



Rajiv Gandhi University of Health Sciences, Karnataka

IV Year Pharm-D / I Year Pharm-D (Post Baccalaureate) Degree Examination – NOV 2016

Time: Three Hours

Max. Marks: 70 Marks

BIOSTATISTICS AND RESEARCH METHODOLOGY

Q.P. CODE: 2870

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any two)

2 x 10 = 20 Marks

1. Explain the different types of graphical presentation of categorical and numerical data.
2. What is descriptive statistics? Explain the different measures of central tendency.
3. Explain the different steps of research methodology in detail.

SHORT ESSAYS (Answer any six)

6 x 5 = 30 Marks

4. Explain how computers can be made use in hospital pharmacy.
5. What are variables? Explain the types with their role in research.
6. Name the different types of observational studies. Explain any one type.
7. What do you mean by statistical power of a study? Write its applications.
8. Briefly describe non parametric tests with its advantages and disadvantages.
9. Explain the role of SEM in testing a hypothesis.
10. Differentiate between correlation and regression.
11. What is normal distribution of data? Write the type of statistical procedures used to estimate the significant difference when data is normally distributed.

SHORT ANSWERS

10 x 2 = 20 Marks

12. A cohort study where 50 subjects exposed to dust (Work in a coal mine) and 50 subjects work in offices, followed for 20 years, was conducted. 20/50 people exposed developed lung cancer while 5/50 people not exposed also developed lung cancer. What is the relative risk of developing lung cancer in people exposed to dust in coal mine?
13. What is the difference between percentage and percentile?
14. Write briefly about the uses of SPSS.
15. Differentiate between incidence and prevalence.
16. What is coefficient of variation?
17. Which parametric test will you use when you need to compare data collected from the same group before and after treatment? Also name the nonparametric equivalent test.
18. Write the difference between SD and SEM.
19. Write about the statistical test generally used to analyse data from large sample size?
20. What is primary and secondary data?
21. Define relative risk and attributable risk.

