

Roll No.

Total No. of Questions : 10]

[Total No. of Pages : 02

B.Pharmacy (Sem. - 1st)

PHARMACEUTICAL CHEMISTRY - I
(Inorganic Pharmaceutical Chemistry - I)

SUBJECT CODE : PHM - 1.1.4 (2K9)

Paper ID : [D0147]

[Note : Please fill subject code and paper ID on OMR]

Time : 03 Hours

Maximum Marks : 80

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.
- 3) Attempt any **Three** questions from Section - C.

Section - A

Q1)

(15 x 2 = 30)

- a) What are hard acids and bases? Give examples.
- b) Differentiate between complexing agent and chelating agent.
- c) What is Lugols solution?
- d) What are protectives?
- e) What is the use of Handerson Hasselbalch equation?
- f) Define buffers.
- g) Differentiate between laxatives, cathartics and purgatives.
- h) Define acidosis.
- i) What are the uses of zinc sulphate?
- j) What is the composition and use of kaolin?
- k) Define astringent.
- l) What are anticaries agent?
- m) What is the role of hydrogen peroxide?
- n) What is the composition of milk of bismuth?
- o) Give two pharmaceutical applications of buffer.

Section - B

(4 × 5 = 20)

- Q2)** Write down the method for the assay of boric acid.
- Q3)** Write down the limit test for arsenic giving chemical reactions.
- Q4)** Describe various preservatives used in pharmaceuticals.
- Q5)** Write short notes on saline cathartics.
- Q6)** What are the different mechanisms by which antimicrobial agents acts?

Section - C

(3 × 10 = 30)

- Q7)** What are topical agents? Classify them with suitable examples. Explain their mechanism of action.
- Q8)** What are the various sources of impurities in pharmaceuticals? Explain the limit test of lead.
- Q9)** What are radiopharmaceuticals? Mention the units of radioactivity. Give two examples of radiolabelled iron preparations.
- Q10)** What are major intracellular and extracellular electrolytes? Discuss the physiological role of sodium.

