B.Sc. DEGREE END SEMESTER EXAMINATION - OCT. 2020 : FEBRUARY 2021

SEMESTER –1: STATISTICS (COMPLEMENTARY FOR B Sc PSYCHOLOGY)

COURSE: **20U1CPSTP1 – BASIC STATISTICS**

(For Regular - 2020 Admission)

Time: Three Hours   Max. Marks: 75

PART A

Answer all questions. Each question carries 1 mark

1. *In Plural sense, the word statistics means ……………*
2. The word statistics was originated from the Italian word ……………
3. ……………… defined Statistics as the science of averages
4. The method of collecting data from every unit of population is called ………………
5. Religion is a characteristic measured using …………..scale of measurement
6. The arrangement of collected information according similarities is called …………..
7. …………….. can be used for finding mode graphically
8. When various observations do not have equal importance, we calculate …………
9. The Arithmetic mean of the first 10 natural numbers is …………..
10. In …………. sampling all the observations have an equal chance of inclusion in the sample

(1 x 10 = 10)

PART B

Answer any eight of the following questions. Each question carries 2 marks

11. Give any two misuses of statistics
12. Distinguish between variables and attributes.
13. Distinguish between schedule and questionnaire.
14. Define secondary data
15. Define a two way table
16. Define systematic sampling
17. The mean of a set of 10 observations is calculated as 25. If one more observation whose value is 25 is included in the set of data, find the new value of arithmetic mean
18. What is the assumption made for calculating mean from grouped frequency distribution?
19. Define median
20. Calculate the median and mode of the following data: 12, 13, 11, 16, 15, 17, 10, 14, 15

(2 x 8 = 16)

PART C

Answer any five of the following questions. Each question carries 5 marks

21. Briefly explain the uses of statistics in Psychology.
22. What are the advantages of sampling over census?
23. What are the different types of classification

24. Draw a suitable bar diagram to represent the following data

Course of study	College A	College B	College C
Arts	125	150	200
Humanities	180	190	240
Science	225	140	120

25. How can we draw a frequency polygon for a grouped frequency distribution?

26. Explain how you will you find median graphically.

27. The average age of a group of 25 boys is 16. When 15 girls join the group, the average becomes 15. What is the average age of girls?

(5 x 5 = 25)

PART D

Answer any two of the following questions. Each question carries 12 marks

28. Draw the ogives and estimate the value of median graphically

Class:	0 - 10	10 – 20	20 - 30	30 - 40	40 – 50	50 - 60
Frequency:	12	17	25	24	19	15

29. Calculate Arithmetic mean from the following data

Class:	10 – 19	20 – 29	30 – 39	40 – 49	50 – 59	60 – 69
Frequency:	17	23	36	34	29	21

30. What are the different types of bar diagrams? Briefly explain their uses.

31. What are the different levels of measurement? Briefly explain them with examples.

(12 x 2 = 24)

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