

Rajiv Gandhi University of Health Sciences, Karnataka
IV Year Pharm-D (I Year Pharm D Post Baccalaureate) / IV Year Pharm-D Degree Examination – 24-Nov-2021

Time: Three Hours

Max. Marks: 70 Marks

BIostatistics and Research Methodology (OS, RS & RS-2)
Q.P. CODE: 2870 / 2886

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. a) Explain graphically parallel and cross over study designs.
b) Describe how sample size is determined for simple comparative experiments.
2. Classify types of data and explain different measures of central tendency with the help of suitable examples.
3. Explain the hypothesis testing of non-parametric tests.

SHORT ESSAYS (Answer any six)

6 x 5 = 30 Marks

4. What is coefficient of variation? Explain its importance over standard deviation with an example.
5. Describe the construction of any three types of graphical representation of statistical data with suitable examples.
6. Note on computerized medication order entry.
7. Write brief note on statistical software of SPSS, Epi-info and SAS.
8. Explain in detail about cohort study. Write its advantages.
9. Define a) α error and β error b) power of the test c) confidence interval.
10. Explain the uses of chi-square test by giving suitable examples.
11. Define epidemiology. Explain incidence and prevalence.

SHORT ANSWERS

10 x 2 = 20 Marks

12. Define case study.
13. Define bias in clinical study.
14. Advantages of patient records database management.
15. P value.
16. Define descriptive and inferential statistics.
17. ANOVA.
18. Differentiate between nominal and ordinal type of data.
19. Paired t-test.
20. Standard error of mean.
21. Type I and Types II errors in hypothesis testing.
