Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Optometry Degree Examination – 20-Nov-2024

Time: Three Hours   Max. Marks: 100

RESEARCH METHODOLOGY AND STATISTICS (RS-4)
Q.P. CODE: 3353

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

LONG ESSAYS (Second Question Choice)   **2 x 10 = 20 Marks**

1. Explain the different steps involved in the research process. What are the criteria of good research?

2. Explain the salient features of the research report
   OR
   What are the different types of sampling? Highlight their merits and demerits

SHORT ESSAYS (Question No 5 & 10 choice)   **10 x 5 = 50 Marks**

3. What is reliability? Mention it's types

4. Write the various properties and examples of nominal and ordinal scales of measurements

5. What is the difference between population and sample? Explain why samples are considered for the data collection rather than population
   OR
   What are the factors that affect the size of the sample?

6. What do you understand by a random number table? Where is the application of the same in research?

7. Write about the organization of data. Illustrate a Bar diagram in the organization of data with an example

8. Difference between dependent and independent variables. Give example

9. What do you understand hypothesis in research? Mention its type with an example

10. Virat Kohli scored the following runs in the last cricket World Cup: 11,63,3,49,82,62,12,64,26
    a) What will be the mean and median score?
    b) Mention the mode of the scores
    c) What will be the probability of getting an even score in the next match?
       OR
    Explain the role of the literature review

11. Write a short note on the concept, graphical form and properties of normal distribution with an example
12. Write a note on skewness and kurtosis

SHORT ANSWER   **10 x 3 = 30 Marks**

13. Explain data in research
14. What is health? What are the components of health?
15. Census vs hospital records
16. Define mortality, morbidity and fertility statistics
17. Characteristics of a good hypothesis
18. Uses of descriptive epidemiology
19. Give examples of dependent and independent variables
20. Criteria used in selecting the samples
21. Short note on the scatter diagram
22. Differentiate prevalence from incidence with an optometry research work

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