

**MASTER OF ARTS (PSYCHOLOGY)**

**Term-End Examination**

**June, 2016**

**MPC-006 : STATISTICS IN PSYCHOLOGY**

*Time : 2 hours*

*Maximum Marks : 50*

*Note : (i) All sections are compulsory.*

*(ii) Use of simple calculator be permitted.*

**SECTION - A**

Answer any two of the following questions  
in about 450 words each :

**2x10=20**

1. Define parametric and nonparametric statistics. 5+5  
Discuss their assumptions.
2. Describe divergence of normality with suitable diagrams. Explain the factors causing divergence in normal curve. 10
3. A research was carried out to find if significant difference exists in Achievement Motivation Scores obtained by three groups. Using ANOVA, find out if there exists difference in the 3 groups. 10

Group - I	Group - II	Group - III
4	8	7
4	12	7
6	14	7
2	23	8
4	14	7
4	25	8
5	15	9
2	15	8
3	14	8
4	13	6

Critical value : 5.49 at 0.01 level of significance  
3.35 at 0.05 level of significance

4. Compute regression equation for X and Y based on the data given below : 10

Individuals	X	Y
A	3	2
B	6	4
C	4	7
D	5	9
E	3	11
F	9	12

### SECTION - B

Answer any four of the following questions in about 250 words each : 4x6=24

5. Explain the meaning of descriptive statistics. Discuss its advantages and disadvantages. 2+4
6. Calculate Mann - Whitney U - test with the help of the following data : 6
- Group 1 : 38, 64, 66, 70, 46
- Group 2 : 45, 65, 71, 62, 70, 43

7. Compute Chi - square for the following data : 6

Years of Experience	Organisational Citizenship	
	High	Low
1 - 5 Years	10	15
6 - 10 Years	15	20
11- 15 Years	20	13

8. Compute Spearman's Rank correlation for the following data : 6  
Data 1 : 34, 45, 54, 34, 23, 43, 45, 45, 43, 45  
Data 2 : 43, 45, 54, 34, 34, 43, 43, 23, 34, 43
9. Describe Phi Coefficient and Biserial Correlation. 3+3

### SECTION - C

Write short notes on any two of the following in about 100 words each : 2x3=6

10. Kendall's Tau 3
11. Wilcoxon Matched Pair Signed Rank Test 3
12. Multiple Correlation 3
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