

(Pages : 4)

H – 4049

Reg. No. : .....

Name : .....

**Third Semester M.A. Degree Examination, January 2020**

**Sociology**

**SO 232 : SOCIAL STATISTICS**

**(2018 Admission)**

Time : 3 Hours

Max. Marks : 75

PART – A

Multiple choice questions.

1. Most frequent observation in a data set is called  
(a) Mode (b) Median  
(c) Range (d) Mean
2. Value of  $[(n+1)^4]^{th}$  term is formula of  
(a) 2nd quartile (b) Mode  
(c) 1st quartile (d) 3rd quartile
3. Cumulative frequency polygon is also called  
(a) histogram (b) absicca  
(c) ogive (d) sigma

P.T.O.



4. Which of the following values could not represent a correlation coefficient?
- (a)  $r = 0.99$  (b)  $r = 1.09$   
(c)  $r = -0.73$  (d)  $r = -1.0$
5. A bar chart constructed in which area of each bar is proportional to number of items in each group is known as
- (a) pi chart (b) frequency distribution table  
(c) polygon (d) histogram

**(5 × 1 = 5 Marks)**

### PART – B

#### Definition of Concepts

Answer any **five** questions out of eight in **50** words each.

6. Statistics
7. Frequency table
8. Bar graph
9. Polygon
10. Mean
11. Range
12. Correlation
13. SPSS

**(5 × 2 = 10 Marks)**



PART – C

Short essay questions (**any five** questions out of eight in **250** words each) .

14. Describe different types of statistics in social research and mention its advantages and disadvantages.
15. What are the uses and limitations of graphs and diagrams?
16. What are the desirable properties of a good average? Explain them.
17. Write a short note on probability.

18. Draw the two ogives for the following data.

Size: 0-10 10-20 20-30 30-40 40-50 50-60

Freq: 5 10 18 12 10 5

19. Find the most appropriate average from the following. State the reason for choosing such an average.

| Income       | No. of people |
|--------------|---------------|
| Below Rs. 10 | 2             |
| 50-60        | 5             |
| 60-70        | 8             |
| 70-80        | 10            |
| 80-90        | 7             |
| Above 90     | 3             |

20. Obtain standard deviation for the data on scores given below. Also find coefficient of variation

Score: 0-2 2-4 4-6 6-8 8-10 10-12

No. of students: 2 4 6 4 2 6

21. Find the coefficient of correlation between price and demand and interpret the result.

X: 11 12 13 14 15 16 17 18 19 20

Y: 30 29 29 25 24 24 24 21 18 15

**(5 × 6 = 30 Marks)**



PART – D

Essay (**any two** questions out of 4 in 1200 words each).

22. Compute arithmetic mean, median and mode for the given data

|        |      |       |       |       |       |       |
|--------|------|-------|-------|-------|-------|-------|
| Marks: | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| Freq:  | 5    | 15    | 0     | 40    | 32    | 2     |

23. Explain in detail on data processing and its presentation in social research with examples.

24. Find from the following data median and mode graphically (E 63)

|       |      |       |       |       |       |       |
|-------|------|-------|-------|-------|-------|-------|
| Size: | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
| Freq: | 2    | 8     | 12    | 20    | 10    | 8     |

25. Elucidate graphical and diagrammatical representation of data in social science research with examples.

**(2 × 15 = 30 Marks)**

---

