

UKA TARSADIA UNIVERSITY

B.Pharm. (1st Semester)

Subject :030020102 - Pharmaceutical Chemistry - I (Pharmaceutical Inorganic Chemistry)

Duration: 3 Hours

Max. Marks: 70

Instructions:

1. Attempt all questions.
2. Write each section in a separate answer book.
3. Make suitable assumptions wherever necessary.
4. Figures to the right indicate full marks allocated to that question.
5. Draw diagrams/figures whenever necessary.

Section-1

Q-1 (A) Do as directed. [07]

- I) Write chemical formula for Seignette's salt
- II) Write chemical formula for Epsom salt
- III) Write chemical formula for Baking soda
- IV) Write chemical formula for Calomel.
- V) Write chemical formula for Precipitated chalk.
- VI) Define impurity.
- VII) Define buffer capacity.

Q-1 (B) Answer the following in brief. (Any 4) [08]

- I) Give method of preparation and use of hydrochloric acid.
- II) Explain saline cathartics.
- III) Explain role of ammonia solution as respiratory stimulant.
- IV) Comment: glycerine is added in assay of boric acid.
- V) Explain relative strengths of acids and bases.
- VI) Define and give example of anaesthetics.

Q-2 Answer the following. [10]

- A) Explain buffer action.

OR

- A) Write a note on purified water and water for injection.
- B) What are ideal requirement of antacids. Write preparation and use of milk of magnesia.

OR

- B) Discuss physiological role of oxygen and describe the method of preparation and properties.

Q-3 Answer the following in detail. (Any 2) [10]

- A) Write about role of physiological ions.
- B) Define limit test. Give detail not on limit test for chlorides.

C) Describe sources of impurities.

Section-2

Q-4 (A) Do as directed.

[07]

- I) Write storage condition for Iodine.
- II) Write storage condition for Silver nitrate.
- III) Write synonym and formula for Bleaching powder.
- IV) Write synonym and formula for Borax.
- V) Define preservative.
- VI) Define sedative.
- VII) Define antioxidants.

Q-4 (B) Answer the following in brief. (Any 4)

[08]

- I) Distinguish between poison and antidote.
- II) Explain role of sodium bisulphate as antioxidant.
- III) Define complexing and chelating agent.
- IV) Give assay method and use of calamine.
- V) Define and explain antiseptics.
- VI) Explain use of [^{57}CO] as radiopharmaceutical.

Q-5 Answer the following.

[10]

A) Write a note on expectorants and emetics.

OR

A) Give a short note on dentifrices.

B) Write about various haematinic preparations.

OR

B) Write a note on diluents as pharmaceutical aid.

Q-6 Answer the following in detail. (Any 2)

[10]

- A) Give a detail account on astringents.
- B) Write down various clinical applications of radiopharmaceuticals.
- C) Write a note on cyanide poisoning and its treatment.