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

SVIS-N 311 A-2K13

B.Sc. VIth Semester Degree Examination

Chemistry

Paper - 6.2

(New)

Time : 3 Hours Maximum Marks : 80

Instructions to Candidates.

*Answer all the **three** sections.*

Section - A

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

1. What is chemical formula of cement?
2. What are raw materials of glass?
3. What are pigments?
4. What are compositions of Borosilicate glass?
5. What is chemical formula of white lead?
6. What is contamination of food?
7. Define chemotherapy.
8. What are antibiotics? Give an example.
9. What is aniline point?
10. Mention two units to express calorific value.
11. What are Galvanic cells?
12. What is Hydrogen over voltage?
13. Why KCL is used as electrolyte in salt bridge.
14. What is liquid junction potential?
15. What are primary cells?

Section - B

II. Answer any **five** of the following: **(5×5= 25)**

16. Explain the setting mechanism of cement.

17. Describe the manufacture of white lead.

18. What are pesticides? Give the synthesis and applications of Gammaxane.

19. Describe the analysis of crude fibres in spices.

20. Discuss the grading of coal.

21. What are standard cells? Describe construction and reactions of weston standard cell.

22. Explain application of EMF measurement in potentiometric Titrations.

Section - C

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

23. a) How cement is manufactured by dry process. **(6)**
    b) What is cement? Give various types of cement. **(4)**
24. a) Describe the manufacture of glass by pot furnace process. **(6)**
    b) Give various constituents of paints. **(4)**
25. a) What is proximate analysis? How is the percentage of ash content and volatile carboneous matter in coal is determined? **(6)**
    b) Give the synthesis and use of Aspirin. **(4)**
26. a) Discuss the thin - layer chromatography in identification of chlorinated pesticides in food products. **(6)**
    b) Explain with examples adulterants and contaminants in food products. **(4)**
27. a) Describe quin hydrone electrode. Explain how pH of a solution be determined using it and write its limitations. **(6)**
    b) Explain the working of lead storage cell with a diagram. **(4)**
28. a) What are concentration cells? Mention types of concentration cells. Derive an expression for the EMF of a concentration cell with transference. **(6)**
    b) Write a note on hydrogen - oxygen fuel cell. **(4)**
