Reg. No ....   Name **18P257**

M. A. DEGREE END SEMESTER EXAMINATION - APRIL 2018
SEMESTER 2 : SOCIOLOGY
COURSE : **17P2SOCT10 ; STATISTICS FOR SOCIOLOGY**
(Common for Regular - 2017 Admission & Supplementary - 2016 / 2015 Admissions)

Time : Three Hours   Max. Marks: 75

Section A
Answer any 8 (2 marks each)

1.   Cartograms
2.   Source note.
3.   Averages
4.   Second Order Averages.
5.   Median class
6.   Illustrate a perfect negative correlation.
7.   What would be your interpretation if the correlation coefficient 'r' is equal to
     1. 0
     2. -1
     3..2
     4..9
8.   Scatter diagram
9.   Classical Definition of Probability
10. Hypothesis.
11. Variance test ratio
12. Bernoulli process

(2 x 8 = 16)

Section B
Answer any 7 (5 marks each)

13. Discuss briefly the various limitations of Statistics.
14. What are the different types of tabulation ?
15. Briefly explain the role of grouping and analysis table in the calculation of Mode.
16. What are the desiarable properties of an average? Calculate the mean, median and mode form the following data:

Wages (in Rs).	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64
No. of workers	31	47	59	78	104	113	81	60	52	25

17. Define correlation. Explain various types of correlation with suitable examples.
18. Consider the following data of the two variates

X	1	2	3	4	5	6
Y	6	4	3	5	4	2

     Draw a scatter diagram of the above data.
19. From the following data, calculate the coefficient of rank correlation between X and Y.

25

| X | 33 | 56 | 50 | 65 | 44 | 38 | 44 | 50 | 15 | 26 |
| Y | 50 | 35 | 70 | 25 | 35 | 58 | 75 | 60 | 55 | 26 |

20.   Write down the important properties of Binomial Distribution.

21.   What is Normal Distribution?

22.   How does Poisson distribution differ from Binomial distribution?

(5 x 7 = 35)

Section C
Answer any 2 (12 marks each)

23.   Describe the importance of classification and tabulation in statistical analysis.

24.   Calculate mean deviation fro median from the following data:

Variable	0	1	2	3	4	5	6	7	8	9
Frequency	15	46	91	162	110	95	82	26	13	2

25.   Compute two regression equations from the data given below:

Income	100	200	300	400	500	600	700
Expenditure on clothing	30	50	60	80	100	110	130

26.   How do you use Chi-square test, for testing goodness of fit?

(12 x 2 = 24)