

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. END SEMESTER EXAMINATIONS APRIL-2023

SEMESTER - III

**20UCHCT3006 - GENERAL CHEMISTRY - VI**

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

### Section A

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

1. Give a detailed account on the acid strength of carboxylic acids.
2. Describe the preparation and its mechanism of ethers by dehydration of alcohols.
3. Give the mechanism of preparation of Grignard reagent. What is its precaution measures?
4. What is the composition of soft drink? Give the effect of soft drink.
5. Write a short note about primary and secondary standards.
6. Discuss Curtius rearrangement with mechanism.
7. Why do ethers have lower boiling points than its isomeric alcohols?
8. How are organolithium compounds prepared?

### Section B

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

9. Discuss the preparation of dicarboxylic acids.
10. Describe important chemical properties of ethers.
11. How can you prepare the following compounds with the help of methyllithium?  
a) Ethanol (2) b) Iso-propyl alcohol (2) c) Tert-Butyl alcohol (2) d) Acetaldehyde (2) e) Methane (2)
12. a) Write notes on food preservatives. (5)  
b) Discuss about legal aspects of food adulteration and prevention. (5)
13. Define the following terms a) Molality (2.5) b) Molarity (2.5) c) Normality (2.5)  
d) Mole fraction (2.5)

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