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**N – 4087**

Reg. No. : .....

Name : .....

**First Semester B.Sc. Degree Examination, June 2022**

**First Degree Programme under CBCSS**

**Statistics**

**Complementary Course for Psychology**

**ST 1131.5 - STATISTICAL METHODS FOR PSYCHOLOGY I**

**(2017 - 2019 Admission)**

Time : 3 Hours

Max. Marks : 80

**SECTION – I**

Answer all questions. Each carries 1 mark.

1. The word 'Statistics' derived from which Latin word.  
(a) Statista (b) Status  
(c) Statistik (d) None of these
2. The statement 'statistics is the science of counting' was given by  
(a) R.A.Fisher (b) Mark Twain  
(c) A.L.Bowley (d) Kendall
3. A frequency distribution can be  
(a) discrete (b) continuous  
(c) both (a) and (b) (d) none of these

P.T.O.

4. In \_\_\_\_\_ scale the difference of the score on the scale has a meaningful interpretation.
- (a) nominal (b) ordinal  
(c) ratio (d) Interval
5. In a histogram the length of the bar is proportion to \_\_\_\_\_
- (a) Class intervals (b) frequencies  
(c) mid value (d) cumulative frequency
6. The x-coordinate of the point of intersection of the two ogives gives \_\_\_\_\_
7. Quartiles can be determined graphically using \_\_\_\_\_
8. The class interval of 10 - 19, 20 - 29, 30 - 39, is \_\_\_\_\_
9. Sampling error usually \_\_\_\_\_ as increase in sample size.
10. Write down any source of secondary data.

(10 × 1 = 10 Marks)

SECTION – II

Answer any eight questions. Each carries 2 marks.

11. Briefly discuss scope of statistics.
12. Define primary data.
13. Define an ordinal scale with an example.
14. Explain the terms : (a) class interval (b) class mark.
15. Define multistage sampling.
16. What is a frequency polygon?

17. Define sample. Give an example.
18. Distinguish between qualitative and quantitative variables.
19. Define cumulative frequency distribution.
20. Briefly describe the construction of frequency curve.
21. Evaluate  $\frac{6a^9b}{2a^5b^2}$
22. Solve  $2x = 5y + 1$ ,  $7x = 24 - 3y$ .

(8 × 2 = 16 Marks)

### SECTION – III

Answer any six questions. Each carries 4 marks.

23. Discuss the limitations of statistics.
24. Describe the advantages of sampling over census.
25. How will you construct a frequency curve for a given frequency distribution?
26. Describe classification and tabulation.
27. Draw suitable pie diagram for the following data.

Farmer	Business	Teacher	Bank	Driver	Total
4	5	6	1	4	20

28. Construct a frequency curve for the following data.

Class	10-20	20-30	30-40	40-50	50-60
Frequency	5	8	15	20	7

29. Draw a bar diagram for the following data.

Year	1991	1992	1993	1994	1996	1997
Frequency	80	90	92	83	94	99

30. Describe secondary data and sources of secondary data.

31. Describe cluster random sampling.

(6 × 4 = 24 Marks)

#### SECTION – IV

Answer **any two** questions. Each carries 15 marks :

32. Briefly describe two methods for collecting primary data. discuss its merits and demerits.

33. Define simple random sampling. Describe methods for selecting a simple random sampling.

34. Describe construction of frequency table. Construct a frequency table for the following data

72 45 23 64 51 25 65 74 30 20  
55 60 65 58 52 36 45 42 35 40  
51 46 38 61 53 58 49 21 34 55  
46 48 52 64 48 45 65 78 53 42

35. What is ogive? Draw less than and more than ogive for the following data.

Class	0-10	10-20	20-30	30-40	40-50	40-50	50-60	60-70
Frequency	5	12	28	40	21	21	10	4

(2 × 15 = 30 Marks)