[LB 4251] **AUGUST 2012** **Sub. Code: 4251**

FIRST YEAR B.PHARM. EXAM

Paper I – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code : 564251

Time : Three hours **Maximum: 100 Marks**

(180 Min) Answer ALL questions in the same order.

I. Elaborate on:	**Pages (Max.)**	**Time (Max.)**	**Marks (Max.)**
1. a) Describe the method of preparation, assay and uses of aluminium hydroxide and boric acid. b) Explain one method for measuring radioactivity. What are the clinical applications of I^{131}, Co^{58} and Barium Sulphate?	19	33	20
2. a) Explain the principle and procedure involved in the arsenic limit test with the help of neat labeled diagram and mention the equations wherever necessary. b) What are antimicrobials? Classify on the basis of mechanism of action with examples.	19	33	20

II. Short notes on:

1. Discuss the principle involved in the assay of calcium gluconate.	3	8	5
2. Write the molecular formula, Preparation and uses of magnesium trisilicate and alum.	3	8	5
3. Explain on saline cathartics with examples.	3	8	5
4. Discuss on electrolytes used in combination therapy.	3	8	5
5. Write on oral rehydration salt.	3	8	5
6. Name one inorganic compound each for the following uses a) antacids b) protectives c) anti-microbials d) dentifrices g) expectorants f) antidote	3	8	5
7. Preparation and applications of EDTA and dimercaprol.	3	8	5
8.Explain the physiological role of iron and copper.	3	8	5

III. Short Answers on:

1. Write the difference between chelating and sequestering agents with an example.	1	5	2
2. What is the importance of limit test in pharmaceutical preparation?	1	5	2
3. Give the medicinal uses of selenium sulphide and charcoal.	1	5	2
4. Discuss the principle involved in the assay of ferrous gluconate.	1	5	2
5. Define ligand. Classify with examples.	1	5	2
6. Write the identification test for aluminium.	1	5	2
7. What are topical agents? Classify with examples.	1	5	2
8. Write the modified limit test for sulphate in potassium permanganate.	1	5	2
9. Why bleaching powder is stored in well closed containers?	1	5	2
10. What is radio opaque contrast medium? Give one example.	1	5	2

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