

2019 Scheme

QP CODE: 321332

Reg. No:.....

Third Semester M. Pharm Degree Supplementary Examinations July 2025 Paper I: Research Methodology & Biostatistics (MRM 301T)

(Common for all branches)

Time: 3 Hours

Total Marks: 75

- *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*

Essays

(3x10=30)

1. Write about review of literature and objective of research.
2. Enumerate methodology of ONE-way ANOVA with example.
3. Write in detail about Euthanasia, double effect and conflict between autonomy and beneficence.

Short Notes

(9x5=45)

4. Explain type I error and type II error with suitable examples.
5. Write in brief about CPCSEA guidelines on veterinary care, quarantine, environment and record keeping.
6. Enumerate Null Hypothesis, Alternate Hypothesis and level of significance.
7. Explain student's t-test with example.
8. Explain in brief about informed consent, confidentiality and vendor relationship.
9. Write in brief about requirements and practical difficulties of research.
10. Explain the steps involved in the calculation of Chi-square test.
11. Write in brief about the referral, treatment of family members in medical research.
12. Explain in brief about crossover design, placebo and blinding techniques.
