

N.B. (1) All the questions are **compulsory**.(2) Draw **diagrams** wherever **necessary**.

Marks

Q.No1

- A] Answer the following brief ;
- Give an example of an antidote used in copper poisoning.
 - Explain the use of α -particles.
 - What do you mean by buffer capacity?
 - What is achlorhydria?
 - Explain the function of hypophosphorous acid.
 - Talc can be used as filter aid/ protective agent. Explain
 - Explain radio-nucleotide purity.
 - What is the role of fluoride in dental products?

8

B]

- What are the ideal properties of antacids?
- What is hyponatremia? What are the cause and symptoms of it?

4

C]

- Give an example of topical protective agent .
- What is *miliequivalence*?
- Give an example of gastrointestinal protective agent

3

Q.No2

- A] What are the side effects of antacid therapy? How can you overcome the side effects? 4
- B] Write a note on oxygen gas. 3
- C] 4
- Write uses of H_2O_2 and $KMnO_4$ solutions.
 - Write note on cyanide poisoning and its treatment

Q.No3

- A] Write a note on iron-protein complexes. 2
- B] Discuss various types of dentifrices with example. 2
- C] *HS*
- Write a note on radiation dosimetry.
 - Write a note on radioactive Fe.

Q.No4

- A] What are different methods of removing permanent hardness? 4
- B] Answer the following (any two) 4
- What are the ideal properties of tablet diluent?
 - Explain the need of lubricant in a tablet.
 - What are the various parameters required for suspending agents?
- C] What are applications of radio pharmaceuticals. 3

Q.No5

- A] Discuss the importance of copper and zinc as essential and trace ions. 4
- B] Write in brief on various application of chelating agents. 3
- C] Discuss water as universal solvent. 4

Q.No6

- A] Answer the following (any two) 6
- Write a note on physiological role of potassium and phosphate.
 - Write a note on systemic alkalosis and measures to rectify.
 - What are essential and trace ions? Give examples.
- B
- Give the various mechanism of action of topical anti-infective agents. 3
 - Write a note on respiratory stimulants 2