



Code No. : 016

FACULTY OF SCIENCE
M.Sc. I Semester Examination, Nov./Dec. 2012
BIO-CHEMISTRY
Paper – I (Chemistry of Biomolecules)

Time: 3 Hours]

[Max. Marks: 80

Note: Answer *all* questions from Part A and Part – B. Each question carries 4 marks in Part – A and 12 marks in Part – B.

PART – A

(8×4=32 Marks)

Short answer type :

1. Define essential and non-essential amino acids with examples.
2. Write about Denaturation and Renaturation of proteins.
3. Write short notes on blood group substances.
4. Give the reactions of monosaccharides.
5. Give an account of prostaglandins.
6. Write short notes on bile acids.
7. Describe phosphodiester bond.
8. Write about Watson and Crick model of DNA.

PART – B

(4×12=48 Marks)

Essay answer type :

9. Write short notes on :
 - a) Ramachandran plot.
 - b) Classification of proteins

OR

Give the classification, structure and acid-base properties of amino acids.



10. Write an essay on structural and storage polysaccharides.

OR

Write short notes on :

- a) Glycosidic bond
- b) Hyaluronic acid

11. Write in detail about phospholipids and gangliosides.

OR

Write short notes on :

- a) Steroids
- b) Heme

12. Describe the different types of RNA and different forms of DNA.

OR

Write notes on :

- a) Melting Curves
- b) Denaturation and Renaturation of DNA.