U.G. 5th Semester Examination-2021

CHEMISTRY

[PROGRAMME]

Skill Enhancement Course (SEC)

Course Code : CHEM-G-SEC-T-3

(Analytical Clinical Biochemistry)

Full Marks : 40 Time : 2 Hours

The figures in the right-hand margin indicate marks.

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

1. Answer any **five** questions: 2×5=10

   a) What are Lipoproteins?

   b) What is the relation of Cholesterol to Atherogenesis?

   c) Write the function of HDLs?

   d) What is composition of Urine Sediment.

   e) What indication are found in presence of Leukocytes in urine?

   f) What is Glycosuria?

   g) What is Fibrous protein? Give example of Fibrous protein.

   h) What do you mean by denaturation of proteins?

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

   a) Write down the clinical and laboratory signs of diabetes? What are the causes of Hypoglycaemia? 3+2=5

   b) Discuss brief outline for managing diabetes. What do you mean by Insulin Analogues. 3+2=5

   c) Discuss the secondary structure of α-helix? What is peptide bond. Give an example. 3+2=5

   d) Discuss the relation between Coenzyme and cofactor. What is function of NADP or NADPH? 3+2=5

3. Answer any **two** questions: 10×2=20

   a) Discuss advantages and disadvantages of biocatalyst and enzyme. Write the properties of Ribozymes. Indicates the two functions of Ribozymes. 5+3+2=10

   b) i) Discuss the composition of normal and pathological urine with an estimate of the concentration of unanalyzed substances.

      ii) Discuss the composition and function of blood. 5+5=10

   c) Write down the classification of carbohydrate. What is its biomedical importance? Write characterization of polysachharides. 4+2+4=10

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