K18U 0922

Reg. No. : .....

Name : .....

IV Semester B.Sc. Degree (CBCSS – Reg./Sup./Imp.) Examination, May 2018
(2014 Admn. Onwards)
COMPLEMENTARY COURSE IN CHEMISTRY
4C04CHE (BS) : Chemistry (For Biological Sciences)

Time : 3 Hours Max. Marks : 32

SECTION – A

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

1. What is meant by isoelectric point ?
2. What are anomers ?
3. What is the chemical name of vitamin B12 ?
4. Give the structure of cortisone.
5. Name the bases of RNA. **(1×5=5)**

SECTION – B

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

6. How can you convert glucose into fructose ?
7. Explain the Sorenson formal titration.
8. Give one preparation method for quinoline and isoquinoline.
9. Explain the functions of nucleic acids.
10. Hormones are chemical messengers. Why ?
11. Explain the role of metals in medicine giving two examples. **(2×4=8)**

P.T.O.

SECTION – C

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

12. Discuss the substitution reactions of pyridine.

13. Discuss the mechanism of enzyme catalysis.

14. Explain the structure and oxygen binding of Hb.

15. Discuss the structure of proteins.

16. How will you convert fructose into glucose ? **(3×3=9)**

SECTION – D

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

17. Explain the biochemical functions of Zn and Co.

18. Write notes on :
    a) mutarotation
    b) epimers
    c) peptides.

19. a) How are vitamins classified ? **2**
    b) Discuss the structure, sources and deficiency disease of vitamin A. **3**

20. a) Explain the effect of hydrogen bonding in biological systems.
    b) Give any three tests for DNA. **(5×2=10)**
