

Roll.No.

22UCHCT2004

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.Chemistry - END SEMESTER EXAMINATIONS - NOVEMBER 2025
SEMESTER - II

22UCHCT2004 - Analytical Chemistry II

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

1. Illustrate the measurement and applications of redox potential.
2. Describe the methods of purification of solid compounds.
3. Predict a method to separate vitamins and elaborate its principle and procedure.
4. Explain the principle and applications of HPLC.
5. Sketch and explain thermometric titrations.
6. Classify solvent extraction and soxhlet extraction.
7. Interpret the principle, types and applications of paper chromatography.
8. Justify the principle and applications of ion exchange chromatography.

Section C

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

9. Explain the working of dropping mercury electrode and significance of illkovic equation and half wave potential .
10. Discuss the characteristics and factors affecting TGA and DTA curves.
11. Organise and explain the experimental techniques of distillation of liquid mixtures.
12. Predict and discuss the method to separate methylene blue and fluorescein.
13. Examine the principle, instrumentation and applications of gas chromatography.
