

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.

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