

18. Discuss the toxic effect of lead, cadmium, Huminium and copper metals.
 19. Explain the M-C bonds with reference to organometallics.
 20. Explain Hydroformylation reactions of coordinated organometallic ligands.
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S.No. 6224

P 16 CH 21

(For candidates admitted from 2016–2021 Batch)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2023.

Chemistry

INORGANIC CHEMISTRY – II

Time : Three hours

Maximum : 75 marks

PART A — ($10 \times 2 = 20$)

Answer ALL questions

1. Define nucleation? Give an example.
2. What are the disease causes by deficiency of calcium and magnesium.
3. Write the names of different forms of cobalamine
4. Give the biological importance of copper containing proteins.
5. Define radiopharmaceuticals? Give example.
6. Write any two mode of action of gold containing drugs Give example.

7. What is Carbene? Give an example.
8. Write the uses of metal carbene complexes.
9. How the addition reactions are carried out by organo metalics? Give an example.
10. Give the insertion reactions of organometalics.

PART B — (5 × 5 = 25)

Answer ALL questions, choosing either (a) or (b)

11. (a) Write a note on biomineral role of calcium carbonate.

Or

- (b) How the ion Pumps maintain the active transport system?

12. (a) Write the role of transaxial ligand to determine the reactivity of Co-C bond.

Or

- (b) Write a short note on Cytochrome? Write it functions.

13. (a) How drugs act by binding at the metal sites of metallo enzymes.

Or

- (b) Write a note on lithium in psychopharmacological drugs.

14. (a) Write a note on arene organometallic complex.

Or

- (b) Discuss the applications of organometallic complex in medicine.

15. (a) Discuss the hydrogenation of olefin by using Wilkinson's Catalyst.

Or

- (b) Explain oxidative addition and reductive elimination of organometallics? Give example.

PART C — (3 × 10 = 30)

Answer any THREE questions

16. Briefly discuss the photosynthesis process of photosystem I and II.
17. Discuss copper containing proteins? Write its biological importance.