

B.Sc. Sem I (Hons.) Examination, 2020

Subject: Biochemistry

Paper: GE1

(Biochemistry of cell)

FM: 40

Time: 2hrs

Answer *any eight* of the following questions:

5 x 8 = 40

1. Describe the structure of tRNA with diagram.
2. Mention two names of derivatives of amino acid and briefly describe their biological role.
3. Draw the structure of GC base pairing. Why it is more stable than ATbase pairing?
4. Mention the role of phospholipids in cellular membrane. Give any two examples of phospholipid.
5. Briefly describe the structure of double stranded DNA with a schematic diagram. Mention two unusual DNA structures.
6. What is racemic mixture? Differentiate between reducing and non-reducing sugar.
7. Mention few major roles of cyanocobalamin in living system.
8. Draw the structure of cAMP. Mention its role as a signaling molecule.
9. Write the role of NO in signal transduction.
10. Briefly describe the secondary structure of protein with suitable diagram.