

Name:..... Reg. No.....

MA DEGREE END SEMESTER EXAMINATION APRIL 2016**SEMESTER-2: SOCIOLOGY****COURSE : 15P2SOCT10 - STATISTICS FOR SOCIOLOGY**

(For 2015 Admission)

Time: Three Hours

Maximum Marks: 75

PART A(Answer **any eight** questions of 2 marks)

1. What are the parts of a table?
2. Give any two characteristics of Statistics.
3. Calculate Median for the following data : 85, 51, 94, 28, 48, 58, 70
4. Define Coefficient of variation.
5. What is a Scatter diagram?
6. Give classical definition of probability.
7. Define null hypothesis.
8. Write the sample space when a coin is tossed three times.
9. If Median = 42.8, Mode = 40, find Mean.
10. What is level of significance?
11. What is a bar diagram ?
12. Find A.M for the following data: 6,9,11,14,20,15,8,7

(8 x 2 = 16)

PART BAnswer **any seven** questions of 5 marks each

13. Calculate Median for the following data

C.I	10- 12	12- 14	14- 16	16- 18	18- 20
F	5	12	14	13	10

14. What are the properties of a good measure of Dispersion?

15. Calculate Standard deviation for the following data.

Variate	1	1	1	1	1
	0	1	2	3	4
Frequen cy	3	1	1	1	3
		2	8	2	

16. Calculate Coefficient of Quartile deviation for the following data

Marks	12	14	17	21	27	30	36
No. of Students	4	6	8	7	12	10	4

17. The lengths and weights of a sample of 6 articles manufactured by a factory are given below. Find the Regression line of Y on X.

Length(x)	3	5	6	7	10	11
Weight(Y)	8	12	11	14	16	17

18. A random sample of 1000 workers from factory A shows that the mean wages were Rs. 47 per Week with S.D of Rs.23. A random sample of 1500 workers from factory B gives a mean wage of Rs. 49 per week with a S.D of Rs. 30. Is there any significant difference between their mean wages?

19. Apply χ^2 test to examine whether the following figures provide association between hair colour and eye colour

	Hair colour Light	Hair colour Brown
Eye colour Light	32	13
Eye colour Dark	14	21

20. Explain the uses of Statistics in Sociological research.

21. Calculate Rank Correlation coefficient for the following data

Advertisement	3	6	6	9	8	7	2	9	3	7
	9	5	2	0	2	5	5	8	6	8
Sales	4	5	5	8	6	6	6	9	5	8
	7	3	8	6	2	8	0	1	1	4

22. The observations 47, 49, 63, 45, 53 came from a normal population. Test whether the mean of the distribution is 55.
(5 x 7 = 35)

PART C

Answer **any two** questions of 12 marks each

23. Calculate Karl Pearson's coefficient of Correlation for the following data

X	12	9	8	10	11	13	7
Y	14	8	6	9	11	12	3

24. Time taken by workers in performing a job by Method 1 and Method 11 are given below.

Method 1	2	3	3	3	3	2	3
	8	0	2	3	3	9	4
Method 11	2	3	3	2	2	2	
	9	0	0	4	7	9	

Do the data show that the variances of time distribution by the two methods do not differ significantly.

25. Prices of a particular commodity in five months at two regions are as follows.

Region A	2	2	1	2	2
	0	2	7	3	6
Region B	1	2	1	1	1
	0	0	8	1	5

Compare the variability of the prices in the two Regions.

26. Calculate Coefficient of Mean deviation for the following data.

Size	4	6	8	1	1	1	1
				0	2	4	6
Frequency	1	4	5	3	2		4
						1	

(12 x 2 = 24)