

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 Baking soda.
- II) Write chemical formula for Precipitated calk.
- III) Write chemical formula for Rochelle salt.
- IV) Give synonym and use of Slaked lime
- V) Give synonym and use of Caustic soda.
- VI) Define official compound.
- VII) Define pharmacopoeia.

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

- I) Write assay principle and chemical reaction of boric acid.
- II) Comment: aqueous ammonia is added in limit test of lead.
- III) Explain conjugated acid and base with example.
- IV) Distinguish between hypokalemia and hyperkalemia.
- V) Discuss physiological role of oxygen.
- VI) What is composition and use of Kaolin.

Q-2 Answer the following. [10]

A) Define limit test. Give detail note on limit test for iron.

OR

A) Define antacids. Describe Al (OH)₃ gel as antacid.

B) Write a note on cathartics.

OR

B) Give detail account on protective agents.

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

A) Discuss factors affecting selection of buffer solution.

B) Explain respiratory stimulants in detail.

C) Write a note on electrolyte used in replacement therapy.

Section-2

Q-4 (A) Do as directed. **[07]**

- I) Write chemical formula for Green vitriol.
- II) Write chemical formula for Tartar emetic.
- III) Give synonym and use of sodium nitrate.
- IV) Give synonym and use of Laughing gas.
- V) Define Astringent.
- VI) Define emetics.
- VII) Define filter aids.

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

- I) Outline role of activated charcoal in poisoning.
- II) Differentiate between laxative and purgative.
- III) Describe anticaries agent.
- IV) Explain therapeutic use of radiopharmaceuticals.
- V) Explain role of Aluminium sulphate as adsorbent.
- VI) Define astringent and give examples.

Q-5 Answer the following. **[10]**

A) How radio activity is measured? Write a note on Gieger muller counter.

OR

A) What is importance of trace elements in our body? Discuss any one iron containing compound as haematinic.

B) Write a note on antidote.

OR

B) Give a detail account on anti infective agent.

Q-6 Answer the following in detail. (Any 2) **[10]**

A) Describe role of sodium fluoride as dental product.

B) Write a note on chelating agents used in therapy.

C) Write a note on antioxidants.