

**Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University)Coimbatore-641043.**

**Master's Degree Examination – November 2018
III Semester**

**Class : II PG
Major : Applied Psychology**

**Time: 3 hours
Max. Marks: 60**

17MAPC16 PSYCHOLOGICAL MEASURES AND STATISTICS

Part A

10 x 1/2 = 5

Choose the correct answer

1. The measure of dispersion is
 - a. mean
 - b. median
 - c. mode
 - d. range
2. Skewness refers to lack of
 - a. symmetry
 - b. flatness
 - c. Peakedness
 - d. normality
3. The correlation involves artificial dichotomy is
 - a. Tetrachoric
 - b. Biserial
 - c. Phi
 - d. Linear
4. Correlation value of 1 (one) shows
 - a. positive correlation
 - b. Negative correlation
 - c. Zero correlation
 - d. None of the above
5. In case of normal small samples the statistics used is
 - a. z-test
 - b. F-test
 - c. t - test
 - d. Chi-square test
6. If the sample size is 30, then the degrees of freedom is
 - a. 30
 - b. 29
 - c. 28
 - d. 27
7. Which of the following assumes the difference between the medians is zero?
 - a. Fisher-Irwin test
 - b. Sign test
 - c. McNemer test
 - d. Rank test
8. The most commonly used test to assess agreement among raters is
 - a. Kendall coefficient
 - b. Correlation coefficient
 - c. F-ratio
 - d. Z-value
9. ANOCOVA statistically controls
 - a. First variable
 - b. Second Variable
 - c. Third Variable
 - d. Fourth variable
10. In SPSS the text data type is denoted as
 - a. numeric
 - b. string
 - c. syntax
 - d. SAX

Part B

5 x 4 = 20

Answer ALL questions

Each answer should not exceed 200 words or one page

11.a. Find the mean for the following scores:

Scores	10-12	13-15	16-18	19-21
f	4	12	20	14

(Or)

11.b. Mention the advantages of graphical representation of data.

12.a. When to compute Phi-Coefficient?

(Or)

12.b. Calculate the rank order correlation of the following:

X	Y
1	2
2	1
3	5
4	3
5	4
6	7
7	8
8	6

13.a. Explain the assumptions of F test.

(Or)

13.b. Find out the significant difference between the two groups with following data: (Critical value at 0.05 level is 2.09)

	Group I	Group II
M	53.20	49.80
SD	7.4	6.5
N	20	20

14.a. When to use non-parametric tests?

(Or)

14.b. Explain the procedure to conduct sign test.

15.a. Explain the kinds of descriptive statistics SPSS provide.

(Or)

15.b. Explain the test procedures for conducting t statistics in SPSS.

Part C

5 x 7 = 35

Answer ALL questions

Each answer should not exceed 600 words or three pages

16.a. Describe the methods of measuring skewness.

(Or)

16.b. Compute quartile deviation for the following scores of hand dynamometer test:

Average score	Number of respondents
9.3-9.7	22
9.8-10.2	55
10.3-10.7	12
10.8-11.2	17
11.3-11.7	14

11.8-12.2	66
12.3-12.7	33
12.8-13.2	11

17.a. Find out the Pearson correlation for the following two groups of scores:

X	15	25	20	30	35
Y	60	70	40	50	30

(Or)

17.b. Explain the steps in computing Tetrachoric correlation.

18.a. 384 school teachers were classified into six categories of adjustment ranging from a high level of adjustment to a low level of adjustment as under:

Categories	I	II	III	IV	V	VI	Total
No. Of teachers	48	61	82	91	57	45	384

Does this classification differ significantly? (critical value at 0.05 level with df 5 is 11.070)

(Or)

18.b. Describe the fundamental concepts in using z test.

19.a. Explain the procedure of conducting McNemar test.

(Or)

19.b. Find out the significance of gender differences in following attitude scores conducting Runs test:

Boys	15	6	7	19	12	4	20	5	18	10
Girls	17	9	16	15	13	3	8	14	11	2

(Critical value of r at 0.05 level is 6)

20.a. How to run One-Way ANOVA in SPSS? Describe.

(Or)

20.b. Elaborate the assumptions and test procedures of regression in SPSS.