

78067

M.Sc. 4th Semester (CBCS Scheme)

Examination, May-2023

CHEMISTRY

Paper-17CHE24GA3

Inorganic Special-VI

Time allowed : 3 hours]

[Maximum marks : 80

*Note : Attempt any five questions in all, selecting at least one question from each section. Question No. 1 is compulsory. All questions carry equal marks.*

1. Answer the following in short : 2 each
- (a) Name some metal complexes which are used as antiviral drugs.
  - (b) What are the side effects of Platinum complexes ?
  - (c) How the heavy metals detoxify in human body ?
  - (d) How do you cure Hypo-activity of thyroid ?
  - (e) What are the effects of lead on our environment?
  - (f) What do you mean by antiviral activity of chelating agents ?
  - (g) What are fat soluble vitamins ?
  - (h) Define Radiopharmacology.

**Section-A**

2. (a) Discuss the anticancer activity of platinum complexes ? What are the side effects of Pt-complexes?
- (b) Write a note on Rhodium complexes as carcinostatic agents. 8,8

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3. (a) How the polyaminocarboxylic acids and polyethylene amines used as chelating drugs ?
- (b) Discuss the role of zinc in tumour growth. 10,6

**Section-B**

4. (a) What are the use of iodine as trace element ? Explain its drug action in hypo and hyper activity of thyroids ?
- (b) Write an explanatory note on drugs applied for the dental caries. 8,8
5. (a) What are the disorders that arises due to imbalance of alkali metals ?
- (b) Discuss the mechanism of interaction between orally administered drug and metal ion in guts. 8,8

**Section-C**

6. (a) How heterocyclic thiosemicarbozones shows carcinostatic activity, explain ?
- (b) Discuss in brief antiviral activity of chelating agents. 8,8
7. (a) What do you mean by ligand induced toxicity ? How it works in the beneficial form ?
- (b) Discuss some macrocyclic compounds used as antibiotic ligands. 8,8

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## Section-D

8. (a) What is the nutrition of calcium and how we can improve our health ?
- (b) Write brief note on Vitamin-D and biomineralization. 6,10
9. Write a brief note on the following : 8,8
- (a) Iodine-31
- (b) Radiopharmacology