

Roll No.

Total Pages : 3

701/MH

C-2050

INORGANIC CHEMISTRY

Paper-I

Semester - VI

(Common for B.Sc., Bio. Tech.)

Time Allowed : 2 Hours]

[Maximum Marks : 26

Note : Attempt any four questions. All question carry equal marks.

1. (i) Explain Symbosis with an example ? Discuss its applications ?
- (ii) Discuss characteristics features of soft acids and hard base ?

2. Discuss in detail HSAB principle.
3. Discuss Hb and Mb and their oxy derivatives :
What is their role in transporting oxygen.
4. (i) How will you differentiate between essential and trace elements.

(ii) Discuss the sources and biological functions of Na^+ .
5. Discuss the structure and bonding in triphospazenes.
6. Discuss silicones, their preparation and important properties.
7. Write note on mononuclear carbonyls and discuss nature of bonding in metal carbonyls.

8. Give the preparation, properties, applications and structure of organoaluminium compound.
9. Attempt all parts :
- (i) Discuss absolute hardness.
 - (ii) Discuss the cooperativity phenomenon in Hb.
 - (iii) Give the use of phosphazenes.
 - (iv) Write a note on homogenous hydrogenation.
 - (v) Give application of organomercury compounds.