

**Fourth Semester BASLP Degree Regular/Supplementary Examinations**  
**January 2022**

**Research Methods and Statistics**

**Time : 3 hrs**

**Max marks : 75**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers*
- *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essay:**

**(4x10=40)**

1. Explain different methods of sampling. State advantages of sampling over census
2. What are the different steps in a research
3. Calculate Karl Pearson's coefficient of correlation for the following data

|   |   |   |   |    |
|---|---|---|---|----|
| X | 1 | 2 | 3 | 4  |
| Y | 1 | 4 | 9 | 16 |

4. Explain skewness and kurtosis. State normal distribution and give properties of normal distribution

**Short notes**

**(5x5=25)**

5. Primary and secondary data
6. Prevalence of hearing loss
7. Single and group designs
8. Measures of central tendency
9. Non parametric tests

**Answer briefly**

**(5x2=10)**

10. Statistical inference
11. Sampling errors
12. Type I and Type II errors in testing
13. Questionnaire
14. Software for statistical analysis