

QP Code : 21779

(3 Hours)

[Total Marks : 70]

- N.B. 1. All the questions are compulsory.
2. Draw diagrams wherever necessary.
- Q.1 A Answer the following in brief 8
- What is the antidote used for copper poisoning.
 - What is penetrability of various radiations of radioactive agents?
 - What is the cause of permanent hardness?
 - Explain the mechanism of action of magnesium sulphate as purgatives.
 - What is use of sodium metabisulphite.
 - How talc acts as a topical protective action?
 - What do you mean by radionuclide purity?
 - What is the role of fluoride in the dental products?
- B Justify the following 4
- Sodium hydroxide is preferred over potassium hydroxide for preparing salts of drugs
 - Sodium carbonate cannot be used as antacid.
- C
- How do proteins act as physiological buffers?
 - How copper is stored and transported?
 - Give an example of respiratory stimulant.
- Q.2 A Write a note on sterile water for injection IP. 4
- B Describe any three conditions where oxygen gas is indicated. 3
- C Write a note on 4
- Sclerosing agents
 - Disodium EDTA.
- Q.3 A Explain different forms and storage and transport of iron-protein complexes. 2
- B Write a note on anticaries agents. 4
- C What are biological effects of radiations? 3
- D Write a note on Co^{60} with respect to radiation(s) emitted, its half-life, its uses and various compounds used as radiopharmaceuticals. 2
- Q.4 A Enumerate various pharmaceutical buffers. What are their uses? 4
- B What is meant by half-life of radiopharmaceuticals? Give its importance in clinical application. 3
- C Write notes on (any two) 4
- Preservatives
 - Colorants
 - Antioxidants
- Q.5 A Write a note on treatment of cyanide poisoning. 4
- B What are antacids? Describe various requirements of an ideal antacids. 3
- C What are electrolytes used in combination therapy? Explain any two in detail. 4
- Q.6 A Give the mechanism of action of sodium hypochlorite and silver nitrate. 3
- B Discuss in detail the imbalance of iodine in body and its consequences. 2
- C Write a note on (Any Two) 6
- Different bases used for systemic effects.
 - Physiological role of chloride and bicarbonate.
 - Calamine lotion.