

**Q.P. Code: 404326**

**Reg. no.: .....**

**Fourth Year Pharm D Degree Supplementary Examinations March 2022**

**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. How will you classify experimental study. Describe the steps in conducting randomized controlled trial.
2. Explain the various types of data distributions. Describe in detail about Poisson distribution.
3. Epidemiological studies are limited to a sample of individuals from a population. Justify and explain about the key techniques used to assess the range of values within which the actual population estimate is likely to lie.

**Short notes:**

**(8x5=40)**

4. Explain different measures of central tendency with suitable examples.
5. Explain Type I and Type II error and how to minimize the errors.
6. Explain the power of study and confidence interval in statistics.
7. Explain about hypothesis and its testing.
8. Compare and contrast one-way anova and two-way anova.
9. Explain about multiple linear regression with suitable examples.
10. Explain how computer-based system is useful in intravenous solutions and admixture.
11. Discuss about epi info statistical software and its applications.

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