

2023

Time : 3 hours

Full Marks : 60

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer any five questions.

- ✓ 1. What are nucleic acids ? Explain the various components of nucleic acids with structure. 4+8=12
2. (a) Write the structure and synthesis of Adenine. 6
- (b) Write short notes on Polynucleotide. 6

3. What are electrophoresis and isoelectric point for amino acids. 12
4. (a) Write any two methods for the synthesis of amino acids. 6
- (b) What happens when amino acids are treated with : 6
- (i) Nitrous acid
- (ii) Formaldehyde
5. What are enzymes ? Write its characteristics with examples. 12
6. Explain the mechanism for enzyme action. 12
7. What are polypeptides ? Explain the methods for identification of their N-terminal group. 4+8=12
8. What is paracetamol ? Write its structure and synthesis. 4+8=12

9. What is ibuprofen? Write its structure and synthesis. 4+8=12

10. Write short notes on any **three** of the following: 4×3=12

(a) Zwitterious

(b) Medicinal value of curcumin (Haldi)

(c) Antibiotics

(d) Antimalarials

(e) Analgesics

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