

**QP CODE: 105326**

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

**First Year Pharm D Degree Examinations July 2018**

**Pharmaceutical Inorganic Chemistry**

**Time: 3 Hours**

**Total Marks: 70**

- Answer all Questions.
- Draw Diagrams wherever necessary.

**Essays**

**(3x10=30)**

1. Explain three important buffer systems and its role in physiological acid base balance. Add a note on the preparation and assay of potassium acetate.
2. Define primary and secondary standards with examples. Explain the titration curve for strong acid versus strong base. Mention the ideal characters for a primary standard.
3. What are expectorants. Classify expectorants with suitable examples. Explain the preparation and assay of ammonium chloride.

**Short notes:**

**(8x5=40)**

4. How acid neutralizing capacity of antacids is determined.
5. Mention the physiological roles of zinc and iodine.
6. Define redox potential and mention Nernst equation. Explain characteristics of redox indicators with suitable example.
7. Explain three types of radio-pharmaceutical radiations"
8. Briefly explain the various steps involved in gravimetric method of analysis.
9. Explain the method of preparation and standardization of perchloric acid solution.
10. Mention the pharmaceutical uses of each of the following
  - Sodium bisulphite    •Activated charcoal    •Potassium chloride
  - Zinc chloride        •Carbon dioxide.
11. Explain the principle involved in the limit test for heavy metals.

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