22UPBAT3003

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.PBPBT - END SEMESTER EXAMINATIONS - NOV'2024 SEMESTER - III 22UPBAT3003 - Chemistry for PBPBT I

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

- 1. Describe the following purification techniques
 - a) Steam distillation b) fractional distillation
- 2. Sketch and discuss the structure of Haemoglobin.
- 3. Explain the structure of NaCl.
- 4. Compare and contrast Primary and secondary standard solutions.
- 5. Illustrate the types of acid base titrations.
- 6. Distinguish DNA and RNA.
- 7. What are purine and pyrimidine bases? Explain with example.
- 8. Define the following terms
 - a) Zwitter ions b) isoelectric point C) peptide linkage

Section C

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Answer any THREE questions (3 \times 10 = 30 \text{ Marks})
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- 9. Explain Thin layer Chromatography technique in detail.
- 10. Examine the hybridisation in methane ethylene and acetylene.
- 11. Interpret Henderson-Hasselbalch equation and write its significance.
- 12. Write the classifications of carbohydrate and justify the open chain structure of glucose.
- 13. Evaluate the primary and secondary structure, of proteins.
