

**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 EXAMINATIONS APRIL - 2022

SEMESTER - III

20PPBET3004 - BIOINSTRUMENTATION & BIOINFORMATICS

Total Duration : 3 Hrs.

Total Marks : 60

Section A

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

1. What is gas chromatography? Explain its applications.
2. Describe briefly operation method of polyacrylamide gel electrophoresis.
3. How UV-Visible spectrophotometer is functioning, Mention its uses in biology.
4. Write a brief note on different types of microscopes.
5. Explain briefly principle and applications of phase contrast microscope.
6. Enumerate the applications of Bioinformatics.
7. Give a concise account on genomics.
8. Explain the application of drug targeting.

Section B

Part A

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

9. Enumerate the principle, operation and applications of HPLC.
10. Explain the working of a Fluorescent Spectroscopy.
11. Describe the components, function and applications of transmission electron microscope.
12. Explain briefly on SWISS-PROT.

Part B

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

13. Write an essay on major areas scope and need of Bioinformatics in the field of Biology.
