0806

12223

3 Hours / 80 Marks Seat No. | | | | | | | | |

Instructions – (1) All Questions are *Compulsory.*

(2) Answer each next main Question on a new page.

(3) Illustrate your answer with neat sketches wherever necessary.

(4) Figures to the right indicate full marks.

(5) Assume suitable data, if necessary.

(6) Use of Non-programmable Electronic Pocket Calculator is permissible.

(7) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. Attempt any EIGHT of the following: **16**

a) Write the effect of heat on Boric acid.

b) Write the reaction involved in the limit test of iron.

c) Enlist any four ideal properties of antioxidants.

d) Give any four ideal requirements of antacids.

e) State the uses and properties of Epsom salt.

f) Define the terms:

i) Achlorhydria

ii) Expectorants and emetics

g) Give uses of Titanium dioxide and Silicone Polymer.

h) Why Povidone Iodine is preferred to lodine solution?

Marks

i) Write storage, labeling condition of Nitrous Oxide.

j) List the Major Intracellular and Extracellular electrolytes.

k) Enlist any four Official compounds of Iron.

l) State the importance of Barium sulphate reagent in sulphate Limit test.

2. Attempt any THREE of the following. **12**

a) Define Buffers. Explain mechanism of buffer action with suitable example.

b) Define Inhalants. Explain role of Oxygen (O_2) in biological system. Give Medicinal uses of Carbon dioxide.

c) Define the terms :–

i) Half Life

ii) Radioisotopes

iii) Radioactivity

iv) Antidotes.

d) Write the significance of quality control in pharmaceutical industry.

e) Describe Properties and uses of :–

i) Antimony Potassium Tartarate

ii) Sodium Metabisulphite.

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

a) Discuss mechanism of action of topical antimicrobials.

b) Enlist various sources of Impurities.

c) Explain principle and reaction involved in the limit test of Arsenic.

d) Explain Combination Electrolytes Therapy. Give properties and official preparations of sodium chloride.

e) Draw neat sketch, well labeled diagram of G. M. Counter. Explain its working.

Marks

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

a) Explain Lowry and Bronsted concept on acid base with examples and list limitations of Arrhenius theory.

b) Mention allotropic forms of sulphur. Describe properties and uses of Selenium sulphide

c) Explain the terms Anticaries and Desensitizing agents. Give properties and storage condition of Strontium chloride.

d) Classify antidotes with examples. Explain the role of sodium nitrite in cyanide poisoning.

e) Explain Physiological acid base balance. Mention electrolytes used in physiological acid base imbalance.

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

a) Define antioxidants. Explain their mechanism of action

b) Explain the term Saline cathartics. Give properties uses and storage of Sodium Potassium tartarate.

c) Explain the term ORS. Give composition of ORS recommended by WHO and UNICEF.

d) Explain Radio opaque contrast medium. Write properties, uses and storage condition of barium sulphate.

e) Give Properties of :–

i) Potassium permanganate

ii) Hydrogen peroxide

iii) Stannous fluoride

iv) Ammonium carbonate

6. Attempt any FOUR of the following: **16**

a) Classify G.I.T agents with examples.

b) Define mEq. Calculate mEq. of NaCl in one liter of 1.6% w/v of solution.

c) Define Astringents. Write uses of astringents. Give properties and uses of Alum.

Marks

d) Explain combination antacid therapy with examples Give properties and uses of Aluminum hydroxidegel.

e) Explain biological role of Iodine. Give uses and incompatibilities of Iodine.

f) Give two identification tests for the following ions/radicals (Any Two).

i) Acetate

ii) Chloride

iii) Calcium

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