

**Research Methodology and Biostatistics****[New Scheme w.e.f. 2009]****Time: 3 Hours****Max Marks: 80****Note: 1.) *Attempt all questions.*****2.) ATTEMPT BOTH PARTS IN SINGLE ANSWER BOOK ONLY.****3.) NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/ PROVIDED****4.) The Student must write O.P. Code in the space provided on the Title page of the Answer Book.****NOTE: SIMPLE CALCULATOR IS ALLOWED.****SECTION - A****[40 Marks]****1. *Write short Notes up to 5 lines in length.*****[5x3=15]**

- (a) T-test
- (b) Standard deviation
- (c) Ethical issues in research
- (d) Validity.
- (e) Research design

**2. Answer the following question upto 3 pages in length.****[10]**

Discuss the significance of literature review. Explain various types of writing review of literature in research papers.

**3. Attempt any ONE question out of the following two questions and answer should be upto 5 pages in length.****[15]**

- (a) What are non-parametric tests? Discuss its characteristics. Explain various types of non-parametric tests.

**OR**

- (b) What is correlation? Differentiate between correlation and regression. Discuss different types of correlation and their suitability.

**SECTION - B****[40 Marks]****1. *Write short Notes up to 5 lines in length.*****[5x3=15]**

- (a) What is biostatistics?
- (b) Informed consent
- (c) Research in clinical practice
- (d) Type II error
- (e) Geometric mean

**2. Answer the following question upto 3 pages in length.****[10]**

What is hypothesis? How is hypothesis formed? How are these tested?

**3.****Attempt any ONE question out of the following two questions and Answer should be upto 5 pages in length.****[15]**

- (a) What is sampling design? Discuss various types of sampling and their suitability with examples.

**OR**

- (b) What is Analysis of Variance? Discuss its suitability. Explain the method of calculation of ANOVA and its interpretation.