### MODEL QUESTION PAPER

#### III SEMESTER M. PHARM DEGREE EXAMINATION

(Common for all branches)

## RESEARCH METHODOLOGY & BIOSTATISTICS (MRM 301T)

Time: 3 hrs

Max marks: 75

### Answer all questions

#### ESSAYS (3x10=30)

- 1. What is Chi-square test? Discuss the different types of Chi-square tests with suitable examples
- 2. Discuss various ethical issues in research and explain the elements of informed consent
- 3. What is the relevance of sampling & sample size in epidemiology studies? Explain the different sampling techniques to avoid bias and the factors influencing sample size.

# SHORT NOTES (9x5=45)

- 4. Write briefly on plagiarism and paraphrasing
- 5. Short note on different study designs in research
- 6. With suitable examples explain Type I & Type II errors in hypothesis testing.
- 7. Discuss the different euthanasia techniques adopted for Small laboratory animals.
- 8. Explain mechanics of writing a research report
- 9. Write briefly on autonomy in Medical Research
- 10. Discuss the different types of t tests and their applications.
- 11. Discuss the constitution and working of IAEC
- 12. What are the guidelines for making a good oral presentation