

**QP CODE:101006**

**Reg.No: .....**

First Year B.Pharm Degree Supplementary Examinations - September 2013

**(2010 - Scheme)**

**PHARMACEUTICAL CHEMISTRY - I**

**(Inorganic & Physical Chemistry)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

**Essay**

**(3x10=30)**

1. Define antimicrobials and mention their mode of action. Enumerate the official antimicrobials and give the method of preparation and the assay of chlorinated lime.
2. Explain briefly the limit test for heavy metals and chlorides.
3. What are the major intra and extra cellular electrolytes. Explain the role of sodium and calcium in the body.

**Short notes**

**(14x5=70)**

4. Define antidote. How sodium thio-sulphate ( $\text{Na}_2\text{S}_2\text{O}_3$ ) is used in some specific poisoning.
5. Differentiate between purified water and water for injection.
6. Explain the physiological acid-base balance and its importance.
7. Povidone-iodine.
8. Discuss about clinical applications, handling and storage of radio pharmaceuticals.
9. Why ammonia and citric acid is used in the limit test for Iron.
10. Explain the preparation, uses and assay of aluminium hydroxide gel.
11. Mention the structure and applications of EDTA in pharmacy.
12. What are dentifrices. Explain the assay and medicinal uses of sodium fluoride.
13. Define impurity. List out the sources of impurities in pharmaceutical substances.
14. Name the official compound of calcium with their chemical formula and uses.
15. Define the following terms.
  - Partition co-efficient
  - Osmotic pressure
16. Distinguish between physical adsorption and chemisorption.
17. Ideal behavior of gases.

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