

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 - IV

20UPBAT4004 - ALLIED CHEMISTRY-II

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

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

1. Classify carbohydrates with examples.
2. Explain the cause and treatment of cancer?
3. Write the composition and uses of water gas and producer gas.
4. Differentiate photochemical reactions from thermal reactions.
5. Briefly explain the buffer action in biological systems.
6. Write any two methods of preparation of amino acids and important properties.
7. Define quantum yield and explain how it is determined using actinometer.
8. Derive Henderson equation and give its significance.

Section B

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

9. i) Draw open chain structure of glucose and explain its properties.
ii) Distinguish RNA and DNA.
10. Compare and contrast analgesics and anesthetics.
11. (i) Discuss about NPK fertilizers.
(ii) Explain the preparation and superphosphate & superphosphate. (5+5)
12. Explain the following photochemical reactions with example. (i) Chemiluminescence (ii) Photosensitization (5 + 5)
13. Draw calomel electrode and explain.
