

**First Semester Examination for the Degree  
of Bachelor of Pharmacy**

**PHARMACEUTICAL CHEMISTRY – I  
(INORGANIC)**

**1 - T - 2**

Time : Three Hours ]

[ Max. Marks : 80

- N. B. : (1) Question No. 1 is Compulsory.  
(2) Solve any Four questions from the remaining.  
(3) Draw neat labeled diagram wherever necessary.  
(4) Discuss the reaction, mechanism wherever necessary.

1. Solve any **Five** of the following :-

- Give the importance of limit tests in Pharmaceutical preparations.
- Write in brief about the acidosis and alkalosis.
- Enlist various inorganic compounds used as gastrointestinal agents along with examples.
- Give the role of fluorides as anticaries agents.
- Write in brief about hypokelamia and hyperkalemia.
- Explain, how acid-base balance of the body is maintained ?
- Give the various WHO formula of oral rehydration solution. 4×5=20

- Write in detail about the various theories of acids and bases and derive the equation  $p^H + p^{OH} = 14$ . 15
- Write note on Any **Three** of the following :-
  - Modified Guitzet's Test.
  - Sterile Water for Injection.
  - Respiratory Stimulants.
  - Pharmaceutical Buffers. 3×5=15
- Define the term Impurity. Give the various sources of Impurities along with its effect. 7
  - Write in detail about the limit test of Iron. 8
- Define the term expectorant and enlist the various inorganic compounds which are used as expectorants and write in detail about any two compounds. 7
  - What do you mean by Topical agents ? Classify the various topical agent and give the mechanism of action of anti-microbial agents. 8
- What are major intra and extra-cellular electrolytes ? Write in detail about the electrolyte combination therapy. 7
  - What are radio pharmaceuticals ? Explain the role of Barium Sulphate as radio-opaque-contrast media along with applications of radiopharmaceuticals. 8

7. Write note on any **Three** of the following :—

- (a) Antidotes
- (b) Dentifrices
- (c) Saline Cathartics
- (d) Antioxidants.

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