42007

M. Sc. Chemistry 4th Semester
Examination – May, 2019

INORGANIC SPECIAL-VI

Paper : CY(H)-403(a)4287

Time : Three hours]   *[Maximum Marks : 80*

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

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

1. Answer the following in short : $2 \times 8 = 16$

   (a) Name some of the carcinostatic ligands.

   (b) How do you cure hypo- activity of thyroids ?

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   (b) How we can explain the probable mechanism of macrocyclic antibiotics ?   8

   (a) How the ligands interfere with hemoglobin in the oxygen transport system.   8

   (b) What do you mean by ligand induced toxicity ? How it works in the beneficial form ?   8

SECTION – D

. (a) Discuss the diseases that arises due to deficiency of vitamin-D and how they can be cured ?   10

   (b) Explain the nuclear medicine and gallium scan.   6

. (a) What are antioxidant and discuss their harmful effects ?   8

   (b) Write a brief note on radio pharmacology and Tc-99m   8

(c) What are the diseases that appear due to deficiency of the Copper ?

(d) Name some metal complexes which are used as antiviral drugs.

(e) What do you mean by biomineralisation ?

(f) What do you mean by macrocyclic antibiotic ligands ?

(g) Explain the radioiodine-131.

(h) What are the applications of Indium scan ?

SECTION – A

2. (a) What are the symptoms and diseases that arises due to Zinc deficiency and how this deficiency is recovered in human beings ? 8

(b) Discuss the mechanism of anticancer activity of gold complexes. 8

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3. (a) Discuss the mechanism of anticancer activity of CuKTS complexes.

(b) Write a note on Rhodium complexes carcinostatic agent ?

SECTION – B

4. (a) Discuss the mechanism of anticancer activity of selenium with its essentiality in living system.

(b) Discuss the clinical disorder regarding the alkali and alkaline earth metals and their remedies.

5. (a) What are the problems regarding the thyroid gland and how we can cure them ?

(b) Write a note on drugs applied for the dental caries.

SECTION – C

6. (a) How heterocyclic thiosemicarbozones shows carcinostatic activity, explain ?

P. T. O.