Ref. No.: Ex/BP104T/2025

B. Pharm 1st Year 1st Semester Examination-2025

BP-104T

Pharmaceutical Inorganic Chemistry

FM-100 **Time-3hrs**

Answer any five question taking atleast two from each group

Group-A

Q1. Define 'limit tests'. Why do we perform limit test? What are the sources of impurities in a pharmaceutical? How can you control them? 2+3+8+2= 15

Q2. Discuss the principle, procedure & diagram of the apparatus involved in the limit test for Arsenic and Lead. 7.5x2= 15

Q3. Define and classify antiseptics & disinfectants with examples. Outline the mode of action of inorganic germicides. Write the preparation, properties & uses of $KMnO_4$, H_2O_2 & bleaching powder. 6+3+6= 15

Q4. Define and classify gastrointestinal agents with examples. What are systemic and non - systemic antacids & write a note on them. Define and classify cathartics with examples. Write short notes: i. Saline cathartics, ii. Strong cathartics. What are the standard evaluation systems of a purgative drug? 3+5+2+4+1= 15

Group-B

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

a) Complete it. $_{95}X^{239}$ -2α = Y

b) ..... is used for cancer of thyroid gland.

c) Calcium gluconate is used as.....

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

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

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

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

f) Curie is unit of .....

g) Use of Ferrous sulphate is as .....

[Turn over

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

i) Complete it. $_{90}Y^{232}$ -2β = Z

j) Ringer lactate is used as for .....

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

l) Geiger Muller counter is used for.....

6. a) Write in details about major physiological ions.
   b) Write note on ORS and Physiological acid base balance. 8 + 7 = 15

7. a) Write about Heamatinics and Ferrous gluconate.
   b) How dental caries is formed? Write in details and short note on Sodium fluoride.
   c) Write composition of Zinc eugenol cement. 6 + 6 + 3 = 15

8. a) Calculate half life for radiopharmaceuticals.
   b) Write in details about uses of radiopharmaceuticals with suitable examples.
   c) Classify Antidotes with example. 5 + 7 + 3 = 15