

M.Sc. (Part-I) Semester-I (C.B.C.S. Scheme) Examination

BIOCHEMISTRY

(Biomolecules)

Paper—I

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory.

(2) All questions carry equal marks.

(3) Draw diagrams wherever necessary.

1. Describe structure of protein in detail. 16

OR

(a) Explain denaturation and renaturation of protein. 8

(b) Describe concept of covalent and weak bonds in protein structure. 8

2. Describe structure of glycogen and starch. 16

OR

(a) Discuss importance of glycoproteins and glycolipids. 8

(b) Describe blood group sugar compounds. 8

3. Describe chemistry of bile salts and bile acids. Describe their role. 16

OR

(a) Describe structure of cholesterol. 5

(b) Give structural derivation of testosterone. 6

(c) Discuss occurrence of lipid in living system. 5

4. Describe structure of DNA and give brief account of types of DNA. 16

OR

- (a) Explain structure of transport RNA. 6
(b) Describe isolation of nucleic acid. 5
(c) Discuss separation assay methods for nucleic acids. 5
5. (a) Describe structure of haemoglobin. 8
(b) Describe structure of porphyrins. 8

OR

- (c) Describe importance of porphyrins in living system. 8
(d) Discuss classification and structure of chlorophyll. 8