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 - IV 20UPBAT4004 - 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. Explain the classification of carbohydrates.
- 2. Explain any five biological functions of proteins.
- 3. Relate antipyretics and analgesics with an example for each.
- 4. Illustrate the preparation and properties of urea.
- 5. Explain the mechanism of photosynthesis in plants.
- 6. Relate the characteristics of fluorescence and phosphorescence.
- 7. Sketch the mechanism of photosensitization with an example.
- 8. Determine the EMF of a standard reference electrode.

Section B

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

- 9. Illustrate the structure and properties of sucrose.
- 10. Predict the causes and medicines used for the following diseases:(i) Diabetes (ii) AIDS
- 11. Distinguish the types of fuel gases with composition and uses.
- 12. Classify the laws of photochemistry with an example. Relate quantum yield and abnormal quantum yield.
- 13. Deduce the Henderson equation and explain buffer action in biological systems.

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