SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS)
(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai — 600 044.
B.Sc. END SEMESTER EXAMINATIONS NOVEMBER-2022
SEMESTER - V
20UPBCT5011 - Bioinstrumentation, Bioinformatics and Biostatistics

Total Duration : 2 Hrs 30 Mins. **Total Marks : 60**

Section A

Answer any **SIX** questions $(6 \times 5 = 30$ Marks)

1. State the basic principles and applications of transmission electron microscope.
2. Describe the basic principle and applications of spectrophotometer.
3. Relate SWISS-PROT and PROSITE.
4. Explain measures of central tendency with suitable examples.
5. Indicate the significance of fixatives and staining in microscopic preparations with suitable examples.
6. Compute the role of centrifugation in biology.
7. Explain sequence analysis.
8. Justify the need of applying Chi-Square test in the case of scientific research data analysis.

Section B

Answer any **THREE** questions $(3 \times 10 = 30$ Marks)

9. Describe the basic principles and functions of light microscope with neat diagrammatic representation.
10. Relate the steps in microtomy with its significance.
11. Distinguish between paper chromatography and thin layer chromatography.
12. Relate Entrez and DDJB with NCBI.
13. Evaluate the role of calculating measures of dispersions in analysis of research data.

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