

Time: Three Hours

Max. Marks: 100 Marks

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. What do you mean by correlation? Explain the concept of correlation coefficient ✓
2. Define research. Explain the research process ✓
OR
Discuss the components and uses of health information system

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Describe the characteristics of a good hypothesis ✓
4. Explain briefly simple random sampling ✓
5. Calculate the standard deviation for the following data on Retina OPD attendance on a sample of 10 days
115, 112, 120, 118, 122, 116, 118, 120, 117, 123
OR
Enumerate the concept of skewness ✓
6. Illustrate bar diagram in organization of data ✓
7. Write a note on arithmetic mean. Explain its application in healthcare
8. Explain total fertility rate
9. Discuss sample registration system
10. Describe normal distribution and its properties ✓
OR
Write about concept of reliability
11. Describe different scales of measurements ✓
12. Discuss validity in detail

SHORT ANSWER

10 x 3 = 30 Marks

13. Write a note on use of random numbers table
14. Differentiate frequency polygon and frequency table
15. Merits and demerits of mode
16. Epidemiological surveillance
17. Incidence and prevalence
18. Explain the reasons for sampling
19. Application of range
20. Application of research in optometry
21. Notification of diseases
22. Write a note on representation of data