**Shah Abdul Latif University Khairpur**

***Institute of Chemistry***

**Class**: M.S /M.Phil. Inorganic Chem **Subject**: Kinetics & Reaction Mechanism

**Semester**: 1st **Test:** Mid term test **Session:** 2019 **Date**: 17-10-2019

**Marks**: 30 **Time:** 1 h

***Note:*** *Attempt all questions.*

**QNo.1** What are the labile and inert complexes, which factors are responsible for liability and inertness in complexes?

**QNo.2** Describe the all types of inorganic reactions explain types and mechanisms of reaction in coordination compounds with examples?

**QNo.3** Describe mechanism of ligand substitution reaction in metal complexes; explain with examples the substitution reactions in octahedral and square planner complexes?

**QNo**.**4**  Describe the electron transfer (oxidation-reduction) reactions in coordination compounds?

**QNo.5** Explain the following: (1) Inner and outer complexes (2) C.F.T splitting (3) Stability of metal complexes (4) SN1& SN2 reaction (5) Rate law (6) Pairing energy.