

Unit IV

No. of Printed Pages : 04

Roll No.

7. (a) Explain the structure of valinomycin and nonactin and their significance in ligand therapy.
- (b) Give some example of carcinostatic ligands and their beneficial activity.

14,6

8. (a) How N, N and S sites show interaction with tumor cell ? Explain the activity and mechanism of interaction of thiosemicarbazone with cancer cells.
- (b) Give the details of aspirin as chelating agent.
- (c) Explain hemoglobin structure and interference in oxygen transport system.

6,6,8

DD-293

M. Sc. EXAMINATION, Dec. 2018

(Fourth Semester)

(Re-appear Only)

CHEMISTRY

CH606B

Inorganic Medicinal Chemistry, Inorganic
Special-IV

Time : 3 Hours]

[Maximum Marks : 100

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Write a note on Mechanism of metal ion induced toxicity.
(b) Biochemical role of iron metal.
(c) What is the principle of avoiding or minimising the drug metal interaction ?
(d) Give correlation between LD₅₀ values of toxic metals and their different chemical parameters. **7,6,3,4**
2. (a) What is bioamplification ? Explain with suitable example. How does Hg metal undergoes this phenomena ?
(b) Give the interaction between orally administered drugs and metal ions in guts.
(c) Write a note on chelating drugs containing sulpha hydra group. Give at least two example of it. **4,6,10**

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Unit II

3. Explain the following : **10,10**
(a) Mechanism of anticancer activity of platinum complexes.
(b) Polyethylene amine as chelating drugs.
4. Write notes on the following : **10,10**
(a) Explain Boron Neutron Capture Theory in detail.
(b) Explain the activity of robust and labile metal complexes.

Unit III

5. Give the general structure of [Ru(chel)₃]²⁺ as luminophores. How it helpful in DNA binding ? Why transition element are most suitable for this purpose ? **20**
6. Write notes on the following : **8,4,8**
(a) Hypo and hyper activity of thyroids
(b) Role of lithium as drugs
(c) Alkali and alkaline earth metals disorder.

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P.T.O.