

**Ph.D. EDUCATION****Term-End Examination****December, 2017****RES-003 : DATA ANALYSIS TECHNIQUES***Time :3 hours**Weightage : 70%*

**Note :** *All questions are compulsory. All questions carry equal weightage.*  
*[Students may be allowed to use calculator, t - test,  $\chi^2$  - test and NPC table]*

1. Answer the following question in about 600 words.

Explain various measures of central tendency. Discuss with examples the use of various measures of central tendency in educational research.

**OR**

- (a) Discuss the use of t - test in educational research.
- (b) The data relating to a mathematical aptitude test of 9<sup>th</sup> standard boys and girls are given as follows. Find out the significance difference between the mean scores of two groups and interpret the result.

Students	N	Mean	Standard Deviation
Boys	50	52	12.00
Girls	50	60	8.00

2. Answer the following question in about 600 words.

What is descriptive and inferential statistics ? Explain the use of descriptive and inferential statistics in educational research.

**OR**

- (a) Differentiate between quantitative and qualitative data.
- (b) In a sample of 500 students, the mean of a certain test is 15.00 and standard deviation is 3.00. Assuming normality of the distribution, find out how many scores fall above 20 and below 10.
3. Answer **any four** of the following questions in about 150 words each.
- (a) Explain the use of frequency polygon in data analysis.
- (b) Explain the use and limitations of Chi- square test in educational research.
- (c) Explain with examples the primary and secondary data.
- (d) Define correlation. Explain the concept of coefficient of correlation.
- (e) Explain the concept of Meta analysis.
- (f) Discuss the technique "Narrative Analysis" used in qualitative research.
4. Answer the following question in about 600 words.
- What is ethnography ? How the data obtained by using observation and interview techniques in ethnographic studies be analyzed ? Explain.
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