QP	CODE:101006	Reg.No:

First Year B.Pharm Degree Supplementary Examinations - March 2014

## (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. Mention the importance of physiological acid base balance with a detailed note on the electrolytes used in acid base therapy.
- 2. Define adsorption. Describe the adsorption isotherms and various factors influencing adsorption.
- 3. List the importance of limit test and explain how it is performed in case of iron and arsenic.

Short notes (14x5=70)

- 4. What are colligative properties. Explain Debye-Huckle theory.
- 5. Discuss on surface tension and what is its importance in Pharmacy.
- 6. Explain briefly the following co-ordination compounds
- Dimercaprol
  Penicillamine
- 7. Mention the medicinal gases commonly used. How nitrous oxide is assayed.
- 8. Define the term astringent. Add a note on alum and zinc chloride.
- 9. Classify antacids and add a note on milk of magnesia.
- 10. Discuss on any two radio pharmaceutical preparations with its clinical application.
- 11. Define refractive index. Explain the working of Abbe refractometer.
- 12. What is the role of fluorides as anti-carries agent. Explain with suitable examples.
- 13. Explain the preparation, assay and uses of hydrogen peroxide.
- 14. Describe the assay of calcium gluconate.
- 15. Explain optical activity. Describe the working of polarimeter.
- 16. Sclerosing agents.
- 17. Complete the following equation:
  - $2KMnO_4 + 3H_2SO_4 =$
  - $Na_2B_4O_7 + H_2SO_4 + 5H_2O =$
  - NaOH +  $H_2CO_3$  =
  - NH<sub>4</sub>Cl + HCHO =
  - NaF+HCl =

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