

QP CODE:101006 (Old Scheme)

Reg.No:

First Year B.Pharm Degree Supplementary Examinations, August 2016

PHARMACEUTICAL CHEMISTRY - I
(Inorganic & Physical Chemistry)

(2010 - Scheme)

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Write equations wherever necessary.

Essay

(3x10=30)

1. Define astringents. Explain the preparation, assay and medicinal uses of alum and zinc sulphate.
2. Define radioactivity and nuclear reactions. Mention the hazards, storage conditions, precautions and clinical applications of I131 and Co58
3. List out the major physiological ions and their role in the body. Add a note on physiological acid-base balance.

Short notes

(14x5=70)

4. Explain Langmuir theory of adsorption.
5. Sclerosing agents.
6. Explain any two physical properties of liquid state.
7. Discuss on the importance of antidotes in poisoning.
8. Dimercaprol and its application in pharmaceutical analysis.
9. Explain the monograph of I.P.
10. Complete and balance the following equations:-

- $\text{NaOH} + \text{H}_2\text{CO}_3 \longrightarrow$
- $2\text{KMnO}_4 + 3\text{H}_2\text{SO}_4 \longrightarrow$
- $\text{NaF} + \text{HCl} \longrightarrow$
- $\text{Fe} + \text{H}_2\text{SO}_4 \longrightarrow$

11. Oral rehydration salt.

12. Name one inorganic compound each for the following uses:

- expectorant
- antacids
- protectives
- respiratory stimulant
- dentifrices

13. Physiological role of copper and zinc.

14. What is partition coefficient and discuss its effect on biological activity.

15. Describe the assay of calcium gluconate.

16. Sodium compounds used as pharmaceutical aids.

17. Explain anti-caries agents.
