

Seat No. : _____

AB-117

April-2019

B.Sc., Sem.-II

CC-103 : Biochemistry (Biomolecules Advanced)

Time : 2:30 Hours]

[Max. Marks : 70

1. (A) Write a note on Cellulose. 14

OR

(i) Explain structure and function of Hyaluronic acid. 7

(ii) Write a note on Glycoprotein and proteoglycon. 7

(B) Write any **four** of the following : 4

(a) Draw structure of Sucrose.

(b) Give function of Chitin.

(c) Give role of Chondroitin sulphate A.

(d) Define Oligosaccharides.

(e) How are polysaccharides help to determine the blood group ?

(f) What is inversion ?

2. (A) Explain the classification of protein based on Shape. 14

OR

(i) Describe the Alpha helix and Beta pleated form of protein. 7

(ii) Explain the reaction of Dansyl Chloride with tripeptide. 7

(B) Write the answer in brief : (any **four**) 4

(a) Define denaturation and renaturation of protein.

(b) Give reaction of Carboxypeptidase on polypeptide chain of protein.

(c) Name the protein has role as contractile protein and transport protein.

(d) What is the Salting in and Salting out ?

(e) Give example of quaternary proteins.

(f) List difference bonds in tertiary structure of protein.

3. (A) Write a short note on Lecithin and cephalin. **14**

OR

(i) Explain the properties and function of cerebrosides. **7**

(ii) Write a brief note on prostaglandin. **7**

(B) Answer in brief : (any **three**) **3**

(a) Draw the structure of phosphatidyl serine.

(b) List the name of two colour reaction of Cholesterol.

(c) Give role of gangliosides.

(d) What is triglycerides ?

(e) Give one function of Phospholipid.

4. (A) Write a short note on purines and pyrimidines nitrogenous bases with structures. **14**

OR

(i) Explain how RNA is differs from DNA. **7**

(ii) Explain important features of DNA – (Watson & Crick Model) **7**

(B) Answer the following : (any **three**) **3**

(a) Write the structure of deoxyribose sugar.

(b) What is nucleotide ? Give an example.

(c) What is the length of one turn of DNA ?

(d) Write the name of Rare Base.

(e) Name the linkage between sugar and phosphate in nucleic acid.
