

Roll No .....

**PY-105**

**B.Pharmacy I Semester**

Examination, December 2016

**Pharmaceutical Chemistry - II**  
**(Inorganic)**

*Time : Three Hours*

*Maximum Marks : 70*

- Note:* i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.  
ii) All parts of each question are to be attempted at one place.  
iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.  
iv) Except numericals, Derivation, Design and Drawing etc.

1. a) What is modern periodic law?  
b) What is oxidation state?  
c) What are the properties of d block elements?  
d) Explain the role of essential and trace ions in biological system.

OR

Explain the principle and procedure for limit test of chloride.

2. a) What is limit test?  
b) What is the principle of limit test of sulphate?  
c) What is the physiological acid base balance?  
d) Discuss the electrolyte combination therapy.

OR

Discuss major physiological ions and electrolytes used in replacement therapy.

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3. a) Explain the uses of hydrogen peroxide.  
b) What is the role of Iron in biological system?  
c) Enlist official inorganic compounds of sodium.  
d) Describe the preparation, properties and uses of the Grignard reagent and potassium permanganate.

OR

Write a short note on Magnesium sulphate and calcium carbonate.

4. a) What is the principle of limit test of arsenic?  
b) Describe the Nessler's cylinder.  
c) Describe calcium hydroxide.  
d) Describe the preparation, properties and uses of the light and heavy magnesium oxide.

OR

Describe the preparation, properties and uses of the silver chloride and aluminium hydroxide.

5. a) What are radiopharmaceuticals?  
b) What are the natural and artificial radio-isotopes?  
c) What are various sources of impurity in pharmaceuticals, How do we detect them?  
d) How radio-isotopes may be produced? What is a Geiger-Muller counter?

OR

Discuss the diagnostic and therapeutic application of radiopharmaceuticals.

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