**PCB/S/140**

**First Semester B.Sc. in PCB**

**Examination Aug/Sep-2015**

**Inorganic Chemistry-I**

**Time: 3Hours Max. Marks:-80**

**SECTION-A**

**Answer any five questions. (6\*5)**

1. List out the properties of Alkali Metals.
2. Define Nitrogen Group. Write down its properties.
3. Give an introduction about chemistry of transition elements.
4. What do you understand by Chaltogens? Write down its properties.
5. Comment on Crystal field theory.
6. Define Square Planar Complexes.
7. List out the properties of Carbon Group.

**SECTION-B**

**Answer any two questions. (10\*2)**

1. What is Bio-inorganic Chemistry? Discuss its major areas.
2. Write a detail note on the following:
   1. Bridging Carbonyls
   2. Infrared Spectra
3. Answer the following questions:
   1. What are compounds? Discuss charge-neutral binary metal carbonyls.
   2. Write a detail note on Catalysis.

**SECTION-C**

**Answer any two questions. (15\*2)**

1. Discuss plant pipe ferredoxins. What are high potential iron sulfur proteins?
2. Elaborate the concept of following:
   1. Structural Motifs b. Biosynthesis
3. Write a detail note on Chlorophyll and Photosynthesis.