

Rajiv Gandhi University of Health Sciences, Karnataka

IV Year Pharma-D (Post Baccalaureate) Degree Examination – Feb / Mar 2012

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. Describe different interventional study designs
2. What are the different steps involved in research process?
3. Explain different methods of describing the data using measures of dispersion.

SHORT ESSAYS (Answer any six)

6 x 5 = 30 Marks

4. Explain how the computers can be used in patient record database management in hospital pharmacy?
5. Define of correlation and regression. What are the different measures of correlation? Explain which measure is used for computing correlation between two quantitative variables?
6. What are the underlying assumptions for the application of Chi-Square Test ? If these assumptions fail which alternative statistical test do you suggest?
7. Describe the method of drawing pie diagram
8. Write a note on SPSS software
9. a) Define α -error and β -error.
b) Define one -tailed and two -tailed tests
10. What are the underlying assumptions for the application of Student's t-test? If these assumptions fail which alternative statistical test do you suggest?
11. Distinguish between parametric and non-parametric tests. When there are k independent group which fail to full fill the assumptions of ANOVA, describe which alternative statistical test do you suggest?

SHORT ANSWERS

10 x 2 = 20 Marks

12. Z-test
13. Inclusive and exclusive method of class intervals.
14. P-value
15. Primary and secondary data
16. Wilcoxon rank sum test
17. Scattered plots
18. Standard deviation and standard error
19. Relative risk
20. Importance of sample size determination in research
21. Confidence interval