M.Sc. DEGREE EXAMINATION, EVEN SEMESTER 2021 I Year II Semester Inorganic Chemistry - II

Max.marks :25

Answer any **FIVE** questions $(5 \times 5 = 25)$ Marks

- 1. Classify Fe_3O_4, Mn_3O_4 and NiFe₂ O_4 as spinels or inverse spinels
- 2. Illustrate, with examples, what is meant by oxidative addition.
- 3. Discuss the mechanism of oxo process using $HCo(CO)_4$ as catalyst.
- 4. Explain photosubstitution reaction using a suitable example.
- 5. Differentiate between photonuclear and thermonuclear reactions.
- 6. Discuss how radioactive tracers are used in the diagnosis and treatment of diseases.
- 7. Explain with suitable examples how magnetic materials are classified