

QP Code: D143796		Total Pages: 1	Name:
			Register No.
FOURTH SEMESTER (CUFYUGP) DEGREE EXAMINATION, APRIL 2026			
POLYMER CHEMISTRY			
PCH4CJ203: INORGANIC CHEMISTRY-II			
2024 Admission Onwards			
Maximum Time :2 Hours			Maximum Marks :70
Section A			
All Questions can be answered. Each Question carries 3 marks (Ceiling : 24 Marks)			
1	What are pseudo halogens? Give two examples.		
2	What are isopoly anions? Give one example of molybdenum.		
3	What are chelates? Give an example.		
4	What is ambidentate ligand? Give an example.		
5	Define trace metal ions with two examples.		
6	Define metalloenzyme. Name a zinc containing enzyme.		
7	Why is Tl^+ more stable than Tl^{3+} ?		
8	Which oxide of nitrogen is paramagnetic? Why?		
9	Why do actinides show greater range of oxidation states?		
10	Briefly explain the ion exchange method of separation of lanthanides.		
Section B			
All Questions can be answered. Each Question carries 6 marks (Ceiling : 36 Marks)			
11	Explain structure of oxoacids of phosphorus.		
12	Explain colour and magnetic properties of transition metal ions.		
13	Describe electronic configuration and general properties of actinides.		
14	Discuss geometrical and optical isomerism in octahedral complexes.		
15	Explain the sodium–potassium pump and its biological significance.		
16	Describe structure of chlorophyll. Write a short note on role of chlorophyll in photosynthesis.		
17	Explain oxygen transport by hemoglobin.		
18	Explain Werner's coordination theory		
Section C			
Answer any ONE .Each Question carries 10 marks (1x10=10 Marks)			
19	Discuss preparation and structure of diborane, boric acid, borazine and boron nitride.		
20	Explain Crystal Field Theory. Discuss splitting of d-orbitals in octahedral and tetrahedral complexes.		