B.Pharm 1ˢᵗ Year 1st Semester Examination-2024
BP-104T
Pharmaceutical Inorganic Chemistry

FM- 75   Time- 3hrs

Answer any five question taking atleast two from each group

Group-A

1. a) Define quality control of a drug/pharmaceutical.
    b) Discuss the source of impurities in pharmaceuticals & how can you control them.
    c) What are tests for purity? Give a brief notes on "tests for purity".

                                                                 2 + 10 + 3 = 15

2. a) Define limit test with examples.
    b) Discuss the principle/reaction procedure involved in the limit test for Lead and Arsenic.
    c) Why are limit tests performed?

                                                                 2 + 10 + 3 = 15

3. a) Define and classify antiseptic & disinfectant with examples.
    b) Write short notes on $KMnO_4$, H_2O_2, I_2 and Boric acid.
    c) What is the significance of the following?
       PbT, AsT, FeT, addition of dil. HNO_3 in the limit test for chloride & dil. HCl in the Limit test for sulphate.

                                                                 2 + 8 + 5 = 15

4. a) Classify gastrointestinal agents with examples.
    b) Define and classify cathartics with examples.
    c) Discuss in brief the strong cathartics, protectives, combined antacid preparation & osmotic purgatives

                                                                 2 + 3 + 10 = 15

                                                                 [Turn over

Group-B

5. Answer **any ten** short questions of the following: $10 \times 1.5 = 15$

   a) Complete it. $_{92}X^{235}$ -2β $= Y$

   b) I^{131} is used for cancer of ....

   c) Zinc-eugenol cement is used as.....................

   d) Activated charcoal is used as...................

   e) Iron is absorbed in body as ....form (Ferrous/Ferric).

   f) Higher concentration of Sodium ion in body is called...............

   g) Low concentration of Potassium ion in body is called...............

   f) Curie is unit of ....

   g) Use of Sodium thiosulphate is as ....

   h) As per Lewis concept Ammonia is................

   i) Complete it. $_{90}Y^{232}$ $-\infty$ $= Z$

   j) ....is used as replacement therapy.

   k) Sodium fluoride is used as....................

   l) Write Henderson-hasselbalch equation for buffer capacity.

6. a) Write in details about major physiological ions.
   b) Classify Antidotes with mechanism and example. $10 + 5 = 15$

7. a) Write about Heamatinics and Ferrous sulphate.
   b) Write about caries and anti-caries agent.
   c) Define dentifrices agents with suitable example. $7 + 6 + 2 = 15$

8. a) Calculate half life for radiopharmaceuticals.
   b) Write in details about uses of radiopharmaceuticals with suitable examples.
   c) How radiopharmaceuticals are stored? $5 + 7 + 3 = 15$