LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600034
M.A. DEGREE EXAMINATION - SOCIOLOGY

FIRST SEMESTER - NOVEMBER 2016
16PSO1MC03 / SO 1813 - RESEARCH METHODOLOGY

Date: 07-11-2016
Time: 01:00-04:00
Dept. No. $\square$ Max. : 100 Marks

## SECTION-A

Answer the following in 30 words each:
(10x2=20)

1. Write a short note on Social Research.
2. What is called as Snow Ball Sampling?
3. How Questionnaire schedule is useful?
4. What is Research Design?
5. Explain Null hypothesis.
6. Define Accuracy.
7. What is called as "Concept"?
8. Define measures of central tendency.
9. Find the range height of 10 students . $15,20,25,30,35,40,45,50,55,60$.
10. Compute the median for the following data. $41,11,14,65,73,04,53,35,71,55$.

## SECTION-B

Answer any Five of the following in about 300 words each:
11. Describe the key ingredients which plays a major role in analyzing data.
12. Elucidate the functions and limitation of measures of central tendency.
13. What are the advantages and dis-advantages using Interview schedule and Questionnaire as tool for data collection.
14. The conceptualization of facts and theory are considered to be the most important aspect in doing research.
15. Enumerate the types of research methods.
16. Compute Karl Perason's co-efficient of correlation for the following data and comment on the results obtained.

| Experience (X) | 16 | 12 | 18 | 04 | 03 | 10 | 5 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Performance (Y) | 23 | 22 | 24 | 17 | 19 | 20 | 18 | 21 |

17. The following data based on 450 students are given for marks in Social Theory (X) and Principles of Sociology (Y) at the semester examination.
Mean marks in Social theory is 40.
Mean marks in principles of Sociology is 48.
Standard deviation for Social theory is 12 .
Variants of marks in Principles of Sociology is 256.
Sum of the products of deviations of marks from their respective mean 42075. Find the regression equation of X on Y .

## Section - C

Answer any two of the following in about 1200 words each:
( $2 \times 20=40$ )
18. Explain the various techniques in sampling research.
19. Enumerate the process of research in detail.
20. Obtain regression of Y on X and X on Y from the following table and estimate the blood pressure when the age is 50 .

| Age | BP | Age | BP |
| :--- | :--- | :--- | :--- |
| X | Y | X | Y |
| 56 | 147 | 55 | 150 |
| 42 | 125 | 49 | 145 |
| 72 | 160 | 38 | 115 |
| 36 | 118 | 42 | 140 |
| 63 | 149 | 68 | 152 |
| 47 | 128 | 60 | 155 |

21. A survey was conducted by a group of students as part of environmental awareness program, in which they collected the following data regarding the number of plants in 8 villages in a district. Find the mean, median and mode of plants per house.

| No. of plants | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Village | 4 | 4 | 9 | 20 | 12 | 6 | 3 | 2 |

