

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. END SEMESTER EXAMINATION APRIL/NOV - 2021

SEMESTER - III

20PPBET3004 - Bioinstrumentation and Bioinformatics

Total Duration : 3 Hrs	Total Marks : 75
MCQ : 30 Mins	MCQ : 15
Descriptive : 2 Hrs.30 Mins	Descriptive : 60

Section B

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

1. Describe the procedure for Paper Chromatography.
2. Illustrate the working principle and applications of Colorimeter.
3. Explain Phase Contrast Microscopy.
4. Classify Biological Data bases.
5. Interpret Pharmacogenomics and Pharmacogenetics and its applications.
6. State the working principle of NMR with suitable diagram.
7. Classify the methods of Phylogenetic analysis.
8. Describe the working principle and applications of SDS PAGE.

Section C

Part A

Answer any **TWO** questions ($2 \times 10 = 20$ Marks)

9. Interpret the components, Sample preparation and applications of Transmission Electron Microscope.
10. Explain the process of drug discovery.
11. Describe Mass Spectroscopy.
12. Explain the different applications of Genomics and Proteomics.

Part B

Compulsory question ($1 \times 10 = 10$ Marks)

13. Compare TLC and HPTLC and elaborate on the steps involved in performing HPTLC.