

Please check whether you have got the right question paper.

- N.B:
1. All questions are compulsory.
 2. Draw the diagrams wherever necessary.
 3. Draw the diagrams/ structures wherever necessary

Q.1) A) Answer the following (*Any five*)

05

1. What is hyperchlorhydria
2. Define the terms Miliequivalent
3. Name the buffer suitable for ophthalmic, nasal and external preparations and contraindicated in parenteral solutions
4. Give any two sclerosing agents
5. Explain the role of penicillamine in copper poisoning
6. Give the example of astringent

B) Match the following:-

05

A		B	
a	Cyanocobalamin Co ⁶⁰	i	Principal Intracellular anion
b	NaHCO ₃	ii	Topical agent
c	ZnO	iii	Flatulence
d	HPO ₄ ⁻²	iv	1.8 gm/kg
e	Na ⁺	v	Diagnostic agent for Pernicious anaemia

C) Answer in detail

05

1. Explain why sodium fluoride called as a general protoplasmic poison.
2. Elaborate the term "Radiation Dosimetry"

Q.2) A) Discuss the detailed mechanism of antimicrobial agents. Support your answer by giving suitable examples. 03

B) Write short note (*any four*)

08

- | | |
|-----------------------------------|--------------------------------------|
| i. Combination therapy of antacid | iii. Chelating agents |
| ii. Oxygen as a inhalant | iv. Treatment of metabolic alkalosis |
| v. Respiratory stimulant | |

Q.3) A) Discuss the role of iron and chromate radioisotopes as diagnostic agents.

04

B) Discuss the advantages of combination therapy of electrolyte giving two examples.

04

C) Write the different sources of fluoride and its application to prevent tooth decay.

03

Q.4) A) Classify cathartics and elaborate on saline cathartics. Give suitable examples.

04

- B) Write a note on (any two) 04
i. Diluent ii) Preservatives iii) Suspending agent iv) Lubricant

- C) Discuss the various biological effects of radiations 03

- Q.5) A) What are two major buffer systems? Explain any one in detail 04

- B) Give mechanism of action of the following (any four) 04

- i. Aluminium hydroxide gel and magnesium trisilicate in combination, ii) Sodium nitrite,
iii) Boric acid, iv. Sodium Iodide I¹³¹, v) Hydrogen peroxide

- C) What are sequestering agents? Give the structure and role of disodium EDTA. 03

- Q.6) A) What are protectives? Explain role of talc and calamine as protective. 03

OR

- A) What are protein precipitants? Explain role of protein precipitants.

- B) Discuss in detail the role of various proteins associated with absorption, storage and transport of iron in the body 04

- C) Explain the following terms with suitable examples (Any two) 04

- i) Anaesthetic, ii) Emetics, iii) Hypernatremia, iv) Rebound acidity