

Q.P. Code: 105340

Reg. no.:

First Pharm D Post Baccalaureate Degree Examinations, September 2013

Paper V – Biostatistics & Research Methodology

Time: 3 Hours

Total Marks: 70

- Answer all questions
- Draw diagrams wherever necessary

Essay:

(3x10=30)

1. Classify ANOVA and describe the general steps involved in the calculation of one-way ANOVA. Mention the important post tests.
2. Explain different types of graphical presentation of data with suitable diagrams.
3. Describe the need for sample size calculation in clinical studies. Explain the method of sample size calculation for estimation of mean and comparison of mean.

Short notes:

(8x5=40)

4. Mention an examples for non-parametric tests and explain the methodology of Mann Whitney U test.
5. Discuss the role of computers in patient data management in hospitals.
6. Explain the assumptions of Chi-square test. Mention the general steps involved in calculation of Chi-square test for association.
7. Define odds ratio and relative risk with the help of suitable examples. Explain its importance in epidemiological studies.
8. Compare the characteristics of variance, standard deviation, standard error of mean and range.
9. Explain the methodology and applications of linear regression.
10. Explain various types of observational studies.
11. Explain Type-I and Type-II errors
