

First Semester B.Pharm Degree Examinations February 2019**Pharmaceutical Inorganic Chemistry
(2017 Scheme)****Time: 3 Hours****Max. Marks: 75**

- **Answer all questions**
- **Write equations wherever necessary**

Essay**(2x10=20)**

1. Explain the principle with chemical reaction and procedure involved in the limit test for iron. Add note on importance of limit test.
2. Define buffer and buffer capacity. Derive the Henderson-Hasselbalch equation to calculate the pH of the buffer. Give the applications of buffers in pharmaceutical system.

Short Notes**(7x5=35)**

3. What are saline cathartics. Give the properties and uses of magnesium sulphate.
4. Mention one method of preparation and the principle of assay of sodium bicarbonate.
5. The preparation, properties and assay of hydrogen peroxide.
6. Give the details about activated charcoal.
7. Define radiopharmaceuticals. Describe about the diagnostic and therapeutic applications of radioisotopes.
8. What are expectorants. Mention the preparation and assay of ammonium chloride.
9. Give an account on oral rehydration therapy.

Answer Briefly**(10x2=20)**

10. Define the term normality.
11. What is the use of citric acid in the limit test for iron
12. Storage conditions of radioactive substance.
13. Define anti-caries agents. Give one example.
14. What are the properties and uses of aluminium hydroxide gel.
15. Define astringent. Give one example.
16. What are ideal antacids
17. Define haematinics with examples.
18. Give any two sources of impurity in a pharmaceutical substance.
19. The chemical reactions involved in the assay of ferrous sulphate.