

NTK/KW/15–6970

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

PHARMACEUTICAL CHEMISTRY – I

(INORGANIC)

Paper – 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.

1. Solve any **Five** of the following :—
- (a) What is Barium Sulphate Reagent ? Give its composition and uses.
 - (b) Write in brief about cyanide poisoning and the compounds used for the treatment of cyanide poisoning.
 - (c) Define the term electrolyte ? And give the composition of Oral Rehydration Solution.
 - (d) Explain the term Achlorhydria and give its treatment.
 - (e) What is an Antacid ? Give the ideal properties for an antacid and enlist the various inorganic Antacid compounds.
 - (f) Write in brief about the saline cathartics.

NTK/KW/15–6970

Contd.

2. (a) What are topical Agents ? Classify them by giving suitable examples and also discuss the mechanism of action of Inorganic Antimicrobial Agents. 8
- (b) Write in brief about the measurements of Radioactivity and give the applications of Radio-Pharmaceuticals. 7
3. (a) Explain the role of different intracellular and Extracellular ions present in the body. 8
- (b) What do you mean by dental caries. Explain the role of fluorides in dental caries and enlist the various dentifrices. 7
4. (a) Write in detail about the various concepts of Acids and Bases with special emphasis on HSAB concept and also give the importance of Acids and Bases. 8
- (b) Derive the equation $p^{\text{H}} + p^{\text{OH}} = 14$ 7
5. (a) Define the term Impurity. Write in detail about the various sources of Impurities. 8
- (b) Give the principle, reaction, procedure and use of various reagents in the limit test for Iron. 7
6. (a) What do you mean by hardness of water ? Write in brief about the various techniques of softening of water. 8
- (b) Write in detail about the pharmaceutical water with special emphasis on sterile water for Injection. 7

7. Write notes on any **three** of the following :—

(a) Antidotes

(b) Antioxidants

(c) Buffers

(d) Expectorants and Emetics.

5 × 3 = 15