22PPBET3004

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. M.Sc. (PBPB) END SEMESTER EXAMINATIONS NOVEMBER - 2023 SEMESTER - III 22PPBET3004 - Bioinstrumentation and Bioinformatics

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

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

1. Explain thin layer chromatography.

2. Describe the working principle of fluorescence microscopy.

3. How do you predict the protein structure using protein databases?

- 4. Illustrate the process of drug designing.
- 5. When do you use the HPLC technique? Explain its working principle.
- 6. How do you differentiate micro and macro photography?
- 7. Sketch the framework of NCBI.
- 8. Examine the methods of phylogenetic analysis.

Section C

I - Answer any **TWO** questions $(2 \times 10 = 20 \text{ Marks})$

9. How do you prepare the sample for separation using electrophoresis?

- 10. Write the applications of UV-Visible spectrophotometer.
- 11. Distinguish transmission from scanning electron microscopy.
- 12. Determine the usage of homology in sequence analysis.

II - Compulsory question $(1 \times 10 = 10 \text{ Marks})$

13. Differentiate phenetic and cladistics methods of analysis.
