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 NOVEMBER-2022 SEMESTER - II 20UPHAT2002 - Allied Chemistry- II

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

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

- 1. Classify the Carbohydrates on the basis of their behaviour on hydrolysis.
- 2. Explain the role of NPK fertilizer in plant growth.
- 3. Give the classification of luminescence with examples.
- 4. What is meant by buffer solution? How is it prepared?
- 5. What is the difference between local and general anesthetics? Give examples.
- 6. How is water gas prepared? Give its uses.
- 7. Discuss the various photo physical processes with the help of Jablonski diagram.
- 8. Define common ion effect? How is it related to the solubility of the electrolyte?

Section B

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

- 9. Discuss Proteins and it's functions in detail.
- 10. What are the classifications of diabetes ? How are diabetes treated?
- 11. Differentiate silicones from silicates. Explain the Preparation and properties of silicone.
- State and explain the Stark-Einstein's law of photochemical equivalence. Add a note on its application to calculate the quantum yield of photochemical reactions.
- 13. Construct the galvanic cell and explain how do you determine the galvanic cell potential.
