

**Fourth Year Pharm D Degree Supplementary Examinations
February 2025**

Biostatistics & Research Methodology

Time: 3 Hours

Total 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*

Essay:

(3x10=30)

1. Discuss the applications of computers in community pharmacy.
2. Explain the methodology, advantages and disadvantages of cohort studies.
3. Compare parametric and non-parametric tests and explain the methodology of Chi square test.

Short notes:

(8x5=40)

4. Semi logarithmic plots and their application.
5. Applications of Epi Info and SPSS software in research.
6. Pearson and Spearman's correlation with suitable examples.
7. Case reports and case series.
8. Measures of spread with examples.
9. Mann Whitney's test and Wilcoxon signed rank test.
10. Null hypothesis, type-1 and type-2 errors.
11. Pie charts and histograms.
