M 24303

Reg. No. : .....

Name : .....

Third Semester M.S.W. Degree (Regular/Supple.) Examination, December 2013
Paper – XVI : STATISTICS

Time: 3 Hours Max. Marks : 80

PART – I

Answer **any six** questions. **Each** question carries **3** marks. Answer to a question is limited to **100** words.

1. Degree of freedom
2. Mode
3. Cartograms
4. Standard deviation
5. Scatter diagram
6. Yule's coefficient
7. Types of errors in hypothesis testing
8. Tabulation of data
9. Frequency polygon. **(6×3=18)**

PART – II

Answer **any five** questions. **Each** question carries **6** marks. Answer to a question is limited to **200** words.

10. Define Statistics. Explain its function and limitations.
11. Calculate the standard deviation of the following data :

Person :	1	2	3	4	5	6	7
Income :	30	40	42	44	46	48	58

P.T.O.

12. Define skewness. Explain the characteristics of positively and negatively skewed distribution.

13. Calculate arithmetic mean and median of the following data :

Marks :	0 – 5	5 – 10	10 – 15	15 – 20	20 – 25	25 – 30	30 – 35	35 – 40
No. of students :	4	6	10	15	30	15	12	8

14. What is ANOVA ? Explain its usefulness in research.

15. Explain measures of dispersion.

16. Explain the importance of hypothesis testing in research. What are the statistical techniques used for it ?

17. Explain the merits and demerits of measures of central tendency. **(5×6=30)**

PART – III

Answer **any two** questions. **Each** question carries **16** marks. Answer to a question is limited to **900** words.

18. Explain the different graphic and diagrammatic presentation of data.

19. A study was conducted with 20 respondents regarding HIV/AIDS awareness. Find whether there is any association between education and awareness on AIDS using following data :

Awareness	**Education**		
	Primary education	**Higher education**	
Aware	45	95	**140**
Not aware	40	20	**60**
Total	**85**	**115**	**200**

For degree of freedom 1, the value of Chi-square at 5% level is 3.84.

20. Calculate rank correlation coefficient :

X :	12	18	32	18	25	24	25	40	38	22
Y :	16	15	28	16	24	22	28	36	34	19

(2×16=32)