

Exam Date &amp; Time: 14-Mar-2022 (10:00 AM - 01:00 PM)



# MANIPAL ACADEMY OF HIGHER EDUCATION

## Pharmaceutics-I [PCE-BP103T]

Marks: 75

Duration: 180 mins.

### I Multiple Choice Questions (MCQs)

Answer all the questions.

Section Duration: 30 mins

1) Which of these is an antioxidant for oily systems?

1) Sodium sulphite	2) Sodium metabisulphite	3) Thioglycolic acid	4) Ascorbyl palmitate	(1)
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2) Incompatibility which can be rectified by addition or substitution of one ingredient in the prescription with another of equal therapeutic value is called \_\_\_\_\_

1) Tolerated	2) Primary	3) Adjusted	4) Any of the above	(1)
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3) 30° u/p alcohol is \_\_\_\_\_ % v/v

1) 140	2) 40	3) 130	4) 30	(1)
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4) 1 lb = \_\_\_\_\_ grains

1) 6500	2) 7000	3) 437.5	4) 480	(1)
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5) Identify the dosage form where the drug is enclosed in a practically tasteless, hard or soft soluble shell made of gelatin.

(1)	1) Tablet	2) Capsule	3) Cachet	4) Collodion
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6) Add 3  $\bar{\text{O}}$ , 2  $\bar{\text{Z}}$  and 1  $\bar{\text{J}}$ . Represent the result in gr (1)

1) 480	2) 660	3) 870	4) 1040
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7) Which of these dosage forms is most likely to have a sweetening agent?

1) Lozenge	2) Tablet	3) Capsule	4) Pessary	(1)
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8) Which of these is a mineral colour?

1)	alizarin	2)	indigo	3)	anthocyanins	4)	lead chromate	(1)
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9) 60 minims = \_\_\_\_\_

1)	1 fluidram	2)	1 fluidounce	3)	1 pint	4)	1 quart	(1)
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10) How much of epinephrine hydrochloride is required to prepare 555 mL of a 3.5% w/v solution?

1)	19.425 g	2)	1.586 g	3)	19.425 mL	4)	None of the above	(1)
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11) The Drugs and Cosmetics Act was first issued in \_\_\_\_\_

1)	1970	2)	1974	3)	1940	4)	1945	(1)
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12) This person is known as Father of Indian Pharmacy Education.

1)	Prof R N Chopra	2)	Prof M L Schroff	3)	Prof P C Roy	4)	Prof B N Ghosh	(1)
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13) Prescription abbreviation 'Fiat Mistura' means

1)	You make	2)	Make mixture	3)	After meals	4)	Before meals	(1)
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14) Mouth washes do not contain the following ingredient (1)

1)	Alcohol	2)	Humectant	3)	Disinfectant	4)	Surfactant	(1)
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15) It is NOT a eutectic substance.

1)	Thymol	2)	Menthol	3)	Chloral hydrate	4)	Sodium alginate	(1)
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16) Polyols are added in syrups to

1)	to increase solubility of added ingredients	2)	to retard crystallization of sucrose	3)	None of the above	4)	All the above	(1)
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17) The primary emulsion formula (o:w:g) for turpentine oil based emulsion is

1)	1:2:1	2)	2:2:1	3)	3:2:1	4)	4:2:1	(1)
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18) All of the following liquids are for internal use except

1)	Syrups	2)	Elixirs	3)	Liniments	4)	Aromatic waters	(1)
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19) The skin layer is considered as a barrier for the absorption of drugs across the skin.

1)	Stratum granulosum	2)	Stratum lucidum	3)	Stratum corneum	4)	Stratum spinosum	(1)
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20) Hydrous wool fat is an example for

1)	Hydrocarbon base	2)	Absorption base	3)	Water-removable bases	4)	Water-soluble bases	(1)
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## II Long Answers

Answer all the questions.

- 1) Define pharmaceutical incompatibilities. Describe their types. (10)
- 2) Explain the preparation of suspension and the liquid emulsions for external use with one example each. (10)

## III Short Answers

Answer all the questions.

- 1) Write the importance of formulating drugs into dosage form
- 2) Give five formulae for calculation of dose of a drug for a child, based on adult's dose
- 3) What are isotonic solutions?  
Calculate the amount of sodium chloride that should be added to 200 mL of nasal drop (containing 0.4 g oxymetazoline), in order to make the solution isotonic to body fluid. Take the freezing point depression produced by 1% w/v oxymetazoline and 1% w/v NaCl solution as 0.158 °C and 0.576 °C, respectively. (5)
- 4) Describe the mechanism of solubilisation of poorly-water-soluble drugs using surfactants
- 5) Explain the features, merits and demerits of hydrocarbon bases used in ointments.
- 6) Mention the benefits of theobroma oil over glycerogelatin base
- 7) Enlist evaluation parameters of creams and explain any TWO.

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