

Rajiv Gandhi University of Health Sciences, Karnataka
VIII Semester B. Pharm Degree Examination – 14-Jun-2022

Max. Marks: 75 Marks

Time: Three Hours

BIostatistics AND RESEARCH METHODOLOGY
Q.P. CODE: 5033

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary
All the Questions are compulsory

2 x 10 = 20 Marks

LONG ESSAYS

1. Describe briefly the different interventional study designs.

OR

Explain the hypothesis testing of non-parametric data.

2. Describe the various types of measures of dispersion and their significance.

7 x 5 = 35 Marks

SHORT ESSAYS

Explain report writing in research methodology.

OR

Explain the hypothesis testing of non-parametric data.

4. Describe variance and standard error of mean with suitable example.

OR

What are the underlying assumptions of one way ANOVA? Explain under what circumstances ANOVA is the most preferred type of statistical data analysis?

5. Discuss the general rules for constructing and labeling a graph? Describe the construction of a semi-logarithmic graph with an example?
6. Compare and contrast Nonparametric and Parametric data.
7. What are the underlying assumptions of one way ANOVA? Explain under what circumstances ANOVA is the most preferred type of statistical data analysis?
8. Explain Fractional Factorial Design.
9. Role of QbD in Pharmaceutical Development.

10 x 2 = 20 Marks

SHORT ANSWERS

10. Define bias in clinical study.
11. Role of sample size in calculation of confidence interval.
12. Characteristics of normal distribution.
13. Advantages and disadvantages Pie charts.
14. Explain: Range, Inter quartile range and Variance.
15. Standard Error of Mean.
16. One tailed and two tailed tests.
17. Control Space.
18. Inclusion and exclusion criteria.
19. Define histogram.
