

B. Sc. DEGREE END SEMESTER EXAMINATION: NOVEMBER 2023**SEMESTER 1: COMPLEMENTARY STATISTICS FOR B Sc. PSYCHOLOGY****COURSE: 19U1CPSTP1: BASIC STATISTICS PAPER - I***(For Regular 2023 Admission and Supplementary/Improvement – 2022/2021/2020 Admissions)*

Time : Three Hours

Max. Marks: 75

PART A**Answer all questions. Each question carries 1 mark**

1. In ----- sense, statistics is defined as data.
2. ----- is a representative part of the population.
3. An available data used by an investigator for a study is called -----data.
4. Arrangement of students according to the height is ----- scale of measurement
5. For drawing a component pie diagram, the sectoral angle of component is -----
6. The average which depends upon all the observations is -----
7. ----- is the average having the property of stability.
8. The value of median can be calculated using the empirical relationship-----
9. The percentage of observations below the median is -----
10. ----- is a measure of central tendency which can be obtained using ogives.

(1 x 10 = 10)**PART B****Answer any eight of the following questions. Each question carries 2 marks**

11. Define Statistics.
12. What do you mean by tabulation?
13. Define manifold Classification.
14. What is the difference between a diagram and graph?
15. Define mode and give a situation where mode is the appropriate average.
16. What is a subdivided bar diagram?
17. Define Median?
18. Define true class limits.
19. Find the Arithmetic mean of first n natural numbers.
20. The mean monthly salary of the 12 Managers in a factory is Rs.65000, that of the 30 Officers is Rs.39000 and that of 120 workers is Rs.26000 of boys is 85 and that of 45 girls is 88. What is the average salary of the employees taken together?

(2 x 8 = 16)**PART C****Answer any five of the following questions. Each question carries 5 marks**

21. Briefly explain the characteristics of statistics
22. Distinguish between qualitative and quantitative classification.
23. Distinguish between primary data and secondary data.
24. Briefly explain the four scales of measurement.

25. Draw a pie diagram to represent the following data giving the number of students in two Colleges according to their faculty of study.

Faculty College	Arts	Commerce	Science
College A	1200	800	1600
College B	1700	1000	900

26. Draw a Histogram and find the mode for the following data

Class:	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70
Frequency:	2	9	15	23	19	11	5

27. Explain why sampling is considered better than Census? (5 x 5 = 25)

PART D

Answer any two of the following questions. Each question carries twelve marks

28. (a) Do you agree with the statement, "Arithmetic mean is considered to be the best Average".

Why?

- (b) Calculate Median and Mode from the following data and hence find mean.

Class:	0 - 9	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59
Frequency:	8	15	27	23	17	9

29. Calculate the missing frequency in the following table if the mean age is given to be 38.5

Age in years:	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69
Frequency:	17	33	-----	35	28	15

30. (a) What are the functions of Statistics?

(b) What are the limitations of Statistics?

31. What are the different types of bar diagrams? What is the difference between a bar diagram and histogram?

(12 x 2 = 24)
