

Exam Date & Time: 17-Mar-2022 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm First Semester - End Semester Examination March 2022

PCH-BP104T: Pharmaceutical Inorganic Chemistry

Max. Marks: 75

Pharmaceutical Inorganic Chemistry [PCH-BP104T]

Marks: 75

Duration: 180 mins.

I Multiple Choice Questions (MCQs)

Answer all the questions.

Section Duration: 30 mins

1) The world's first pharmacopoeia was published in the year

(1)

1) 1864	2) 1820	3) 1951	4) 1953
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2) One of the solvent below is of low toxicity

(1)

1) Cyclohexane	2) Acetic acid	3) carbon tetrachloride	4) Acetonitrile
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3) Lead impurities are detected in limit test by reaction with

1)

Thioglycollic acid	2) Hydrogen Sulphide	3) Barium Chloride	4) Dithizone
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(1)

4) In limit test of sulphate alcohol not allow

(1)

1) saturation	2) super saturation	3) less saturation	4) precipitation
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5) Yellow colour stain formed in arsenic limit test is due to the formation of

1)

Mercury arsenate	2) Mercury arsenide	3) Mercury arsenic acid	4) Mercury Arsenous acid
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6) Systemic acidosis is a condition, in which

1) pH of the blood	2) pH of the blood	3) More acid	4) Less acid is more than is less than secretion in the secretion in normal normal stomach the stomach
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7) The synonym of aqueous iodine is

1) Bleaching powder	2) Strong tincture of Iodine	3) Lugol's solution	4) Weak iodine solution
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(1)

8) Hydrogen peroxide is used as

1) antiseptic	2) acidifying agent	3) protective	4) antioxidant
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(1)

9) Agents that act by increasing the osmotic load of gastro intestinal tract by absorbing large quantity of water and thereby stimulate peristalsis are called as

(1)

1) Bulk purgatives	2) Saline purgatives	3) Stimulant purgatives	4) Emollient purgative
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10) An inorganic agent act by irritating gastric mucosa & then stimulate respiratory tract secretion

1) Terpin hydrate	2) Ammonium chloride	3) Ambroxol	4) Codeine
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11) Is not sulphur containing amino acid

1) Methionine	2) Cysteine	3) Taurine	4) Threonine
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12) Isotonic solutions are not used in

1) Wet dressings	2) Loss of sodium	3) Irrigating body cavities	4) Irrigating tissues
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(1)

13) Interstitial fluid consists of

1) 25-35% of body weight	2) 45- 50% of body weight	3) 4- 5% of body weight	4) 12- 15% of body weight
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(1)

14) Magnesium is not involved

1) Activate enzymes in carbohydrate and protein metabolism	2) Secretion of parathyroid hormone	3) Cofactor for glycolytic enzymes	4) For protein synthesis and for smooth functioning of the neuromuscular system
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(1)

15) Calcium phosphate is used as (1)

1) Polishing agent	2) Desensitizing agent	3) Dentifrice	4) Anticaries agent
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16) Hydroxyapatite is the mixture

1) carbonate, phosphate and hydroxides	2) Calcium, carbonate, phosphate and hydroxides	3) Hydrogen, Calcium, carbonate	4) Calcium, hydrogen, phosphate
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(1)

17) It is also known as white vitriol

(1)

1)	Zinc oxide	2)	Zinc Sulphate	3)	Zinc Chloride	4)	Zinc Carbonate
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18) Alums are sulphates of

1)	Trivalent metal with a univalent atom	2)	Trivalent metal with divalent atom	3)	Univalent metal with a trivalent atom	4)	Univalent atom with a divalent metal
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(1)

19) Styptic action is the property of

1)	Haematinics	2)	Astringents	3)	Antidotes	4)	Expectorants
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(1)

20) Sodium thiosulphate is assayed by

1)	Iodimetric method	2)	Iodometric method.	3)	Precipitation titration.	4)	Complexometric titration.
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(1)

II Long Answers

Answer all the questions.

- 1) What are antimicrobial agents? Explain its mechanism of action. Write the preparation and assay principle of boric acid.
- 2) a) What is buffer capacity? Explain the mechanism of buffer. Mention the standard buffers given in Indian Pharmacopoeia?
b) Explain how the body maintains acid base balance?

III Short Answers

Answer all the questions.

- 1) What are Haematinics? Write the preparation and advantages of ferrous sulphate.
- 2) How the impurities get incorporated in to the pharmaceutical preparations during the manufacturing process? Explain.
- 3) Give the preparation, principle involved in the assay and medicinal uses of any one inorganic expectorant. (5)
- 4) Classify antidote. Give the preparation of any two inorganic compounds used as antidote. (5)
- 5) Explain how the fluorescence by the radiation is useful in the measurement of radiation? (5)

- 6) What modification is done in the limit test for chloride for potassium permanganate and sodium salicylate? Why? (5)
- 7) Write a short note on alpha, beta and gamma decay. (5)

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