

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 -2023

SEMESTER - II

20UCHCT2003 - General Chemistry -III

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section B

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

1. Explain the stability of dienes with examples.
2. What is hydroboration? Describe with examples.
3. Derive the relationship between C_p and C_v
4. Compare the exothermic and endothermic reaction with examples.
5. Describe the importance of normal error curve.
6. Compute the average deviation and coefficient of variation for the following values.
23, 30, 31, 15, 46
7. State Hoffmann and Saytzeff rule. Explain with examples.
8. What is ozonolysis? Deduce its mechanism.

Section C

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

9. Explain Markownikoff's rule and peroxide effect with suitable examples.
10. a) Give an example for Diel's Alder reaction.
b) Write a note on
 - i) addition of halogens to alkynes
 - ii) oxidation of alkynes (5+5)
11. Explain the following:
 - a) Intensive and extensive properties
 - b) Reversible and irreversible process
 - c) Isothermal and adiabatic process (4+3+3)
12. Describe the following.
 - a) Heat of combustion
 - b) Heat of neutralisation
 - c) Heat of fusion
 - d) Heat of Transition (4 x 2.5)
13. Explain any two types of error and any two methods of minimising the error.
