

This question paper contains 3 printed pages]

Your Roll No.

208

B.Sc. (Prog.)/II

C

CH-201—INORGANIC CHEMISTRY

(Admissions of 2008 and onwards)

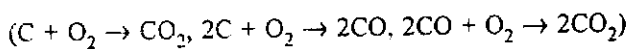
Time : 2 Hours

Maximum Marks : 50

(Write your Roll No on the top immediately on receipt of this question paper.)

Attempt any four questions.

1. (a) Discuss the Ellingham diagram for the oxides of carbon. 4½



- (b) Write a short note on Kroll process. 4
- (c) Write a short note on hydrometallurgy. 4

P.T.O.

2. (a) Explain inert pair effect giving suitable examples. 4½
- (b) What is diagonal relationship ? Give *three* points of similarity between B and Si. 4
- (c) Discuss the structure of diborane. 4
3. (a) Give names, formulae and structures of oxoacids of chlorine. 8
- (b) How is hydroxylamine obtained from NO ? Explain its oxidising and reducing properties. 4½
4. (a) What are silicones ? Discuss some of their important applications. 4
- (b) Write a short note on silicates. 4
- (c) How does fluorine differ from rest of the elements of its group ? Why does HF_2^- exist but HCl_2^- does not ? 4½

5. (a) Discuss biological role of Mg^{2+} ions. 6½
- (b) Describe Na/K pump. 6
6. Write short notes on the source, toxic effects and antidotes of the following :
- (a) NO_x 4
- (b) SO_x 4
- (c) Hg. 4½