

(203ZOO17)

M.Sc. DEGREE EXAMINATION, APRIL 2018

SECOND SEMESTER

Branch - Zoology

CHEMISTRY OF BIOMOLECULES

(New Syllabus for batch 2017)

Time : 3 Hours

Max. Marks : 70

I. Answer any FIVE of the following :

(5 × 4 = 20)

1. Leukotrienes.
2. pKa.
3. Essential amino acids.
4. Peptide bond.
5. Ramachandran plot.
6. Protein stability.
7. Cot curves.
8. Chargoff's rule.

II. Answer FOUR of the following :

(4 × 12.5 = 50)

9. (a) Write an essay on the classification, properties and functions carbohydrates.

Or

- (b) Describe the structure and functions of prostaglandins and thromboxanes.

10. (a) Discuss the structure, types and properties of peptides and also explain the peptide synthesis by solid-phase technique.

Or

- (b) Write about the biosynthesis of non-essential amino acids.

[P.T.O]

11. (a) Discuss the structure of proteins. Explain the importance of protein conformation and biological activity of proteins.

Or

- (b) Describe the classification, isolation and purification of proteins.

12. (a) Write notes :

- (i) Chemical synthesis of DNA.
- (ii) Watson and crick double helix structure.

Or

- (b) Describe the types, properties and biological functions of Nucleic acids.
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