

First Year B.Pharm Degree Examinations - August 2014

## **(2012 - Scheme)**

### **PHARMACEUTICAL CHEMISTRY - I** **(Inorganic & Physical Chemistry)**

**Time: 3 Hours****Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

**Essay****(3x10=30)**

1. Explain the preparation and assay of Boric acid and Zinc chloride. Mention their pharmaceutical uses
2. What is electrolyte combination therapy. How the physiological acid base balance is maintained
3. Enlist the ideal qualities of an antacid. Explain the preparation, assay and side effects of sodium bicarbonate

**Short notes****(14x5=70)**

4. Chemical formula and uses of dimethicone and bismuth carbonate
5. Explain the procedure involved in the limit test for iron giving reason for the addition of each reagent. What is the importance of iron limit test
6. What are dentifrices. List example and uses
7. What is the use of Medicinal Nitrous oxide. Write its method of preparation
8. Explain the physiological role of copper and iron
9. How do you prepare Ferrous sulphate? Mention its chemical properties and uses
10. Sodium bisulphite and bentonite as pharmaceutical aids
11. Uses of iodine-131 and cobalt-58
12. Describe inorganic antidotes and their uses
13. Define and list the importance of refractive index & partition coefficient in pharmaceutical chemistry
14. Debye-Huckel theory
15. How do manufacturing process and raw materials used can be a source of impurity in pharmaceutical substances. Explain with examples
16. Explain EDTA and its importance in pharmaceutical analysis giving examples.
17. What are respiratory stimulants. Mention an example, chemical formula and uses