M. Phil Clinical Psychology Part I Supplementary Examinations
September 2021
Paper II: Statistics and Research Methodology

Time: 3 hrs   **Max. Marks: 70**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers*
  - *Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Long Essays   **(4x14=56)**

1. Following data indicates the scores f two students in a memory test for 6 rounds.

Student A	Student B
76	85
68	68
70	86
83	90
71	80
76	65

    Calculate mean and variance of both students. Find which student has more consistent memory power.

2. What do you mean by statistical hypothesis. Distinguish between type I error and type II error. Explain the context of using t-test for independent sample and t-test for paired comparison in testing equality of means.

3. An experiment was conducted to test the efficacy of chloromycetin in checking typhoid. The number of cases after giving chloromycetin is given below:

	No typhoid	Typhoid	Total
Chloromycetin	90	10	100
No Chloromycetin	70	30	100
Total	160	40	200

    Test whether chloromycetin is effective in checking typhoid. (Chi-square at 5% level of significance for one df is 3.84)

4. Explain ANOVA. Explain two-way ANOVA model with an example.

Short Essays: **(2x7=14)**

5. Describe levels of measurement (nominal, ordinal, ratio and interval) with examples.

6. Distinguish between Completely Randomized Design (CRD) and Randomised Block Design (RBD).

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