0806

21718

3 Hours / 80 Marks Seat No. 6 5 6 1 6 2

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 <u>FIVE</u> of the following: **20**

a) Define acid and base as per Arrhenious theory and write drawbacks of it.

b) Define Antioxidants. Explain it's mechanism of action.

c) Explain mechanism action of Antimicrobial agents.

d) Write reactions involved in Assay of Boric acid with Glycerine.

e) Define and classify antacids with examples.

f) Write different allotropic forms of sulphur and give the properties and uses of precipitate sulphur.

g) Define topical agents and classify with examples.

h) Define 'Astringents'. Discuss their uses.

P.T.O.

Marks

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

a) Define term Achlorhydria and write synonym, chemical formula, properties and uses of Muriatic acid.

b) Write mechanism action of osmotic laxatives. Classify cathartics with examples.

c) Give reasons why combination antacids are required with examples.

d) List official preparations of buffers and write its roles in pharmacy.

e) Define 'Volume Strength' and calculate volume strength of 20% W/V H_2O_2 solution.

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

a) Define following terms with examples. (any four)

(i) Internal protective and absorbents

(ii) Desensitizing agents

(iii) Respiratory stimulants

(iv) Buffers

(v) Inhalants

(vi) Expectorants.

b) Write biological role of oxygen or carbondioxide.

c) Define and classify dental products with examples.

d) What is 'Slaked Lime'? Give its properties, uses and molecular formula?

e) Write advantages of providone Iodine over other Iodine preparations and write properties and uses of providone Iodine.

Marks

4. Attempt any <u>THREE</u> of the following: **12**

a) Write synonyms of following (any four)

(i) Calcium carbonate

(ii) Sodium hydroxide

(iii) Talc

(iv) Boric acid

(v) Aqueous iodine solution

(vi) Magnesium sulphate

b) Write properties and uses of Alum.

c) Write chemical formulae for following (any four)

(i) Chlorinated lime

(ii) Borax

(iii) Antimony potassium tartrate

(iv) Sodium potassium tartrate

(v) Sodium thiosulphate

(vi) Hypophosphorus acid

d) Explain mechanism action of sodium thiosulphate and sodium nitritc in cyanide poisoning.

e) Write storage and labelling condition of sulphurdioxide and oxygen gases.

5. Attempt any <u>THREE</u> of the following: **12**

a) Write four sources of impurities in the pharmaceuticals with examples.

b) Draw well-labelled diagram of Gutzeit apparatus.

c) Write importance of quality control and quality assurance in pharmacy.

d) Write principle and reactions involved in limit test for Iron.

e) Write principle and reactions involved in Assay of Iodine or ferrous sulphate.

P.T.O.

Marks

6. Attempt any <u>THREE</u> of the following: **12**

a) Write acid-base balance of the body.

b) Explain the biological effects of radiations on human body.

c) What is ORS? Give different formulae given by WHO and UNICEF.

d) Distinguish between α, β and γ rays.

e) Solve any two of the following:

(i) Define radio opaque contrast media with example

(ii) Write any four compounds official of calcium.

(iii) Discuss Role of iron in human body.

(iv) Give uses of stannous fluoride and selenium sulphide.
