

2055
Bachelor of Science (FYUP) Second Semester
Bio-Chemistry
Paper: Biomolecules - II

Time allowed: 3 Hours

Max. Marks: 60

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

I. Attempt the following :

- a) What are Aromatic amino acids? Give examples.
- b) What are Biologically active peptides? Give examples.
- c) What are Fibrous proteins?
- d) Give names of purine and Pyrimidine bases?
- e) List different forms of RNA.
- f) What are Bile pigments? (6x2)

UNIT - I

- II. a) Discuss Stereoisomerism in Aminoacids and system for designation.
- b) What are protein and nonprotein amino acids? (2x6)
- III. Discuss physical and chemical properties of amino acids. (12)

UNIT -II

- IV. a) Discuss forces stabilizing structure of proteins.
- b) Write a note on Salting- In and salting- out of proteins. (8,4)
- V. Elaborate on different levels of structural organization in Proteins. (12)

UNIT - III

- VI. a) Write note on Double helical model of DNA.
- b) What are different forms of DNA? Explain. (2x6)
- VII. Write about physical and chemical properties of nucleic acids. (12)

UNIT - IV

- VIII. Discuss about Porphyrin structure and classification. (12)
- IX. Deliberate on chemical nature and physiological significance of bile Pigments. (12)

x-x-x