

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks

(10 x 2 = 20)

- 1 Hypothesis.
- 2 Type 1 Error.
- 3 T-test.
- 4 Principle of randomization.
- 5 Anova.
- 6 Reliability.
- 7 Content validity.
- 8 Sample.
- 9 Sign test.
- 10 Median test.

**SECTION - B (25 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks

(5 x 5 = 25)

- 11 a Explain the types of Hypothesis.  
OR  
b Explain Type I and Type II Error.
- 12 a Find the value of 't' for the following scores.  

Scores x	10	15	9	3	7	12	16	17	4
Scores y	12	17	8	5	6	11	18	20	3

OR  
b Explain the meaning of Correlation.
- 13 a Explain the interpretations of a coefficient of correlation?  
OR  
b Discuss the purpose of ANOVA.
- 14 a Construct a scatter diagram for the following scores.  

Scores for A	13	12	10	8	7	6	6	4	3	1
Scores for B	7	11	3	7	2	12	6	2	9	6

OR  
b Differentiate between parametric and non-parametric hypothesis test.
- 15 a Calculate the median test for the following scores  
17,47,15,35,25,39,50,44,7,10,8,12,9,11,6,7  
OR  
b Explain Test-retest method.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks

(3 x 10 = 30)

- 16 Computation of coefficient of correlation by using rank differences method for the following scores.  

Score in test X	12	15	24	50	8	15	20	20	11	26
Score in test Y	21	25	35	24	16	18	25	16	16	38
- 17 Ten subjects were tested on an attitude scale. They were made to read some literature in order to bring a change in their attitudes. The attitude scale was re-administered. The results of initial and final testing are as under.  

Initial	10	9	9	8	8	7	7	5	4	4
Final	11	7	8	9	6	6	8	4	3	4

Test the null hypothesis at the 5% level of significance.
- 18 When to use Parametric and non-parametric tests.
- 19 Explain the criteria for good measurement.
- 20 Write a brief introduction to software package of statistic.