0806

15162

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

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

(5) 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) Define acid and base as per Lewis theory with examples.

b) Discuss the uses of Aluminium hydroxide gel and magnesium sulphate.

c) Define the following terms :

(i) Achlorhydria

(ii) Gastrointestinal agents

d) Give the synonym of:

(i) Sodium Potassium tartrate

(ii) Zinc Sulphate

e) Write the properties and uses of silicone polymers.

f) What are dentifrices ? Write the storage condition of sodium fluoride.

Marks

g) Give the incompatibilities of :

(i) Iodine

(ii) Silver nitrate

h) Write the reaction involved in limit test of iron. What is the role of thioglycolic acid in iron limit test.

i) Give the molecular formula of the following:

(i) Borax

(ii) Yellow mercuric oxide

j) Name major intra and extracellular electrolytes.

k) Define buffers. Enlist various buffers used in Pharmacy.

l) Explain handling and storage of radioactive material.

2. Attempt any FOUR of the following: 12

a) Give the properties and uses of calcium hydroxide.

b) Define antioxidants. Write factors for the selection of suitable antioxidant.

c) Write properties, uses and incompatibilities of sodium thiosulphate.

d) Define and classify antacids with suitable examples.

e) Give the molecular formula of :

(i) Talc

(ii) Calamine

(iii) Chlorinated lime

f) Discuss the term ORS with examples.

Marks

3. Attempt any FOUR of the following: 12

a) Write molecular formula properties and uses of calcium carbonate.

b) State molecular formula, synonym and uses of sodium metabisulphite.

c) Define and classify topical agents with examples.

d) Name the inorganic pharmaceuticals used in the treatment of constipation. Write properties and uses of bismuth subcarbonate.

e) Define the term anticaries agents and desensitising agents with example. What is dental fluorosis ?

f) State molecular formula, properties and uses of calcium gluconate.

4. Attempt any FOUR of the following: 12

a) Mention molecular formula and uses of stannous fluoride and Strontium chloride.

b) What is metabolic acidosis and metabolic alkalosis ? Name two compounds used to treat metabolic acidosis.

c) Write the principle and procedure involved in the limit test for sulphate as per I.P. 1996.

d) Give the properties molecular formula and uses of ammonium chloride.

e) What are protectives and adsorbents. Give the classification and ideal properties of the same.

f) Discuss the properties and uses of Potassium Permanganate.

5. Attempt any FOUR of the following: 12

a) Discuss uses and storage condition of –

(i) Oxygen

(ii) Nitrous oxide

b) State the uses of :

(i) Sodium acetate

(ii) Potassium Citrate

Marks

c) Give the molecular formula, uses and storage condition of ammonium carbonate.

d) Define mEq. Calculate the mEq of Nacl in one litre of 1.6 % w/v of solution.

e) What are radiopharmaceuticals ? Give the characteristics of alpha particles.

f) Name two official compounds of iron. Discuss the properties and uses of ferrous sulphate.

6. Attempt any FOUR of the following: 16

a) Define the term Curie and Microcurie. Draw well labelled diagram of G.M. counter.

b) Enlist different allotropic forms of sulfur. Explain properties and uses of precipitated sulfur.

c) Discuss the principle and reactions involved in the limit test for arsenic.

d) Give any two identification tests for the following. (Any 2)

(i) Carbonate

(ii) Acetate

(iii) Calcium

e) Define the following terms:

(i) Expectorant

(ii) Respiratory stimulants

(iii) Autidotes

(iv) Cathartics

f) Define the term impurity. Explain various sources of impurities present in pharamaceuticals.