

Q.P. Code: 105340

Reg. no.:

First Pharm D Post Baccalaureate Degree Examinations, August 2015

Paper V – Biostatistics & Research Methodology

Time: 3 Hours

Total Marks: 70

- Answer all questions
- Draw diagrams wherever necessary

Essay:

(3x10=30)

1. Describe the various applications of computer in hospital pharmacy.
2. Discuss regarding Pearson's and Spearman's co-efficient giving suitable examples.
3. The following data shows the daily sodium (Na) intake and systolic pressure (SBP) of 12 individuals. Elucidate whether, there exists any linear selection between the two:

| | | | | | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Na mg | 6.8 | 7.0 | 6.9 | 7.3 | 7.0 | 7.5 | 7.3 | 7.1 | 6.4 | 7.3 | 6.5 | 6.9 |
| SBP | 154 | 167 | 162 | 190 | 158 | 195 | 189 | 186 | 140 | 190 | 148 | 160 |

Short notes:

(8x5=40)

4. ANOVA
5. Confounding variables
6. Case report form
7. Bias in epidemiological studies
8. Explain lottery method with a suitable example.
9. Bar charts
10. Randomized control trial
11. Estimate the mean and standard deviation for the plasma drug concentration ($\mu\text{g/ml}$) of 12 patients which is given below.
21, 28, 17, 25, 15, 22, 30, 09, 15, 12, 10, 09
