First Year MASLP Degree Examinations, August 2016

STATISTICS AND RESEARCH METHODS

Time : 3 hrs   **Max marks : 80**

•   **Answer all questions.**

Essays   **(5x16=80)**

1. Distinguish between observational research and experimental research. State a research question/problem in speech and hearing field for both observational research and experimental research.   (8+8)

2. Why multivariate statistical methods are important in the field of speech and hearing. Explain any three methods of multivariate statistical methods in detail.   (4+12)

3. What are the concepts of probabilities and what is its range. How do you interpret $P < 0.05$ in test of significance of hypothesis.

    The marks scored in Statistics before conducting the teaching program and the marks scored after conducting the teaching program of 5 students are given below:

Student	Before the Program	After the Program
1	4	7
2	2	4
3	3	1
4	0	3
5	6	5

    Apply pared-sample t-test and draw statistical inference   (4+4+8)

4. Define Correlation. Explain different types of correlation with examples

                                                                      (10+6)

5. Distinguish between qualitative research and quantitative research. Describe a protocol for a research proposal to study epidemiology of language disorders.   (8+8)

****