Q.P. CODE: 1106 **Reg. No:** .....

First Vear B. Pharm Degree Supplementary Examinations, April 2012

Pharmaceutical Chemistry - I

(Inorgnaic & Physical chemistry)

Time: 3 Hrs **Max. Marks: 100**

- Answer all questions
- Write equation wherever necessary

Essay: **(2x10=20)**

1. Give an account on various sources of impurities in Pharmaceutical substances.
2. Write a note on measurement of radioactivity. Mention the Clinical applications of I^{131}, Co^{58}. What are the precautions that should be taken in their use.

Short notes: **(10x5=50}**

3. Write the assay of chlorinated lime.
4. Explain the limit test for Iron.
5. Write a short note on the electrolytes used for replacement therapy.
6. What are adsorption isotherms. Explain the Freundlich's adsorption isotherms.
7. Define optical activity. Explain the working of polarimeter.
8. Explain Debye-Huckel theory.
9. Explain the various methods used and the importance of quality control.
10. What is antidote. How sodium nitrite is used in some specific poisoning
11. What are the qualities of an ideal antacid and how the acid neutralizing capacity is determined.
12. Complete and balance the following equations.
    - $Na_2S_20_3 + 12$ --7
    - $Ca(OH)_2 + Na_2C0_3$ --7
    - $NaF + H_20$ --7
    - $KMn0_4 + C_2HsOH$ --7
    - $Fe + H_2S0_4$ --7

Answer Briefly: **(10x3=30)**

13. Define parachor and partition co-efficient.
14. What are colligative properties. Define Raoult's law.
15. What are antacids. Classify them with examples.
16. How do you test for carbon monoxide in oxygen.
17. Explain the role of stannated HCI, potassium iodide and mercuric chloride in the limit test for arsenic.
18. How do you prepare ferrous gluconate.
19. Write the Mechanism of action of saline cathartics.
20. Define Adsorption, Chemisorption, physical adsorption.
21. Write the Uses of the following compounds:
    - Ammonium Chloride
    - Povidone Iodine
    - Potassium bromide
22. Give the uses and storage conditions of nitrous oxide and oxygen.