



# THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2<sup>nd</sup> Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

## Backlog Arrear Examination, March 2021

CHE 2524 CHE CHS 2514

INORGANIC CHEMISTRY-IV

Max : 75mks

Time : 3Hrs

Answer any five the questions

(5 x 15=75)

1. a) Describe the extraction of nickel from its ore.  
b) Explain the magnetic properties of first transition elements. (10+5)
2. Explain the stereoisomerism in coordination compounds.
3. Explain crystal field theory as applied to octahedral complexes and discuss the applications of CFT(10+5)
4. Describe the preparation and importance of the following compounds.  
i) Prussian blue      ii) Nessler's reagent      iii) tungsten blues(3x5)
5. Give an account on silicones and polyphosphazenes (8+7)
6. a) Explain Werner's theory of coordination compounds.  
b) Point out the difference between first and second transition elements.(5+10)
7. a) Explain JahnTeller effect  
b) Give the special characteristics of inorganic polymers (8+7)