Roll No. _____ [Total No. of Pages : 2

SVS-N-316 B-18
B.Sc. Vth Semester Degree Examination
CHEMISTRY
Paper - 5.2
(New)

Time : 3 Hours **Maximum Marks : 80**

Instructions to Candidates:

1) Answer ALL the sections A, B and C.

SECTION-A

I. Answer **ALL** the following questions. **(15×1=15)**

1. Name the metal present in Chlorophyll.
2. Which hetero cyclic compound present in haemoglobin.
3. Name the metal present in cobalamine.
4. Give the composition of superphosphate of lime.
5. Draw the structure of cupferron.
6. What is a dye?
7. Write the Haworth structure of sucrose.
8. Name the monomers of Nylon-6,6.
9. Define iodine number.
10. Write structure of ethylacetoacetate.
11. Define cell constant.
12. Write clausius- mossotti equation.
13. What is meant by ionic mobility.
14. Define specific conductance.
15. Define dipole moment.

SECTION-B

II. Answer any **FIVE** of the following questions. **(5×5=25)**

16. What is the role of Na^+ & K^+ ion in biological system explain?
17. Draw the structure and application of
    a. Oxine b. α -nitroso - β -napthol.
18. Explain the synthesis of 4-methyl uracil and antipyrine from ethylacetoacetate.
19. Explain the mechanism of osazone formation.
20. Write a note on polarization.
21. Give an elementary account of Debye-Huckel onsager equation for strong electrolyte.
22. Explain Variation of equivalent conductance and specific conductance with dilution.

SECTION-C

III. Answer any **FOUR** of the following questions: **(4×10=40)**

23. a. Explain the manufacture of urea with neat labelled diagram. (6)
    b. Explain the nitrogen fixation. (4)
24. a. Explain the toxic effect of lead and Arsenic ion on enzymes. (6)
    b. What are the advantages and disadvantages of organic reagent? (4)
25. a. Explain the manufacture of soap by hydrolyser process. (6)
    b. Explain the Wohl degradation of chain shortening of an aldose. (4)
26. a. Explain the following synthesis. (6)
    i. Bismarck brown ii. Alizarin.
    b. How do you convert Glucose to Fructose? (4)
27. a. Discuss the importance of dipole moment in deciding the shapes of water CCl_4. (6)
    b. Write a note on acid-base conductometric titration. (4)
28. a. How do you determine the transport number by Hittorfs method using non attackable electrode. (5)
    b. Write a note on magnetic properties. (5)
