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 - IV 20UPBAT4004 - Allied chemistry -II

Total Duration : 3 Hrs.

Total Marks : 60

Section A

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

- 1. Describe the Bergmann synthesis for dipeptides.
- 2. Explain the causes and treatment for diabetes
- 3. Discuss the preparation and uses of triple phosphate.
- 4. Explain the various laws of photochemistry.
- 5. Explain the construction and working of a calomel electrode.
- 6. Give the composition and uses of carburetted water gas.
- 7. Explain chemiluminescence.
- 8. Discuss the elementary ideas about DNA and RNA.

Section B

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

- 9. Explain the open chain structure of glucose with the reactions.
- 10. Write in detail about (i) Analgesics (ii) General anesthetics
- 11. Describe the synthesis, properties and uses of silicones.
- 12. Explain (i) Phosphorescence (ii) Fluroscence
- 13. Derive Henderson equation and explain the buffer action in biological system.
