20	12
20-30	10
30-40	16
40-50	18
50-60	15
60-70	12
70-80	13
80-90	10
90-100	9
100-110	6

26. What is the Random Number Table method? Elaborate the steps taken to choose the sample using this method.

27. Compute the median for the following distribution.

Scores	f
0-10	3
10-20	5
20-30	4
30-40	10
40-50	12
50-60	9
60-70	10
70-80	2
80-90	5

(5 x 5 = 25)

PART D
Answer any 2 (12 marks each)

28. Find the mean, median and mode of the following frequency distribution.

Classes	f
5-10	4
10-15	38
15-20	65
20-25	90
25-30	70
30-35	42
35-40	6

29. Explain the need and significance of Statistics in the field of Psychology.

30. Compare and contrast the probability sampling methods with examples.

31. Differentiate between primary and secondary data. What are the factors to be considered while using secondary data?

(12 x 2 = 24)