SH-II/PHY/202/C-4/(T)/19

B.Sc. 2nd Semester (Honours) Examination, 2019

PHYSIOLOGY

Paper : SH/PHY/202/C-4(T)

(Chemistry of Biomolecules)

Course ID : 22512

Time: 1 Hour 15 minutes **Full Marks: 25**

The figures in the right hand side margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

1. Answer *any five* questions of the following: 1×5=5

(a) What is liposome?

(b) Define essential fatty acid.

(c) What is isoelectric precipitation?

(d) What is glycosidic bond?

(e) State the clinical importance of inulin.

(f) What do you mean by deamination?

(g) Name any two sulphur containing amino acid.

(h) 'Cholesterol is an amphipathic molecule'. — Explain.

2. Answer *any two* questions of the following: 5×2=10

(a) Write the functional classification of protein. 5

(b) Differentiate between A-DNA and Z-DNA. Classify different types of RNA and state their function. 1+2+2=5

(c) State the important properties of monosaccharides. "Glucose and galactose are epimers of each other". — Explain. 3+2=5

(d) What is neutral fat? Classify lipid with proper example. 2+3=5

3. Answer *any one* question of the following: 10×1=10

(a) What will happen if glucose is heated with strong mineral acid. What are enediols? Distinguish between the chemical structure of starch and cellulose. Why sucrose is a non-reducing sugar. 3+2+3+2=10

(b) Describe the primary structures of protein. Write the classification of Carbohydrates. What do you mean by 'D' and 'L' sugar? 4+4+2=10

———————