M 20825
Reg. No. : .. $\qquad$
Name : $\qquad$
III Semester M.S.W. Degree (Reg./Sup.) Examination, December 2011 Paper - XVI : QUANTITATIVE METHODS IN SOCIAL RESEARCH

Time: 3 Hours

## PART - I

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

Write short notes :

1. Univariate analysis
2. Standard deviation
3. Arithmetic mean
\$. Rank correlation
4. Normal distribution
5. One tailed and two tailed tests
6. SPSS
7. $2 \times 2$ contingency table
Q. $t$ test.

## PART - II

Answer any five questions. Each question carries 6 marks. Answer to a question is limited to 200 words.
10. Define independent and mutually exclusive events. Can two events be mutually exclusive and independent simultaneously ?
(114) What are the different diagrammatic representations of data ?
12. What are the salient features of SPSS ?

Explain the objects of averaging and requisites of a good average.
14. What are the different ways in which data is classified and tabulated?

Differentiate between Mean Deviation and Standard Deviation.
(6) Calculate the mean for the data given below :

| Daily earnings <br> (in Rs.) | No. of <br> persons | Daily earnings <br> (in Rs.) | No. of <br> persons |
| :---: | :---: | :---: | :---: |
| $50-53$ | 3 | $65-68$ | 28 |
| $53-56$ | 8 | $68-71$ | 16 |
| $56-59$ | 14 | $71-74$ | 10 |
| $59-62$ | 30 | $74-77$ | 5 |
| $62-65$ | 36 |  |  |

47. An automobile manufacturing firm is bringing out a new model. In order to map out its advertising campaign, it wants to determine whether the model will appeal most to a particular age group or equally to all age-groups.
The firm takes a random sample from persons attending a preview of the new model and obtained the results summarized below :

| Persons | Age Groups |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Under 20 | $20-39$ | $40-59$ | 60 and <br> over |
| Liking the car | 146 | 78 | 48 | 28 |
| Disliking the car | 54 | 32 | 32 | 62 |

What conclusions would draw from the above data?
$(5 \times 6=30)$
PART - III

Answer any two questions. Each question carries equal marks. Answer to a question is limited to 900 words.
18. Explain the importance of statistics in social work research.
19. Describe the different methods of measuring deviation, pointing out the merits and demerits of each.
20. Calculate Pearson's coefficient of correlation between advertisement cost and sales as per the data given below :

| Advertisement Cost <br> (in '000 Rs.) | 39 | 65 | 62 | 90 | 82 | 75 | 25 | 98 | 36 | 78 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales (in lakh Rs.) | 47 | 53 | 58 | 86 | 62 | 68 | 60 | 91 | 51 | 84 |

