

24-01-19

Total No. of printed pages = 4

PY 132106

Roll No. of candidate

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2019

B.Pharm. 1st Semester End-Term Examination
PHARMACEUTICAL CHEMISTRY – I (INORGANIC
CHEMISTRY)
(Old Regulation)

Full Marks – 100

Time – Three hours

The figures in the margin indicate full marks
for the questions.

Answer question No. 1 and any *six* from the rest.

1. Answer the following questions : (10 × 1 = 10)
- (i) The freezing point depression of blood is
(a) 0°C (b) -0.57°C
(c) 1°C (d) -0.52°C
- (ii) An acid is an electron acceptor and base is a
electron donor
(a) Arrhenious theory
(b) Bronsted Lowry theory
(c) Lewis acid base concept
(d) Traditional concept
- (iii) A 0.9% w/v NaCl solution is
(a) Isotonic (b) Hypotonic
(c) Hypertonic (d) None of the above

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- (iv) It is used in the management of dental carries for temporary filling
- (a) CaCO_3 (b) NaF
(c) ZOE (d) SnF_2
- (v) The pH of gastric juice is
- (a) 2.2–3.2 (b) 1.5–3.5
(c) 4.5–5.5 (d) 1.5–1.8
- (vi) In radiopharmaceuticals, the instrument mainly used for detection of ionizing radiation
- (a) Scintillation counter
(b) Geiger-Muller tube
(c) Autoradiography
(d) Photodetector
- (vii) CuSO_4 is an eg. of
- (a) Expectorants
(b) Emetics
(c) Haematinics
(d) Astringents
- (viii) Desferrioxamine is an antidote of
- (a) Copper (b) Lead
(c) Iron (d) Mercury
- (ix) Eg. of systemic antacid
- (a) Sodium bicarbonate
(b) Aluminium hydroxide
(c) Sodium hydroxide
(d) Magnesium hydroxide

- (x) Respiratory alkalosis is caused by
- (a) Barbiturate poisoning
 - (b) Pneumonia
 - (c) Salicylate poisoning
 - (d) Drowning
2. (a) Explain in brief about the sources of impurities present in pharmaceutical preparation. (7)
- (b) Write down the principle for the limit test for Arsenic. Give the detail description of the apparatus used for the limit test for Arsenic with suitable diagram. (8)
3. (a) What are antacid? Write the different types of antacids with suitable examples. Explain the preparation, properties and uses of Calcium carbonate. (1+2+3=6)
- (b) Discuss the pH of acidic buffer and alkaline buffer by applying Handerson-Hassalbach equation. Explain the role of buffer in pharmacy. (6+3=9)
4. (a) Classify topical agents with suitable examples. Explain the preparation, properties and uses of talc and titanium dioxide. (2+3+3=8)
- (b) Why Boric acid cannot be directly titrated with alkali? Explain the method of preparation, properties and uses of Boric acid and Hydrogen Peroxide. (1+3+3=7)
5. (a) What are radionuclide? Discuss the construction and operation of Geiger Muller Counter. What are the applications of Radioisotopes? (2+6+2=10)
- (b) Write a short note on Radio opaque contrast media. (5)

6. (a) What is an antidote? Explain the different types of antidotes with suitable examples. Discuss briefly the treatment strategies followed in case of Cyanide Poisoning. (1+3+6=10)
- (b) Write a note on complexing and chelating agent. (5)
7. (a) Why stannous fluoride is superior to sodium fluoride as anticaries agent? Write down the method of the preparation, properties and uses of Stannous fluoride. (2+3=5)
- (b) Discuss briefly the biological role of iron, calcium and iodine in human body. (6)
- (c) Write a short note on Pharmaceutical aid. (4)
8. (a) What is electrolyte combination therapy? Explain different categories of electrolyte combination products. (2+6=8)
- (b) Write a note on Physiological Acid Base balance. (7)
9. Write notes on : (6+5+4=15)
- (a) Topical Agents
- (b) Expectorant and Emetics
- (c) Handling and storage of Radioactive substances.
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