### Internal Assessment, Semester IV

#### **Core VIII**

Q 1. What is crystal field theory (CFT) ? Show splitting pattern of the orbitals in tetrahedral crystal field.

Q 2. Explain catalytic properties of coordination compounds.

# Core IX

Write short notes on :

1. Mannich reaction

2. Hoffmann's exhaustive methylation

# Core X

Q 1. What is kohlrausch's law ? What are the applications of this law ?

Q 2. What is electrochemical series ? What are the applications of this series ?

### Semester IV, GE

Q1. What is difference between molecularity and order of reaction ?

Q2. Derive first order rate expression for a chemical reaction.