

QP CODE: 101006 (Old Scheme)

Reg. No: .....

**First Year B.Pharm Degree Supplementary Examinations  
December 2017**

**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. What are radioisotopes. Explain their therapeutic and diagnostic applications in detail with suitable examples.
2. What is optical activity. How will you define specific rotation. Explain in detail the determination of specific rotation with construction and working of polarimeter.
3. Define and classify antacids. Enumerate the ideal characteristic of an antacid. Discuss the preparation of aluminium hydroxide gel.

**Short notes**

**(14x5=70)**

4. Explain the principle behind the limit test for arsenic.
5. Construction and working of GM-counter.
6. Principle with chemical reactions involved in the assay of magnesium sulphate.
7. Test for purity for the following compounds: calamine and sodium fluoride.
8. Give an account of preparation of the following: chlorinated lime & ferric ammonium citrate
9. Detail the medicinal properties of the following: zinc stearate, calcium gluconate, sodium benzoate, hydrogen peroxide and potassium bromide.
10. Explain the method of assay of the following compounds with reactions: boric acid, ferrous sulphate
11. Give an example for the following class of compounds: antiseptic, disinfectant, laxative, alkalizer and antidote
12. Colour coding for medicinal gases.
13. Volhard's method of assay.
14. Preparation of iodine solutions.
15. Partition co-efficient and its significance in pharmacy.
16. Langmuir's adsorption isotherms
17. Surface active agents and their applications in pharmacy

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