K17U 0618

Reg. No. : .....

Name : .....

IV Semester B.Sc. Degree (CBCSS – Reg./Supple./Imp.) Examination, May 2017
(2014 Admn. Onwards)
Complementary Course in Chemistry
4C04 CHE(BS) : CHEMISTRY (For Biological Science)

Time : 3 Hours

Max. Marks : 32

SECTION – A

Answer **all** questions. **Each** question carries **1** mark.

1. What are enzymes ? Give examples.
2. What is meant by codon ?
3. What are epimers ?
4. Give two examples for fat soluble vitamins.
5. Give the structure of two condensed heterocyclic compounds. **(1×5=5)**

SECTION – B

Answer **any four** questions. **Each** question carries **2** marks.

6. What is meant by Sorenson formalin titration ?
7. Explain the importance of Ca in biological systems.
8. How can you convert glucose into fructose ?
9. Name the disease caused by the deficiency of Vitamins A, C.
10. Explain the electrophilic substitution reactions in pyrrole.
11. What is meant by zwitter ion ? How does isoelectric point influence the structure of amino acid ? **(2×4=8)**

SECTION – C

Answer **any three** questions. **Each** question carries **3** marks.

12. Discuss the structure and uses of cellulose.
13. Explain the synthesis of quinoline.

P.T.O.

14. Give any three tests for proteins.

15. Explain the mechanism of enzyme action.

16. Explain the role of Hb in oxygen transport. **(3×3=9)**

SECTION – D

Answer **any two** questions. **Each** question carries **5** marks.

17. Discuss the structure of DNA. What is the importance of DNA and RNA in biological systems ?

18. a) Explain the sodium potassium pump. **3**
    b) Explain the role of metals in medicine. **2**

19. Discuss the structure and reactions of pyridine.

20. How are proteins classified ? Explain the structure of proteins. **(2×5=10)**
