

0806

15116

3 Hours / 80 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Figures to the right indicate full marks.
(4) Assume suitable data, if necessary.
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any FIVE of the following: 20
- Define Respiratory Stimulant. Write brief account on Ammonium Carbonate as a respiratory stimulant.
 - What are Anticaries agent? Give properties and uses of sodium fluoride.
 - Give the identification tests with chemical reactions for the following ions/radicals (any two):
 - Acetates
 - Calcium
 - Bicarbonates
 - Give the uses and storage and labelling of the following:
 - Oxygen
 - Carbon dioxide
 - Give the principle, reactions and procedure involved in Limit Test for Chloride (I.P).
 - Describe properties, uses, synonym and formula of calcium gluconate.
 - Describe the assay principle and reactions of boric acid with glycerine.

P.T.O.

2. Attempt any THREE of the following: 12

- a) Draw a well labelled diagram for Gutzeit Test Apparatus (I.P.) for Arsenic impurity in pharmaceuticals.
- b) Give the deficiency, symptoms and properties of Iodine.
- c) Give the synonym of:
 - (i) Precipitated Sulphur
 - (ii) Stannous Fluoride
 - (iii) Borax
 - (iv) Zinc Sulphate.
- d) Write incompatibilities of the following:
 - (i) Iron Salts
 - (ii) Calcium Gluconate
- e) Give chemical formula, properties and uses for (any two):
 - (i) Calcium Carbonate
 - (ii) Sodium Nitrite
 - (iii) Ferrous Sulphate

3. Attempt any THREE of the following: 12

- a) Give the principle and reactions involved in Limit Test of Iron (I.P.).
- b) Define Emetics. Give molecular formula, synonym, properties and uses of antimony potassium tartrate.
- c) What is quality control? Stress out the importance of quality control in pharmaceutical industry.
- d) What are antidotes? Classify antidotes with examples.
- e) Give properties, uses, synonym and molecular formula of sodium hydroxide.

- 4. Attempt any THREE of the following:** **12**
- a) Enlist the various sources of impurities. Explain the source - “Raw materials” and “Storage condition”.
 - b) Discuss the various uses of radioisotopes in pharmacy.
 - c) Give the molecular formula, method of preparation, properties and uses of Ammonium Chloride.
 - d) Define Pharmacopoeia and Monograph. What are the contents of Monograph?
 - e) Define Antioxidants and state properties, chemical formula and uses of Sodium Metabisulphite.
- 5. Attempt any THREE of the following:** **12**
- a) Explain the mechanism of action of antimicrobial agents.
 - b) Give the synonym, molecular formula, properties, preparation and uses of chlorinated lime.
 - c) How the acid-base balance of the body is maintained?
 - d) What are desensitizing agent? Give properties and uses of Strontium Chloride.
 - e) Enlist the various devices used in measurement of radioactivity. Draw a neat labelled diagram of “Geiger - Muller Counter”.

6. Attempt any THREE of the following:**12**

- a) Explain Arrhenius Acid-Base theory with examples.
 - b) What is ORS? Give the formula of ORS given by WHO and UNICEF.
 - c) Define “radio-opaque contrast media”, and give properties and uses of Barium Sulphate.
 - d) Give one medicinal use of:
 - (i) Aluminium hydroxide gel
 - (ii) Magnesium sulphate
 - (iii) Bismuth subcarbonate
 - (iv) Selenium sulphide
 - e) Give the properties and uses of: (any two)
 - (i) Talc
 - (ii) Calamine
 - (iii) Potassium permanganate
 - (iv) Hydrogen peroxide
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