

B. PHARM 1ST YEAR, 1ST SEMESTER EXAMINATION, 2023**PHARMACEUTICAL INORGANIC CHEMISTRY**

Time : Three hours

Full Marks : 75

Answer any five questions taking at least two from each group**Group A**

1. a) Define limit test. Why are limit test done for pharmaceuticals? What are the tests for purity?

b) What are the sources of impurities? How can you control them in the pharmaceuticals?

5+10 = 15

2. Discuss in brief the principle, procedure & chemicals used in limit tests for 'Arsenic' and 'Lead' for a pharmaceutical.

 $7\frac{1}{2} \times 2 = 15$

3. a) Define and classify antiseptics & disinfectants with examples. Outline the mechanism of action of inorganic germicides.

b) Write short notes on Bleaching powder, KMnO_4 and H_2O_2 .

5+10 = 15

4. a) What are gastrointestinal agents? Classify them with examples. Write short notes on Acidifying agents & local antacids.

2+2+3

b) What are laxatives, classify them with examples. Write short notes on stimulant purgatives, osmotic purgatives and bulk laxatives.

2+6

[Turn over

Group-B

5. a) Write about Heamatinics and Ferrous sulphate.
 b) Classify Antidotes with mechanism and example. 9 + 6 = 15
6. Answer **any ten** short questions of the following: 10 × 1.5 = 15
- a) Complete it. ${}_{92}\text{X}^{235} - 1\alpha = \text{Y}$
- b) Curie is unit of
- c) I^{131} is used for cancer of
- d) Activated charcoal id used as.....
- e) Iron is absorbed in body asform (Ferrous/Ferric).
- f) Low concentration of Sodium ion in body is called.....
- g) Higher concentration of Potassium ion in body is called.....
- f) Oral Rehydration Salt is used as.....
- g) Use of Sodium chroride is as
- h) Dimercaprol is used as.....
- i) Complete it. ${}_{90}\text{Y}^{230} - 2\beta = \text{Z}$
- j)is used in physiological acid base balance.
- k) Calcium carbonate is used as.....
- l) Zinc eugenol cement is used as.....
7. a) Discuss about different uses of radiopharmaceuticals with suitable examples.
 b) How will you calculate half life for radiopharmaceuticals? Derive it.
 c) How Geiger Muller Counter works? 8 + 5 + 2 = 15
8. a) Write in details about major physiological ions.
 b) Write about caries and anti-caries agent. 9 + 6 = 15