

I YEAR B.PHARM DEGREE MODEL EXAMINATION, JULY 2011

PHARMACEUTICAL CHEMISTRY Paper-I

(Inorganic & Physical Chemistry)

Time: 3 Hours

Total Marks: 100

- Answer all questions
- Write equations wherever necessary

Essay

(2x10=20 marks)

1. Write the principle and procedure involved in the limit test for Iron & Arsenic with equations.
2. Explain the assay of Nitrous Oxide giving a neat diagram.

Write short notes on:

(10x5=50 marks)

3. Briefly explain saline cathartics with examples.
4. Give examples for electrolytes used in acid base therapy
5. Describe in detail Langmuir's theory of adsorption.
6. Derive the kinetic gas equation.
7. Write a brief note on surface tension with equations.
8. Complete the following
 - (a) $\text{Na}_2\text{HPO}_4 + \text{CaCl}_2 =$
 - (b) $2\text{HI} + \text{MnO}_2 + \text{H}_2\text{SO}_4 =$
 - (c) $\text{I}_2 + 2\text{Na}_2\text{S}_2\text{O}_3 =$
 - (d) $2\text{BiCl}_3 + 3\text{H}_2\text{S} =$
 - (e) $\text{Na}_2\text{CO}_3 + \text{H}_3\text{PO}_4 =$
9. Write the method of assay of hydrogen peroxide.
10. Explain the uses of radio active isotopes in medicine.
11. Write a note on the sources of impurities in drugs and pharmaceuticals.
12. Explain the term refractive index.

Answer Briefly:

(10x3=30 marks)

13. Explain ORS and its importance
14. Define antidotes? Classify them with examples.
15. Give the properties and uses of
 - (a) Calamine
 - (b) Bleaching powder
16. Write the uses and storage conditions of
 - (a) Povidone-Iodine
 - (b) Silver nitrate
17. How will you carry out test for purity in bentonite?
18. Explain the term Parachor. Give its applications.
19. Define optical rotation, viscosity and dipole moment.
20. What are real and ideal solutions?
21. Write a note on different methods of quality control.
22. Write the method of preparation, storage and uses of Iodine.
