



K16U 0614

Reg. No. :

Name :

IV Semester B.Sc. Degree (CBCSS – 2014 Admn. – Regular)
Examination, May 2016
COMPLEMENTARY COURSE IN CHEMISTRY
4C04 CHE (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. Give two examples five membered heterocycles.
3. What are anomers ?
4. What is diseases caused by the deficiency of Vitamin B₁₂ ?
5. Name two Zn containing enzymes. (5×1=5)

SECTION – B

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

6. What is the importance of hydrogen bonding in biological systems ?
7. Explain the sorenson formal titration.
8. Give the structure of adrenaline and thyroxine.
9. Explain the electrophilic substitution reaction of thiophene.
10. Explain the term mutarotation.
11. Explain the role of metals in medicine giving two examples. (4×2=8)

P.T.O.



SECTION – C

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

12. Discuss the structure of pyridine.
13. What is meant by biosynthesis of protein ? Explain.
14. Explain sodium-potassium pump.
15. Compare the structure of starch and cellulose.
16. How will you convert glucose into fructose ?

(3×3=9)

SECTION – D

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

17. Explain the structure and functions of haemoglobin and myoglobin.
18. Give the preparation and properties of quinoline.
19. a) How are proteins classified ?
b) Discuss the structure of proteins.
20. a) Explain Michaelis – Menton theory.
b) Write a note on enzyme deficiency diseases.

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(2×5=10)