0046391

K19U 2218

Reg. No. : .....

Name : .....

V Semester B.Sc Degree (CBCSS- Reg./Sup./Imp.) Examination,

November-2019

(2014 Admn. Onwards)

CORE COURSE IN CHEMISTRY

5B08 CHE : INORGANIC CHEMISTRY-II

Time : 3 hrs Max. Marks : 40

SECTION - A

Answer **all** questions. Each question carries **one** mark. **(4×1=4)**

1. What are lattice compounds?
2. What is meant by EAN?
3. Give example for ionisation isomerism.
4. What are the toxic effects of lead in biological system?

SECTION - B

Answer any **seven** questions. Each question carries **two** marks. **(7×2=14)**

5. What is meant by cooperativity?
6. What are the possible isomers of $[Co(NH_3)_6Cl_2]^+$?
7. Write two applications of complexes in quantitative analysis.
8. Explain the hybridisation and geometry of $[MnCl_4]^{2-}$
9. What are metalloenzymes? Give examples.
10. Write the general electronic configuration and common oxidation state of the lanthanides.
11. What are the uses of non ferrous alloys?
12. What is van Arkel method?
13. What are the methods for preventing corrosion?
14. Give two consequence of lanthanide contraction.

P.T.O.

SECTION - C

Answer any **four** questions. Each question carries **three** marks. **(4×3=12)**

15. Explain the electrochemical theory of corrosion.
16. What are the advantages of powder metallurgy?
17. Write a note on structural isomerism of complexes.
18. Give the factors influencing corrosion.
19. What are the functions of ca in biological system?
20. Explain the magnetic properties of lanthanides.

SECTION - D

Answer any **two** questions. Each question carries **five** marks. **(2×5=10)**

21. Discuss the application of coordination compounds in qualitative and quantitative analysis.
22. Give an account of the role of sodium and potassium in biological systems.
23. a) Discuss the various steps involved in metallurgy.
    b) What are the applications of alloy steels?
24. Explain the splitting of d orbitals in ocahedral and square planar ligand field. What are the limitations of CFT?
