

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-2022

SEMESTER - I

20UNDAT1001 - Allied Chemistry - I

Total Duration : 3 Hrs.

Total Marks : 60

Section A

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

1. Explain briefly the importance of pH and buffering in biological systems.
2. How is urea is manufactured? Mention its uses?
3. Discuss the hybridisation in ethane and acetylene.
4. Write anote on the preparation and properties of thiophene.
5. What is phosphorescence? How does it differ from fluorescence?
6. Explain briefly on chemiluminescence.
7. Discuss the mechanism of nitration of benzene.
8. What are the disadvantageous of hard water?

Section B

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

9. Write short notes on
 - a. common ion effect
 - b. strong and weak electrolytes (5+5)
10. Define temporary and permanent hardness. How is water purified by reverse osmosis method?
11. How organic reaction classified? Give an example for each type.
12. Explain the synthesis and properties of pyrrole and pyridine.
13. a.State and explain the Stark-Einstein law. (5)
b. Discuss the photo chemical reaction H_2 and Cl_2 . (5)
