

QP CODE:101006 (Old Scheme)

Reg.No:

First Year B.Pharm Degree Supplementary Examinations , April 2015

(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 radioactivity and nuclear reaction. Mention the hazards, storage conditions, precautions and clinical applications of I^{131} and Co^{58} .
2. What are the advantages of combination therapy of antacids. Explain the method of preparation, assay and uses of aluminium hydroxide gel and sodium bicarbonate.
3. Define a real and an ideal solution. What are colligative properties. Mention a method to analyze the depression of freezing point.

Short notes

(14x5=70)

4. Discuss on the importance of antidotes in poisoning.
5. Explain the theory and applications of co-ordination compounds.
6. Explain why gases deviate from ideal behavior.
7. Discuss on Dentifrices
8. Explain the method of preparation, assay and uses of any one electrolyte used for replacement therapy.
9. Explain the physiological role of sodium and chloride.
10. How assay of oxygen is carried out.
11. Explain the assay of boric acid with necessary reactions.
12. What is the physiological role of iodine and explain its official solutions.
13. Discuss on refractive index and how it is measured.
14. Explain electrolyte combination therapy and oral rehydration salt.
15. Discuss the mechanism of action and uses of protectives with a note on calamine.
16. Mention the principle behind the limit test for iron and sulphate.
17. Complete the following:
 - $2KMnO_4 + 10KI + 8H_2SO_4 =$
 - $Fe + H_2SO_4 =$
 - $Al(OH)_3 + 2HCl =$
 - $I_2 + Na_2S_2O_3 =$
 - $Ca(OH)_2 + Cl_2 =$
