

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 APRIL-2023

SEMESTER - IV

20UCHCT4008 - General Chemistry- VIII

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

1. Illustrate the exceptional properties of fluorine.
2. Describe the mechanism of Aldol condensation.
3. State and derive Lambert-Beer's law for light absorption by solutions.
4. Predict the characteristics of precipitating agents and conditions of precipitation.
5. Explain the position of rare gases in Periodic Table.
6. Relate the mechanism of reaction of ammonia derivatives with aldehydes.
7. Describe the chlorination of methane with suitable reactions.
8. Ascertain the principles of gravimetric analysis.

Section C

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

9. Describe the properties and structure of thiocyanate, and azide compounds.
10. Explain the preparation and properties of XeF_2 & XeF_4 compounds.
11. Predict Perkin, Cannizzaro reaction with mechanism.
12. Discuss the mechanism of photosensitization and quenching using suitable examples.
13. Illustrate the various theories of precipitation.
