

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.(PBPBT) END SEMESTER EXAMINATIONS NOVEMBER -2023

SEMESTER - III

20UPBAT3003 - Allied Chemistry-I

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

1. Differentiate bonding and anti bonding orbitals.
2. Give the M.O diagram for N_2 and calculate its bond order.
3. What is a Ore? Give its various types with an example.
4. Write short notes on Zone refining and Van-arkel method.
5. What is a system? Explain the various types of system.
6. Give the principle and uses of Chromatography.
7. Explain the geometry and hybridisation in acetylene.
8. Explain geometrical isomerism with an example.

Section C

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

9. What are inter halogen compounds? Give its structure and hybridisation.
10. Explain the general methods involved in the extraction of metals from its ore.
11. Explain the efficiency of Carnot's cycle.
12. Write short notes on column chromatography and TLC.
13. Explain the Haworth's synthesis of Naphlene. Give its uses and any three chemical properties.
