

3 Hours

Total Marks: 75

- N.B:** 1. All questions are compulsory.
2. Figures to right indicate full marks.

Q.1 Attempt all multiple-choice questions**20M**

No	Question	Options
1	Calcium Gluconate is prepared by _____	a mixing Calcium chloride with gluconate
		b mixing Glucose and Calcium hydroxide
		c mixing Gluconic acid with calcium carbonate
		d mixing silica and glucose
2	Which GIT agents are used in the treatment of Diarrhea	a Laxative
		b Antacids
		c Protective and adsorbants
		d Saline Cathartics
3	In Lowry Bronsted concept, base is	a Proton acceptor
		b Electron pair donor
		c Proton donor
		d Electron pair acceptor
4	_____ assay is based on the principle of precipitation titration.	a Sodium Bicarbonate
		b Sodium chloride
		c Sodium thiosulphate
		d Sodium nitrate
5	Which apparatus is used for the Limit test for arsenic?	a Karl Fischer
		b Gutzeit Apparatus
		c Nessler Cylinder
		d Arrhenius
6	Which statement is correct regarding the handling and storage of radioactive materials	a Radiopharmaceuticals never be touched with hand
		b Sufficient protective clothing must be used while handling the materials
		c Kept in suitable container
		d All of the above

7	Assay of Hydrogen peroxide is _____ type of titration	a	Acid-Base Titration
		b	Redox Titration
		c	Precipitation Titration
		d	Complexometry
8	_____ is the Major intracellular cation	a	Sodium
		b	Calcium
		c	Potassium
		d	Zinc
9	The latest edition of IP was published in _____	a	2020
		b	2022
		c	2015
		d	2021
10	Which of the following converts haemoglobin to methaemoglobin?	a	Sodium thiosulphate
		b	Activated charcoal
		c	Sodium nitrite
		d	Bentonite
11	Radioactivity was first discovered by	a	Henry Becquerel
		b	Rutherford
		c	J.J.Thomson
		d	Madame Curie
12	_____ are used to stop bleeding from small cuts.	a	emetic
		b	expectorant
		c	antidote
		d	astringent
13	Choose Incorrect pair	a	Antacid: Magnesium Hydroxide
		b	Expectorant : Copper Sulphate
		c	Astringent : Zinc Sulphate
		d	Cathartic: Magnesium Sulphate

14	_____ is the titrant used in the assay of ferrous sulphate as per I.P.1996.	a	Potassium Permanganate
		b	Sodium thiosulphate
		c	Cerric ammonium sulphate
		d	Hydrochloric acid
15	Which of the following is an emetic as well as used in the preparation of Benedict's Solution?	a	Sodium thiosulphate
		b	Ammonium chloride
		c	Copper sulphate
		d	Hydrochloric acid
16	In the limit test for iron, purple color is due to formation of _____	a	Ferrous thioglycolate complex
		b	Citric acid-Ammonia complex
		c	Thioglycollic acid
		d	Ferrous citrate
17	Example of systemic antacid is	a	Sodium Bicarbonate
		b	Calcium carbonate
		c	Aluminium sulphate
		d	Magnesium sulphate
18	The drug which are able to neutralize the alkaline body fluids especially blood	a	Systemic acidifiers
		b	Urinary acidifiers
		c	Gastric acidifiers
		d	Hydrochloric acid
19	Which of the following is used for treatment of goiter as well as expectorant?	a	Potassium iodide
		b	Ammonium chloride
		c	Copper sulphate
		d	Hydrochloric acid
20	_____ are used to bring about defecation	a	Cathartics
		b	Protective and adsorbants
		c	Antacids
		d	None of these

- Q.2 Attempt any two questions out of three 20M**
- 1.a) Give Principle, reaction and procedure involved in the limit test of arsenic as per IP. 5M
b) Discuss Pharmaceutical applications of radioactive substances. 5M
- 2.a) Give category and uses of Sodium Nitrite, activated charcoal, Copper sulphate, Ferrous gluconate, Zinc Sulphate, Potassium Iodide. 5M
b) Define the Limit test and give its significance. Elaborate on Limit Test for Iron. 5M
- 3.a) Define Antacid. Give classification of Antacid with suitable examples. Explain the benefits of antacid combination therapy giving suitable example. 5M
b) Write ideal properties of Antacids. 5M
- Q.3 Attempt any seven out of nine 35M**
- 1 Write a note on electrotype replacement therapy. 5M
2 Write the category, mechanism of action and uses of magnesium hydroxide, Dil. HCl, Bentonite, Hydrogen Peroxide, Boric acid. 5M
3 What are astringents? Describe properties and applications of astringents with suitable examples. 5M
4 Give method of preparation and uses of the following (any two) 5M
1. Ferrous sulphate 2. Sodium thiosulphate 3. Sodium bicarbonate
5 Write a note on preparation, principle involved in the assay and uses of Calcium gluconate 5M
6 Classify antidotes based of mechanism of action. What is cyanide poisoning? Give the treatment for cyanide poisoning. 5M
7 Explain the terms with suitable examples 5M
i) Haematinics ii) Emetics iii) Expectorant iv) Chemical Antidotes
v) Physiological antidotes
8 Define and classify antimicrobials based on mechanism of action with suitable examples. Give the action and uses of KMnO_4 . 5M
9 What are dentifrices? Explain following terms with suitable examples: anticaries agent, dental desensitizers. 5M
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