M.Sc. Molecular Biology & Human Genetics (Semester-III)

November 2023   Examination

Time : 3 Hrs.   **[Max. Marks :100]**

Research Methodology and Biostatistics

Q.P Code : M3600

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

LONG ESSAY   **2 X 20 = 40**
Marks

1. Explain the role of preclinical study in drug development
2. a) What is central tendency? Explain 3 commonly used measures with examples

   b) Explain types of variables with examples and mention the scales of measurement for variables

SHORT ESSAY   **6X 10**
= 60 Marks

3. Explain the salient features of electronic databases and search engines
4. Explain the process of blinding in clinical trials
5. Explain the salient features of cohort study design
6. The body weight of boys and girls are as follows. Comment on the variability of the Weight among them.
   Boys: $= 67 \pm 2.5$
   Girls: $= 60 \pm 2.4$.
7. Describe the construction and use with an example each of the following (i) Bar-Diagram (ii) Pie-diagram; (iii) Histogram; (iv) Scatter diagram
8. What are tests of significance? Classify them with examples