

**QP Code: 102318**

**Reg. No.....**

**M. Phil Clinical Psychology Part I Supplementary Examinations  
May 2024**

**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. Discuss the importance of standardization in test construction. Explain the benefits of norm-referenced and criterion-referenced testing, highlighting their differences.
2. Dr. Meera conducted a study to understand the effectiveness of Vipassana meditation on the self-esteem, optimism, and well-being of individuals with physical disabilities. She has limited her sample to the age group of 18 to 22 years. She selected a few colleges from her hometown to utilize the mother tongue benefit. The self-esteem, optimism, and well-being of 80 participants were assessed at three phases of the study, each with a gap of one month; before the intervention and twice during the intervention. Results indicated that scores of self-esteem significantly increased at three phases of the intervention, as per the expectation of the researcher. Differences between the scores of optimism and well-being in the three phases were also found to be significant. Generate null and alternative hypotheses for the research and make a decision based on the results. Analyze the threats to the internal validity of the research. Describe the measures taken to control extraneous variables in the study. Comment on the sampling method used by Dr. Meera. (3+6+3+2)
3. Roux and Phillipot (2015) conducted a comprehensive examination of the effectiveness of solution-focused brief therapy (SFBT) interventions in addressing substance abuse and trauma-related issues. They utilized a randomized controlled trial design to assess the impact of SFBT within primary substance use treatment services, specifically focusing on child welfare-involved parents who were undergoing outpatient treatment for substance use disorders. The assessment tools employed in this study included the Addiction Severity Index-Self-Report and the Trauma Symptom Checklist-40. Which analysis methods might Roux and Phillipot (2015) have employed to evaluate the changes within and between groups to assess the treatment effects. Provide your rationale for the relevance of each analysis method you assumed. Explore the alternative analysis strategies that may offer comprehensive inferences on the study outcomes (5+5+4)

**(PTO)**

4. A psychologist tested eight subjects randomly chosen from the 11-year-old boys taught in comprehensive schools in a city using a standard aptitude test. The scores were:

135, 103, 129, 96, 122, 140, 110, 91

Later, the same subjects a new and improved aptitude test, and the scores (in the same order of subject were

125, 102, 117, 94, 120, 130, 110, 92.

Examine whether there is a statistically significant difference between the mean scores on the two tests. Also, determine whether there is a correlation between the two tests. Based on the results, comment on the validity of each test related to the other.

(5+5+4)

**Short Essays:**

**(2x7=14)**

5. Odds ratio and survival analysis.  
6. Factor analysis.

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