

0806

11819

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) Illustrate your answers with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. **Answer any EIGHT of the following:** **16**
- State any four ideal properties of buffer solution.
 - Mention two different allotropic forms of sulphur.
 - Explain Lewis Acid - Base theory.
 - Define:
 - Assay
 - Radio opaque Contrast Media
 - Name the inorganic compound used in following:
 - Schistosomiasis
 - Achlorhydria
 - Write storage conditions for:
 - Calcium hydroxide
 - Bismuth sub carbonate.

P.T.O.

- g) Write incompatibilities of the following
- (i) Sulphur dioxide
 - (ii) Silver Nitrate
- h) Explain :
- (i) Limit tests
 - (ii) Significant figures
- i) Write importance of sodium ion in the body fluid.
- j) Define :
- (i) Radio activity
 - (ii) Half life
- k) Explain the role of lead acetate cotton plug and mercuric chloride paper in Arsenic limit test.
- l) Give one important use of following compound:
- (i) Magnesium trisilicate
 - (ii) Stannous fluoride

2. Answer any FOUR of the following:

12

- a) Define and classify laxatives with examples.
- b) Explain G.I.T. protective and adsorbent. Give properties and uses of Kaolin
- c) Discuss Bronsted and Lowry concept of acids and bases. Explain its advantages over Arrhenius Theory.
- d) Explain ORS powders recommended by UNICEF and WHO.
- e) What are antacids? Give important properties of antacid.
- f) Write properties and uses of :
 - (i) Titanium dioxide
 - (ii) Calamine.

3. Answer any FOUR of the following:**12**

- a) Explain the following terms:
 - (i) Desensitizing agent
 - (ii) Anticaries agent
 - (iii) Polishing agents
- b) Define antidote. Discuss various actions of antidote with example.
- c) Explain the role of Iron in human body.
- d) Define and classify Topical agent with examples.
- e) What are Metabolic acidosis and alkalosis? How they are treated?
- f) Enlist six different sources of impurities in Pharmaceuticals.

4. Answer any FOUR of the following:**12**

- a) Discuss the role of Oxygen in biological system.
- b) State the precautions to be taken while handling and storage of Radiopharmaceuticals.
- c) Write principle and reaction involved in the limit test for chloride.
- d) Define respiratory stimulant and expectorant. State properties of potassium iodide.
- e) Give molecular formula for:
 - (i) Sodium metabisulfite
 - (ii) Sodium bicarbonate
 - (iii) Ammonium Hydroxide
- f) Write reactions involved in:
 - (i) Effect of heat on Boric acid
 - (ii) Effect of Glycerine on Boric acid.

- 5. Answer any FOUR of the following:** **12**
- a) Mention properties, uses and storage of Borax.
 - b) Explain electrolyte replacement therapy. Give official preparations of sodium chloride.
 - c) Define astringents. Give properties and uses of Alum.
 - d) Explain the principle involved in the limit test for arsenic.
 - e) Give procedure involved in the limit test for Iron.
 - f) Write Synonym of:
 - (i) Sodium metaphosphate
 - (ii) Sublime sulphur
 - (iii) Ferrous sulphate
- 6. Answer any FOUR of the following:** **16**
- a) Define:
 - (i) Antiseptic
 - (ii) Disinfectant
 - (iii) Germicide
 - (iv) Bacteriostatic
 - b) Give any four properties of α and β ray's.
 - c) Draw a neat labeled diagram and explain working of G.M. counter.
 - d) Define antioxidants. Give molecular formula properties and uses of sodium thiosulphate.
 - e) Mention four official preparations of :
 - (i) Iodine
 - (ii) Calcium
 - f) Give two identification tests for (any two)
 - (i) Acetate ion
 - (ii) Potassium ion
 - (iii) Chloride ion
 - (iv) Sodium ion
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