# B. Pharm. First Semester (C.B.S.) Examination <br> PHARMACEUTICAL CHEMISTRY-I (Inorganic) <br> Paper-2 (1T2) 

Time : Three Hours]
[Full Marks : 80
N.B. :- (1) Question No. $\mathbf{1}$ is compulsory.
(2) Solve any FOUR questions from remaining.
(3) Draw neat labeled diagram wherever necessary.

1. Solve any FIVE of the following :-
(a) Write the principle for the Limit test of chloride.
(b) Enlist various inorganic compounds used as gastrointestinal agents along with examples.
(c) Write the role of fluorides as anticaries agents.
(d) Explain, how acid-base balance of the body is maintained.
(e) Write the various WHO formula of oral rehydration solutions.
(f) Define buffer capacity. Write its importance.
(g) What do you mean by acidosis and alkalosis? $4 \times 5=20$
2. (a) Define the term Impurity. Give the various sources of Impurities along with its effect. 7
(b) Write in detail about the limit test of Iron. 8
3. Write in detail about the various theories of acids and bases and derive the equation $\mathrm{p}^{\mathrm{H}}+\mathrm{p}^{\mathrm{OH}}=14$.
4. Write notes on any THREE of the following :-
(a) Antidotes
(b) Dentrifrices
(c) Saline Cathartics
(d) Antioxidant.
$5 \times 3=15$
5. (a) What are major intra and extra cellular electrolytes? Write in detail about the electrolytes combination therapy.
(b) What are radio pharmaceuticals? Explain the role of Barium sulphate as radio-opaque contrast media along with applications of radiopharmaceuticals.
6. (a) Define the term expectorant and enlist the various inorganic compounds which are used as expectorants and write in detail about any two compounds.
(b) What do you mean by Topical agents? Classify the various topical agents and give the mechanism of action of antimicrobial agents.
7. Write notes on any THREE of the following :
(a) Respiratory stimulants
(b) Pharmaceutical Buffers
(c) Modified Guitzet's test
(d) Sterile Water for Injection. $5 \times 3=15$
