## Rajiv Gandhi University of Health Sciences, Karnataka

III Semester Bachelors in Hospital Administration Degree Examination - 07-Dec-2023

Time: Three Hours Max. Marks: 80

# RESEARCH METHODOLOGY AND OPERATION RESEARCH - (RS) Q.P. CODE: 3238

Your answers should be specific to the questions asked Draw neat, labeled diagrams wherever necessary

#### LONG ESSAYS (Answer any Two)

 $2 \times 10 = 20 \text{ Marks}$ 

- 1. What do you mean by research? Explain methods and methodology
- 2. Define probability and probability distribution. Explain different properties of normal distribution
- 3. Given the equiprobable sample space  $S = \{0,1,2,3,4,5,6,7,8,9\}$  and events  $A = \{3,6,9\}$ . Find the probability of event A

#### **SHORT ESSAYS (Answer any Eight)**

 $8 \times 5 = 40 \text{ Marks}$ 

- 4. Elucidate network analysis methods
- 5. Discuss on limitations of probability
- 6. Describe different experimental design
- 7. Discuss scientific approach in decision making
- 8. Discuss on techniques of operational research
- 9. Explain types of research reports
- 10. Briefly discuss on theory of games
- 11. Explain the concept of analysis and interpretation of data
- 12. Enumerate union and intersection of events and types of events
- 13. What is sequential sampling method? Inscribe the advantages and disadvantages

### **SHORT ANSWERS (Answer any ten)**

 $10 \times 2 = 20 \text{ Marks}$ 

- 14. Decision trees
- 15 Null hypothesis
- 16. Secondary data
- 17. Research reports
- 18. Sampling variation
- 19. Tabulation of data
- 20. Conditional probability
- 21. Quantitative research
- 22. Monte-Carlo technique
- 23. Concept of queuing theory
- 24. Census and survey method
- 25. Research problem and hypothesis

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