

5. Attempt both parts:
- Classify cathartics and write an explanatory note on saline cathartics taking example of phosphates.
 - Discuss the characteristics and significance of purified water, water for injection and sterile water for injection in pharmacy.
6. Give the method of preparation, identification tests, category and uses of any four of the following:
- Talc
 - N_2O
 - NH_4Cl
 - $NaHCO_3$
 - Bismuth sub-carbonate.

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Printed Pages : 4



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(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 150101

Roll No.

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B.Pharma.

SPL. THEORY EXAMINATION 2014-15

PHARMACEUTICAL CHEMISTRY - I

Inorganic Chemistry

Time : 3 Hours]

[Total Marks : 70

Section-A (Attempt all questions)

Note: Attempt all three sections. Each questions of section-A; contains 1 marks, section -B 4 marks and section-C; 8 marks.

- Define hypoxia.
- Universal antidote consist of.....
- Write the examples of any two intracellular cations.
- Barium sulphate reagent is used in the limit test of....., write its composition.....
- Give any two examples of opacifier.
- Werner's coordination number is also known as.....

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[Contd...

7. Type I glasses are chemically composed of.....
8. An anti-infective agent, potassium permanganate acts through which mechanism?
9. Mottling of teeth enamel is associated with.....
10. Write the name of two important physiological buffers.
11. Chemical formula of sodium metabisulphite is....., and it is used as.....
12. What are the major side effects of magnesium containing antacids?
13. Sr^{90} undergo.....decay, and medically it is used in the treatment of.....
14. An essential element.....is required for the activity of enzymes such as dehydrogenases and carboxypeptidases.

Section-B (Attempt any six questions)

1. What are the ideal properties of antacids? Write a note on antacid therapy. 4×6=24
2. Describe hematinics and give the method of preparation of ferric ammonium citrate.
3. Discuss the principle and method for the limit test of iron.
4. Write down specifications of solubility and storage conditions of pharmaceuticals as per Indian Pharmacopoeia.
5. Give an explanation of hazards produced by radioactive substances and precautions taken during their handling.

6. Write category, method of preparation and identification test of any two of the following:
 - a) Oxygen
 - b) NaHPO_3
 - c) MgSO_4
7. Comment on astringents. Write about the method of preparation and identification test of ZnSO_4 .
8. Write an explanatory note on anti-caries agents.

Section-C (Attempt any four questions)

1. What are coordination compounds? Discuss Werner's coordination theory in detail and mention the novel applications of metals in pharmacy.
2. Explain various mechanism of action of inorganic anti-microbial agents and give the method of preparation, and identification tests of- KMnO_4 , H_2O_2 , boric acid silver nitrate.
3. What are major physiological ions? Discuss in detail about physiological acid-base balance at the level of tissues and kidneys. Also comment on calcium replacement therapy.
4. Enlist various sources of impurities in pharmaceutical substances with suitable examples? Write a descriptive note on chemical instabilities and particulate, non particulate, microbial contaminations in pharmaceutical substances.