

**Rajiv Gandhi University of Health Sciences, Karnataka**  
**I Semester M.H.A Degree Examination – 08-May-2026**

[Time: 3 Hours]

[Max. Marks: 100]

**HOSPITAL ADMINISTRATION**  
**Research Methodology, Quantitative Techniques and Business Statistics**  
**Paper-III - (RS-5)**  
**Q.P. CODE: 8732**

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

**Answer All The Questions**

**10 X 10 = 100 Marks**

1. What do you mean by "Research"? Discuss scope and significance of research in Hospital Administration.
2. What is "Research Design". Explain various types of "Research Design".
3. What do you mean by "Measurements"? Explain various "Levels of Measurements".
4. Write a note on "Report Writing" in research.
5. Write a note on "Classification and Tabulation".
6. Calculate Mean and Mode for the following data

C.I	Frequency
100-150	10
150-200	15
200-250	25
250-300	10
300-350	5
350-400	2

7. What is "Dispersion" and "Measures of Dispersion"? Discuss various measures of dispersion along with merits and demerits.
8. What is "Type I error" and "Type II error". Test whether there is any significant difference between cases and controls with respect to BMI ( table value = 2.14)

Cases	32	34	28	24	25	29	30	34
Control	24	18	20	23	25	26	19	22

9. Define "Exponential distribution". The number of accidents occurring in a factory, on an average was 4 per year. Find the probability that there will be ( $e^{-4}=0.0183$ ).
  - i. More than 2 accidents
  - ii. No accidents
10. Write a note on "Simulation technique" of Operations Research.

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