M. A. (PSYCHOLOGY) (MAPC)

Term-End Examination

December, 2024

MPC-006: STATISTICS IN PSYCHOLOGY

Time: 2 Hours Maximum Marks: 50

Note: (i) All Sections are compulsory.

(ii) Use of simple calculator is permitted.

Section—A

Note: Answer any two of the following questions in about 450 words each. $2 \times 10 = 20$

- Explain parametric and non-parametric statistics. Describe the advantages and disadvantages of non-parametric statistics. 5+5
- Explain the organisation of data with the help of suitable examples.

3. Compute ANOVA for the following data: 10

Group A	Group B	Group C
6	4	6
2	3	7
3	2	8
4	1	1
1	3	3
3	4	2
2	3	4
3	2	6
2	1	7

Critical value:

3.35 at 0.05 level

5.49 at 0.01 level.

4. Compute Chi-square for the following data: 10

Responses

Categories	Agree	Undecided	Disagree
Group A	8	2	5
Group B	6	4	5
Group C	2	3	5
Group D	5	5	5

Section—B

Note: Answer any **four** of the following questions in about **250** words each. $4\times6=24$

5. Compute Spearman's rho for the following data:

Data A	Data B
1	3
7	9
6	12
4	11
5	8
9	13
8	15
2	14
3	4
10	2

- 6. Explain the concept of normal distribution.

 Describe the factors causing divergence in normality.

 3+3
- 7. Describe point biserial correlation with the help of suitable examples. 6

3

8.	Describe Wild	eoxon mat	ched pa	ir signed	rank			
	test.				6			
9.	Describe inte	eractional	effect.	Explain	the			
	demerits of tw	o-way AN	OVA.		2+4			
Section—C								
${\it Note}$: Write short notes on any ${\it two}$ of the following								
	in about 10	0 words ea	ich.	$2 \times$	3 = 6			
10.	Type I and Ty	pe II error	s.		3			
11.	Multiple regre	ession.			3			

12. Mann-Whitney U-test.