

**QP CODE:101006 (Old Scheme)**

**Reg.No: .....**

First Year B.Pharm Degree Supplementary Examinations, February 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. Define adsorption. Describe the adsorption isotherms and various factors influencing adsorption.
2. Discuss radio pharmaceutical preparations and their clinical applications.
3. What are medicinal gases. Explain the preparation, assay and uses of nitrous oxide.

**Short notes**

**(14x5=70)**

4. Dentifrices.
5. Describe the limit test for lead.
6. Explain the kinetic theory of gases.
7. How assay of oxygen is carried out.
8. Name one inorganic compound each for the following uses:  
• Anti-caries agents • sedative • acidifiers • saline cathartics • pharmaceutical aid
9. Explain optical activity. Describe the working of polarimeter.
10. Mention coordination compounds and mention the role of EDTA in pharmaceutical analysis.
11. Electrolyte combination therapy.
12. Physiological role of selenium and iron.
13. Explain talc and zinc oxide.
14. What is an expectorant and explain with suitable examples.
15. Explain why gases deviate from ideal behavior.
16. Sodium lauryl sulphate and its importance in pharmacy.
17. Complete and balance the following equations:-

- $\text{Ca(OH)}_2 + \text{Cl}_2 \longrightarrow$
- $\text{Na}_2\text{S}_2\text{O}_3 + \text{I}_2 \longrightarrow$
- $\text{NH}_4\text{Cl} + \text{HCHO} \longrightarrow$
- $2\text{KMnO}_4 + 10\text{KI} + 8\text{H}_2\text{SO}_4 \longrightarrow$

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