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

Enrollment No.....

Faculty of Pharmacy
End Sem Examination Dec 2024
PY3CO19 Industrial Pharmacy -I

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.	Define racemisation and polymerization with examples.	**2**	02	01	01	
	ii.	What do you mean by flow properties and polymorphism?	**2**	02	01	01	
	iii.	Enlist any four quality control tests for tablet.	**2**	02	01	02	
	iv.	Give the types of coating in tablet.	**2**	02	01	02	
	v.	Enlist the manufacturing defects of hard gelatin capsules.	**2**	02	01	03	
	vi.	Write any four disadvantages of soft gelatin capsules.	**2**	02	01	03	
	vii.	Define isotonicity with examples.	**2**	02	01	04	
	viii	Enlist evaluation parameters of ophthalmic preparations.	**2**	02	01	04	
	ix.	Define propellants with examples.	**2**	02	01	05	
	x.	Write the evaluation parameters for hair dyes and sunscreens.	**2**	02	01	05	
Q.2		Attempt any two:					
	i.	Explain the applications of preformulation considerations in the development of solid and liquid oral.	**10**	02	01	01	
	ii.	Discuss the formulation and manufacturing consideration of suspensions and emulsions.	**10**	02	01	02	

	iii.	(a) Discuss BCS classification of drugs & its significance.	**5**	02	01	01	
		(b) Classify tablets and give the ideal characteristics of tablets.	**5**	02	01	02	
Q.3		Attempt any seven: Two questions from each section is compulsory.					
		Section – A					
	i.	Explain the filling techniques of hard gelatin capsule and production of hard gelatin capsule shells.	**5**	02	01	03	
	ii.	Discuss the stability testing of soft gelatin capsules and their applications.	**5**	02	01	03	
	iii.	Describe the pelletization process and formulation requirements for pellets.	**5**	02	01	03	
		Section – B					
	iv.	Explain the different factors affecting preformulation of parenteral products.	**5**	02	01	04	
	v.	Write a note on quality control tests of parenteral products.	**5**	02	01	04	
	vi.	Discuss the formulation of eye drops and eye ointments.	**5**	02	01	04	
		Section – C					
	vii.	Write a note on formulation and preparation of cold cream and vanishing cream.	**5**	02	01	05	
	viii.	Discuss the legal and official requirements for containers in packaging of pharmaceutical products.	**5**	02	01,02,03,09	06	
	ix.	Describe evaluation and stability studies of aerosols.	**5**	02	01	05	

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Marking Scheme

PY3CO19 Industrial Pharmacy -I

Q.1 i) Definition of racemisation with examples – 1 Mark **2**
Definition of Polymerization with examples – 1 Mark

ii) Flow properties – 1 Mark **2**
Polymorphism – 1 Mark

iii) One Quality control test for tablet – 0.5 Mark **2**

iv) One type of coating in tablet – 0.5 Mark **2**

v) One manufacturing defect of hard gelatin capsules – 0.5 Mark **2**

vi) One disadvantages of soft gelatin capsule – 0.5 Mark **2**

vii) Definition – 1 Mark **2**
Example – 1 Mark

viii) One evaluation parameter of ophthalmic preparations – 0.5 Mark **2**

ix) Definition – 1 Mark **2**
Example – 1 Mark

x) Evaluation parameters for hair dyes OR Define– 1 Mark **2**
Evaluation parameters for sunscreens OR Define – 1 Mark

Q.2 Attempt any two:

i. Application in the development of solid – 5 Mark **10**
Application in the development of liquid oral – 5 Mark

ii. Suspensions– 5 Mark **10**
Emulsion – 5 Mark

iii. (a) BCS classification of drugs – 3 Mark **5**
(b) Significance – 2 Mark
(c) Classification of tablets - 3 Mark **5**
(d) The ideal characteristics of tablets – 2 Marks

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

Section - A

i. Filling technique of hard gelatin capsule – 3 Mark **5**
Production of hard gelatin capsule shells – 2 Mark

ii. Quality control test or Stability testing of soft gelatin capsules – 3 Mark **5**
Applications – 2 Mark

iii. Pelletization process -2.5 Mark **5**
Formulation requirements for pellets – 2.5 Mark

Section - B

iv. One factor – 1 Mark each **5**

v. One quality control test of parenteral products – 1 Mark each **5**

vi. Formulation of eye drops – 2.5 Mark **5**
Formulation of eye ointments – 2.5 Mark

Section – C

vii. Formulation and preparation of cold cream – 2.5 Mark **5**
Formulation and preparation of vanishing cream – 2.5 Mark

viii. legal and official requirements for containers – 5 Marks **5**

ix. Evaluation – 1.5 Mark **5**
Stability studies – 2 Mark
Parts of aerosol– 1.5 Mark

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