#### THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LM 2007) MARCH 2018 Sub. Code: 2007

# B.PHARM. DEGREE EXAMINATION PCI Regulation SEMESTER – I PAPER IV – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 562007

Time: Three hours Maximum: 75 Marks

I. Elaborate on:  $(2 \times 10 = 20)$ 

1. Give the principle reaction involved in the limit test for Arsenic with a neat diagram of the apparatus used for it.

- 2. Define Radioactivity. How to measure radioactivity and explain the storage condition and precaution to be followed when handling radioactive substance?
- 3. Give the functions of major physiological ions used as electrolyte in the replacement therapy. Give the composition and uses of Oral rehydration salt.

II. Write notes on:  $(7 \times 5 = 35)$ 

- 1. What are antidotes? Give the preparation, properties, assay and uses of Sodium thiosulphate.
- 2. What are buffers? Give the types of buffers, preparation and stability of buffers used in pharmaceutical substances.
- 3. What are properties of  $\alpha$ ,  $\beta$  and  $\gamma$  rays?
- 4. What are Anti-microbials? Write the preparation and assay of Hydrogen peroxide.
- 5. Brief account about the Iodine and its solution.
- 6. What are expectorants? Give the preparation, properties, assay and uses of ammonium chloride.
- 7. Brief history of Indian Pharmacopeia.
- 8. Write the sources of impurities in pharmaceutical substances.
- 9. Write about the principle and reaction involved in the limit test of chlorides.

## III. Short answers on: $(10 \times 2 = 20)$

- 1. Define radio isotopes.
- 2. Write about the formula of any two emetics.
- 3. Define cathartics and give the formula of sodium orthophosphate.
- 4. Write about the formula of any two antacids.
- 5. Write about the formula, properties and uses of Ferrous Gluconate.
- 6. What is the use of activated Charcoal?
- 7. What are dentrifices? Give the role of fluorides in dental products.
- 8. Define isotonicity.
- 9. Write about the formula, properties and uses of Calicium gluconate.
- 10. What are acidifiers with two examples?

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## THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(LN 2007) SEPTEMBER 2018 Sub. Code: 2007

# B.PHARM. DEGREE EXAMINATION PCI Regulation SEMESTER – I FIRST YEAR PAPER IV – PHARMACEUTICAL INORGANIC CHEMISTRY

Q.P. Code: 562007

Time: Three hours Maximum: 75 Marks

# I. Elaborate on: Answer any TWO questions.

 $(2 \times 10 = 20)$ 

- 1. a) Write the principle and reaction involved in the limit test for Iron.
  - b) Write a note on Indian Pharmacopoeia.
- 2. a) Write about role of fluoride in the treatment of dental caries.
  - b) Write a note on Zinc eugenol cement.
- 3. a) Define and classify antimicrobial with example.
  - b) Write about the preparation, assay and uses of chlorinated lime.

# II. Write notes on: Answer any SEVEN questions.

 $(7 \times 5 = 35)$ 

- 1. Explain the methods of adjusting isotonicity.
- 2. Write about the preparation, assay and uses of calcium gluconate.
- 3. Explain the principle and reaction involved in the limit test for lead.
- 4. Define alum and gives the formula, properties and uses of potash alum.
- 5. Write a note on Sodium iodide  $^{131}$ I.
- 6. Write about the preparation, assay and uses of copper sulphate.
- 7. Define antacid and gives a brief note on combination of antacids.
- 8. Briefly describe physiological acid base balance.
- 9. Discuss about measurement of radio activity.

## III. Short answers on: Answer ALL questions.

 $(10 \times 2 = 20)$ 

- 1. Define Haematinics and give example.
- 2. Write the formula and uses of potassium chloride.
- 3. Define emetics and give one example.
- 4. Define Half life period.
- 5. Principle of limit test for sulphate.
- 6. Write the principle involved in assay of ammonium chloride.
- 7. Define astringent and give example.
- 8. Write about Poison.
- 9. Define buffer capacity.
- 10. Write the composition of oral rehydration salt?