# DIAGNOSIS

## MPC–006
## STATISTICS IN PSYCHOLOGY

No. of Printed Pages : 3 \qquad MPC-006

02400
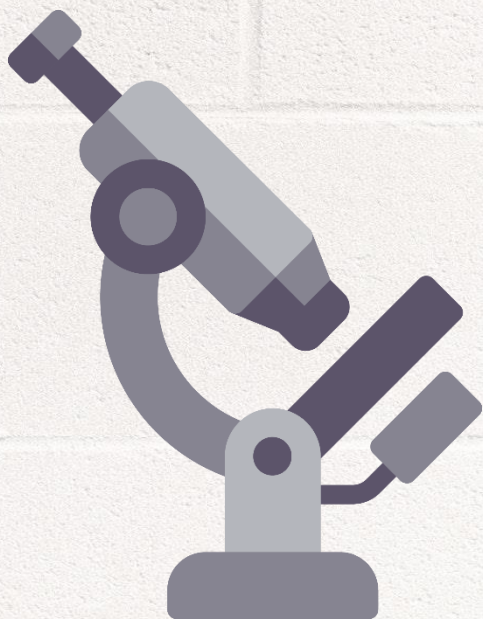
# MASTER OF ARTS (PSYCHOLOGY)

## Term-End Examination

## December, 2018

### MPC-006 : STATISTICS IN PSYCHOLOGY

*Time : 2 hours* \qquad *Maximum Marks : 50*

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

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

## SECTION - A

Answer **any two** of the following questions in about **450** words each : \qquad **2x10=20**

1. Differentiate inferential from descriptive statistics. **4+6** Describe steps in setting up the level of significance.

2. Discuss the rational for using non-parametric **3+7** statistics and describe its advantages and disadvantages.

3. Explain partial correlation. Compute Spearman's **3+7** Rho for the following data :

| Data : A | 60 | 54 | 59 | 44 | 49 | 48 | 40 |
|----------|----|----|----|----|----|----|----|
| Data : B | 55 | 60 | 69 | 70 | 67 | 66 | 54 |

4. Compute ANOVA for the following data : \qquad **10**

| Group : 1 | 2 | 2 | 3 | 3 | 2 | 4 | 2 | 3 | 2 |
|-----------|---|---|---|---|---|---|---|---|---|
| Group : 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 2 |
| Group : 3 | 3 | 3 | 3 | 4 | 4 | 4 | 1 | 1 | 1 |

Critical value : 19.41 for 0.05 level of significance
99.46 for 0.01 level of significance

MPC-006 \qquad 1 \qquad P.T.O.

## SECTION - B

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

5. Compute t test for the data given below : 6

   Group A : 10, 4, 3, 2, 4, 2, 5, 10, 5, 5

   Group B : 4, 6, 8, 2, 9, 1, 12, 13, 10, 10

   Critical value : 2.10 at 0.05 level of significance

   2.88 at 0.01 level of significance

6. Compute Mann Whitney U test for the following data : 6

   Group A : 100, 86, 94, 85, 69, 70, 82, 74, 64, 59

   Group B : 96, 92, 90, 84, 80, 78, 76, 65, 62, 50

7. Compute Chi square for the following data : 6

   responses

   | Male | Agree | Disagree | Not decided |
   |--------|-------|----------|-------------|
   |        | 20    | 10       | 20          |
   | Female | 10    | 20       | 30          |

   Critical value :

   5.991 at 0.05 level of significance

   9.210 at 0.01 level of significance

8. Discuss the importance and application of standard error of mean. 6

9. Discuss factors causing divergence in normal curve. 6

## SECTION - C

Write short notes on **any two** of the following in about **100** words each :  $2 \times 3 = 6$

10. Point biserial correlation.  3

11. Linear regression.  3

12. Two ways Analysis of Variance.  3

———

| Q No | Focus Prediction | ERR Priority | Que Repeat | Marks |
|------|------------------|--------------|------------|-------|
| 1 | YES | 1 | YES | 4+6 |
| 2 | YES | 2 | YES | 3+7 |
| 3 | YES | 3+1 | YES | 3+7 |
| 4 | YES | 1 | YES | 10 |
| 5 | NO | 3 | YES | 6 |
| 6 | YES | 1 | YES | 6 |
| 7 | YES | 1 | YES | 6 |
| 8 | NO | 3 | YES | 6 |
| 9 | YES | 1 | YES | 6 |
| 10 | YES | 1 | YES | 3 |
| 11 | YES | 3 | YES | 3 |
| 12 | NO | 3 | YES | 3 |

## Success Rate of ERR for Dec 18 Exam

| Without Option (Out of 50 Marks) | |
|------|------|
| Marks | Percentage |
| 41 | 82% |

## Success Rate of MAPC Focus for Dec 18 Exam

| Without Option (Out of 50 Marks) | |
|------|------|
| Marks | Percentage |
| 44 | 88% |

## Question Repeat for Dec 18 Exam

| Without Option (Out of 50 Marks) | |
|------|------|
| Marks | Percentage |
| 50 | 100% |

| Unit / Block | 1 | 2 | 3 | 4 | Total |
|---|---|---|---|---|---|
| 1 | ** | 10 | ** | ** | 10 |
| 2 | ** | 7,3 | 3 | ** | 13 |
| 3 | 6 | 6,6 | 10,3 | 3 | 34 |
| 4 | 10 | 6 | ** | 6 | 22 |
| Total | 16 | 38 | 16 | 9 | 79 |

## Guessing For Dec 18 Exam was

| 1st Priority | |
|---|---|
| Block | Unit |
| 1 | 2 |
| 2 | 2 |
| 3 | 1,3 |
| 4 | 2,4 |
| 72% of Questions | |
| 57 Marks | |

| 2nd Priority | |
|---|---|
| Block | Unit |
| 1 | 1 |
| 2 | 4 |
| 3 | ** |
| 4 | 1 |
| 20% of Questions | |
| 16 Marks | |

| 3rd Priority | |
|---|---|
| Block | Unit |
| 1 | 3,4 |
| 2 | 1,3 |
| 3 | 2,4 |
| 4 | 3 |
| 8% of Questions | |
| 6 Marks | |

### Actual Marks in Dec 18 Exam

| 51 Marks | 10 Marks | 18 Marks |
|---|---|---|
| 65% Que | 13% Que | 22% Que |

MAPCHELP.com