QP CODE: 1106 **Reg. No: .....**

FIRST YEAR B.PHARM DEGREE EXAMINATION, AUGUST 2011
PHARMACEUTICAL CHEMISTRY-I
(Inorganic & Physical Chemistry)

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

- **Answer all questions**
- **Write equations wherever necessary**

Essay **(2x10=20)**

1. Discuss the limit test of arsenic and sulphate.
2. Write notes on the method of preparation, assay and uses of aluminium hydroxide gel and ammonium chloride.

Write Short notes on **(10x5=50)**

3. Give the method of preparation and assay of hydrogen peroxide.
4. Explain the assay of carbon-di-oxide
5. Explain the Monograph of LP.
6. Write a note on physiological role of iron and copper.
7. Describe the Langmuir adsorption
8. Define surface tension and parachlor.
9. Derive the kinetic gas equation.
10. Define refractive index. Explain the working principle of Abbe's refractometer.
11. Write the method of preparation, assay and uses of ferrous sulphate.
12. Complete and balance the following equations:
    - Boric acid + Glycerol -7
    - $Ca(OCl)Cl + H_20 + CH_3COOH$ -7
    - $CuS0_4$ + KI -7
    - NH_4Cl + HCHO -7
    - $CaCh + Na_2C0_3$ -7

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

13. Define dipole moment and give its applications.
14. Explain the factors influencing adsorption
15. Give the reasons for the following
    - Use of lead acetate cotton wool in the limit test for arsenic
    - Maintenance of pH in the assay of magnesium sulphate.
16. Write the test for purity ofbentonite.
17. Write a note on povidone iodine
18. Explain the pharmaceutical applications of the following radio pharmaceuticals
    - Sodium Iodide (I^{131})
    - Ferric Citrate (Fe^{59})
    - Sodium phosphate (P^{32})
19. What happens when
    -)Boric acid is heated at 100°C •) $C0_2$ is passed through lime water
20. What is radio activity and half life period. Give the storage conditions of radio pharmaceuticals.
21. What are sclerosing agents. Give examples.
22. Write a note on alum.

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