

S/2015/1944

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**FIRST YEAR PHARMACY**  
**PHARMACEUTICAL CHEMISTRY - I**  
**(102)**

**Time : Three Hours****Maximum Marks : 80**

**Note :** Attempt total *six* questions. Question No.1 is compulsory. From the remaining questions attempt any *five*.

1. Attempt any five of the following. 10
- ✓ a) Define inhalants with examples.
  - ✓ b) Write only the principle for the limit test of chloride.
  - c) Write the specifications of Nessler's cylinder as per I.P. 1996.
  - ✓ d) What is the composition of Barium Sulphate reagent in sulphate limit test.
  - e) Enlist the official compounds of Calcium as per I.P. 1996.

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P.T.O.

(2)

2. Attempt any four of the following. 14

- a) What are the sources of impurities in pharmaceutical compounds?
- b) Define anti-oxidants with examples.
- c) Define and classify topical agents with examples.
- d) What do you understand by physiological acid base balance.
- e) Enlist the official compounds of Iron as per I.P. 1996. Write the uses of  $\text{FeSO}_4$ .

3. Attempt any four of the following. 14

- a) Classify G.I.T. agents with examples.
- b) Why citric acid is added in Iron limit test.
- c) Write the physico-chemical properties and uses of sodium nitrite.
- d) Write the physico-chemical properties and uses of iodine.
- e) Why aluminium and magnesium compounds are used in combination in antacid preparations. Write the physico-chemical properties and uses of magnesium carbonate.

(3)

4. Attempt any four of the following : 14

a) Write the physico-chemical properties and uses of sodium metabisulphite.

b) Write the uses of Boric acid and Hypochlorous acid.

c) Write the uses of sodium potassium tartrate and magnesium sulphate.

d) Write a short note on antimicrobials.

e) Write short note on Antacids.

5. Attempt any four of the following. 14

a) Define the following with examples.

i) Expectorants and Emetics

ii) Respiratory stimulants

iii) Antidotes

iv) Saline cathartics

b) Write short note on Dental products.

c) Write the formula of O.R.S. according to W.H.O.

d) Write the properties and uses of sodium acetate and ammonium chloride.

e) Write a short note on G.M. Counter.

(4)

6. Attempt any four of the following. 14

- a) What do you understand by radio-opaque contrast media.
- ✓ b) Write the physico-chemical properties and uses of Aluminium Hydroxide and Calcium Carbonate.
- c) Write the uses of radioisotopes.
- ✓ d) Write the uses of Bismuth subcarbonate, kaolin and zinc oxide.
- ✓ e) Write the physico-chemical properties and uses of hydrogen peroxide.

7. Attempt any four of the following. 14

- ✓ a) What are the storage conditions of radio-pharmaceuticals.
- ✓ b) Write the preparation, properties and uses of calcium gluconate.
- c) Write the physico-chemical properties and uses of potassium permanganate.
- d) Write a short note on buffers. What do you understand by buffer capacity.
- ✓ e) Write the identification test of the Magnesium and sulphate.

