

CS/B.Pharm/SEM-1/PT-103/2012-13

2012

PHARMACEUTICAL CHEMISTRY (INORGANIC)

Time Allotted : 3

Hours Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP – A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for any *ten* of the following :

10x1 = 10

- i) Hydrogen peroxide is generally not used as anti-infective for
- a) Dermatological infection
 - b) Ear infection
 - c) Ophthalmic infection
 - d) Systemic infection.
- ii) Calamine contains
- a) 98% ZnO b) 99% ZnO
 - c) 95% ZnO d) 94% ZnO.
- iii) Which of the following electrolyte can be used in metabolic alkalosis ?
- a) Sodium acetate b) Potassium acetate
 - c) Sodium bi-carbonate d) Ammonium chloride.
- iv) pH value of blood is
- a) 7.0 b) 5.4
 - c) 8.4 d) 7.4.
- v) ORS solution should be discarded after

- a) 24 hrs b) 48 hrs
- c) 72 hrs d) none of these.

vi) Achlohydria is the condition defined by

- a) Excess secretion of gastric Hcl
- b) Absence of Hcl in gastric acid secretion
- c) decrease of gastic pH
- d) none of these.

vii) Tocopherol is known as

- a) Vitamin C b) Vitamin E
- c) Vitamin A d) Vitamin B.

viii) The Chemical name of bleaching powder is

- a) Chlorinated lime b) Hydrogen peroxide
- c) Silver nitrate d) Ammoniated Mercury.

ix) In Wilson disease a condition of excess storage of

- a) Fe b) Zn
- c) Cu d) I.

x) Dry Ice is

- a) Nitrous oxide snow
- b) Nitrogen snow
- c) Carbon di-oxide snow
- d) Helium snow.

xi) As per Bronsted-Lowry theory, base is a/an

- a) Electron donor b) Proton donor
- c) Proton acceptor d) none of these.

xii) Which buffer is an acidic buffer ?

- a) Phosphate buffer b) Protein solution
- c) Borate buffer d) Bi-carbonate buffer.

xiii) Which of the following is used as an antidote in heavy metal poisoning ?

- a) BAL b) Na₂EDTA
c) Penicillamine d) all of these.

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following. 3x5 = 15

2. Write a brief note on 'Sterile water for injection.'
3. Write a note on "Importance of electrolytes in human body".
4. a) Define the term "Antidote".
b) Classify antidotes alongwith their mechanism of actions
and example. 1 + 4
5. Write a short note on preparation of kaolin.
6. a) What is Antacid ? Give example (at least two)
b) What are ideal propertis of an antacid ? 2 + 3

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. 3x15 = 45

7. a) What is ORS ?
b) Write the composition of ORS according to WHO.
c) What do you mean by electrolytes ?
d) What are the various fluid(s) present in the body ?
e) How the acid-base balance is maintained in the body ?
2 + 4 + 2 + 2 + 5
8. a) Discuss the Brousted-Lowry concept of Acid and base.
b) What are the limitations of this concept.
c) Write in brief the role of buffer in pharmacy.
d) What are the advantages of phosphate buffer ?
6 + 2 + 5 + 2
9. a) What are topical agents ?
b) What are various categories of topical agents ?

c) Write the preparation and use of Titanium Dioxide.

d) Write in short about the mechanism of action of topical anti-microbial agents.

1 + 4 + 5 + 5

10. Write down the preparations, properties and uses of any three of the following :

a) Milk of Magnesia

b) Potassium permanganate

c) Calcium carbonate I.P.

d) Zinc oxide

e) Hydrogen per-oxide.

11. a) What is anaemia ? Classify.

b) Describe the physiological function Iron in our body.

c) Describe the factors that help in Iron absorption.

d) Write a note on "Ferrous sulphate-as a haematimics".

4 + 3 + 3 + 5

=====