First Year B.Pharm Degree Supplementary Examinations - September 2013

## (2010 - Scheme)

### PHARMACEUTICAL CHEMISTRY - I

#### (Inorganic & Physical Chemistry)

## Time: 3 Hours

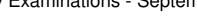
- Answer all Questions.
- Write equations wherever necessary.

#### Essay

- 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

- 4. Define antidote. How sodium thio-sulphate  $(Na_2S_2O_3)$  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.



# Total Marks: 100

(14x5=70)

(3x10=30)

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### QP CODE:101006

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