

Q.P. Code: 404326

Reg. no.:

**Fourth Year Pharm D Degree Regular/Supplementary Examinations
November 2021**

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. Explain the different type of graphical representation of data with suitable diagrams.
2. Classify epidemiological studies and explain the methodology of case-control study.
3. Classify ANOVA tests with examples and describe the general steps involved in the calculation of one-way ANOVA.

Short notes:

(8x5=40)

4. Sample size determination.
5. Non-parametric tests.
6. Cross-sectional studies.
7. Applications and steps involved in the calculation of paired t-test.
8. Define incidence, prevalence, odds ratio, relative risk and attributable risk.
9. What is correlation and describe the methodology of Spearman's correlation.
10. Explain the different measures of spread or dispersion.
11. Explain the application of computers in drug information retrieval.
