Course Code: 3MSC4 Course: Elective-II (Co-ordination chemistry) Credit: 3 Last Submission Date: April 30 (for January Session) October 31, (for July session)

> Max. Marks:-30 Min. Marks:-11

Note:-attempt all questions.

- Que.1 Explain following:-
 - (a) VBT (valence bond theory)
 - (b) (Crested Field theory)
 - (c) (Molecular orbital theory)
- Que.2 Write magnetic & spectral properties of transition elements.
- Que.3 Write short notes on:-
 - (1) Charge transfer spectra
 - (2) Electronic spectra
- Que.4 Write method of determination of magnetic susceptibility by group and faraday method.
- Que.5 Explain in Van-Velck equation.
- Que.6 Write a note on para- magnetism.
- Que.7 Write a note on orgel diagram.
- Que.8 Write catalysis of organomitalic compounds.
- Que.9 What are boranes? Write structure of it.
- Que.10 Explain metal clunture.