Total No. of Questions: 3 *Total No. of Printed Pages:2*

Enrollment No.....

Faculty of Pharmacy
End Sem Examination Dec 2024
PY3CO04 Pharmaceutical Inorganic Chemistry

Programme: B. Pharm. Branch/Specialisation: Pharmacy

Duration: 3 Hrs. **Maximum Marks: 75**

Note: All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary. Notations and symbols have their usual meaning.

			Marks	BL	PO	CO	PSO
Q.1	i.	Write the reaction involved in the limit test for sulphate.	**2**	1	1, 10	1	
	ii.	Give difference between limit test for chloride and modified limit test for chloride.	**2**	2	1, 2, 9, 10	6	
	iii.	Define Isotonicity.	**2**	1	1, 10	2	
	iv.	What is the role of fluoride in the treatment of dental caries?	**2**	2	1	5	
	v.	What do you mean by cathartics?	**2**	1	1	3	
	vi.	Give four examples of antacids.	**2**	1	1	3	
	vii.	Define astringents, give one example.	**2**	1	1	3	
	viii.	What are antidotes? Give one example.	**2**	1	1	3	
	ix.	What are radioisotopes?	**2**	1	1	5	
	x.	Name the methods used for the measurement of radioactivity.	**2**	1	1	5	
Q.2		Attempt any two:					
	i.	Define impurities. Discuss in detail about the sources and types of impurities in pharmaceutical substances.	**10**	1	1, 10	1	
	ii.	Explain major intracellular and extracellular electrolytes. Write the composition, preparation and uses of ORS.	**10**	2	1	2	
	iii.	(a) Explain the principle and procedure involved in limit test of lead.	**5**	3	1, 2, 9, 10	6	
		(b) Write a note on Dentifrices.	**5**	1	1	5	

			Marks	BL	PO	CO	PSO
Q.3		Attempt any seven: Two questions from each section is compulsory.					
		Section - A					
	i.	What are Antacid? Discuss the ideal properties of Antacids, give general method of preparation of sodium bicarbonate.	**5**	1	1	4	
	ii.	What are emetics? Give the method of preparation and uses of copper sulphate.	**5**	1	1	4	
	iii.	Define antimicrobials. Classify antimicrobials on the basis of mechanism of action with suitable examples.	**5**	1	1	3	
		Section - B					
	iv.	Define expectorants. Write methods of preparation, properties and uses of Ammonium chloride.	**5**	1	1, 2, 9, 10	6	
	v.	What are haematinics? Write a note on Ferrous sulphate.	**5**	1	1, 2, 9, 10	6	
	vi.	Write the methods of preparation, properties and uses of sodium thiosulphate.	**5**	1	1, 2, 9, 10	6	
		Section - C					
	vii.	Explain various techniques used in the measurement of radioactivity.	**5**	2	1	5	
	viii.	Discuss storage conditions and pharmaceutical applications of radioactivity.	**5**	2	1	5	
	ix.	Give the properties of alpha and beta radiations.	**5**	1	1	5	

******

Marking Scheme

PY3CO04 (T) Pharmaceutical Inorganic Chemistry (T)

Q.1 i) Reaction involved in the limit test for sulphate. **2**

ii) 1 difference between limit test for chloride and modified limit test for chloride. **2**

iii) Isotonicity definition **2**

iv) Role of fluoride in the treatment of dental caries **2**

v) Cathartics definition **2**

vi) Four examples of antacids- 0.5 mark each **2**

vii) Define astringents- 1 mark **2**
one example- 1 mark

viii) Define Antidotes- 1 mark **2**
one example- 1 mark

ix) Define radioisotopes **2**

x) 2 methods used for the measurement of radioactivity **2**

Q.2 Attempt any two:

i. Define impurities- 2 mark **10**
Sources- 4 marks
Types of impurities in pharmaceutical substances- 4 marks

ii. Major intracellular and extracellular electrolytes- 5 marks **10**
Composition, preparation and uses of ORS- 5 marks

iii. (a) Principle – 2 marks **5**
procedure involved in limit test of lead- 3 marks
(b) Note on Dentifrices - 5 marks **5**

Q.3 Attempt any seven: Two questions from each section is compulsory.

Section - A

i. Antacid- 1 mark **5**
ideal properties of Antacids- 2 marks
General method of preparation of sodium bicarbonate- 2 marks

ii. Emetics- 1 mark **5**
Method of preparation- 2 marks
uses of copper sulphate- marks

iii. Define antimicrobials- 1 mark **5**
Classification on the basis of mechanism of action- 2 marks
with suitable examples-2 marks

Section - B

iv. Define expectorants- 1 mark **5**
Methods of preparation, properties- 2 marks
uses of Ammonium chloride- 2 marks

v. What are haematinics- 2.5 marks **5**
Write a note on Ferrous sulphate- 2.5 marks

vi. Methods of preparation-2 marks **5**
Properties- 1 mark
and uses of sodium thiosulphate- 2 marks

Section - C

vii. Various techniques used in the measurement of radioactivity- 5 marks **5**

viii. Storage conditions- 2.5 marks **5**
Pharmaceutical applications of radioactivity- 2.5 marks

ix. Properties of alpha radiations - 2.5 marks **5**
beta radiations- 2.5 marks

******