



Library  
Pharmaceutical Technology  
Brainware University  
Barasat, Kolkata-700125

## BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – D.Pharm-2022/D.Pharm-2023

Course Name – Pharmaceutics - Theory

Course Code - ER20-11T

( Year I )

Full Marks : 80

Time : 3:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group-A

(Multiple Choice Type Question)

1 x 20=20

1. Choose the correct alternative from the following :

- (i) Which of the following substance is used as a surfactant?
  - a) Calcium carbonate
  - b) Sodium saccharin
  - c) Sodium lauryl sulfate
  - d) Magnesium stearate
- (ii) Which tablets are placed under the skin?
  - a) Electric-coated tablets
  - b) Effervescent tablets
  - c) Implants
  - d) Lozenges
- (iii) Which is the suitable mill for size reduction of Rauwolfia?
  - a) Roller mill
  - b) Ball mill
  - c) Cutter mill
  - d) Colloid mill
- (iv) What is the term used to describe the passage of gases, vapours, and liquids through a plastic packaging system?
  - a) Permeation
  - b) Leaching
  - c) Sorption
  - d) Alteration
- (v) Where valve and actuator is used?
  - a) Liquid dosage form
  - b) Semisolid dosage form
  - c) Aerosols
  - d) Solid dosage form
- (vi) "Impact" is the mechanism of size reduction for which of the following mill?
  - a) Roller mill
  - b) Cutter mill
  - c) Hammer mill
  - d) Fluid energy mill
- (vii) In which case amber colour mainly gives protection?
  - a) Oxidation
  - b) Reduction
  - c) Hydrolysis
  - d) Photo-degradation

- (viii) What is the term used to describe the removal of components from a formulation through the container wall?
- a) Sorption  
b) Desorption  
c) Chemical reaction  
d) Leaching
- (ix) Determine air-tight sealed containers are used for.
- a) Tablets  
b) Injectables  
c) Capsules  
d) Ointment
- (x) Describe the category of borosilicate glass.
- a) Inferior in nature  
b) Soft in nature  
c) Type I glass  
d) Inferior in appearance
- (xi) Predict according to IP very fine powder is.
- a) All particles pass through 120# sieve  
b) 90% particles pass through 350# sieve  
c) All particles pass through 350 # sieve  
d) 90% particles are of size <10µm
- (xii) Which one of the following is not used in amber coloured glass?
- a) Iron  
b) Silver  
c) Copper  
d) Magnesium dioxide
- (xiii) Which of the following is not a mixing mechanism?
- a) Diffusion  
b) Shear  
c) Conduction  
d) Convection
- (xiv) Identify the correct answer: In which of the following process, drug is kept with menstruum for 15 minutes?
- a) Maceration  
b) Infusion  
c) Digestion  
d) Percolation
- (xv) Identify the correct answer: Which of the following is not a mechanism of filtration?
- a) Sieving or screening  
b) Entrapment or impaction  
c) Electrostatic attraction  
d) Compaction
- (xvi) Identify the number of tablets needed for friability test.
- a) 5  
b) 10  
c) 20  
d) None of these
- (xvii) Indicate the correct option: Vacuum dryer is a modified form of-
- a) Vacuum still  
b) Simple distillation  
c) Evaporation  
d) Sublimation
- (xviii) Select the equilibrium moisture content of talc.
- a) High  
b) One  
c) Variable  
d) Zero
- (xix) Select the correct answer: The third edition of the pharmacopoeia of India was published in-
- a) 1966  
b) 1985  
c) 1996  
d) 1975
- (xx) Select the correct answer: The implants are useful in -
- a) Hormone therapy  
b) Delivering erythrocytes  
c) Inhalation  
d) Nebulization

Library  
Pharmaceutical Technology  
Jawahar Education University  
Jawahar Education University  
Jawahar Education University

### Group-B

(Short Answer Type Questions)

3 x 10=30

2. Recall various characteristics in pharmaceutical manufacturing plant.

(3)

3. Define Tablets and list the classification based on route of administration. (3)
4. Define the terms Quality Assurance and Quality Control. (3)
5. Write advantages and disadvantages of injectable products. (3)
6. Explain Process of forming glass containers. (3)
7. Explain synthetic coloring agent. (3)
8. Describe syrup and classify them with examples. (3)
9. Describe Darcy's Equation. (3)
10. Describe the composition of glass. (3)
11. Classify injectable products with examples. (3)

OR

Define ointments and classify them with suitable examples. (3)

**Group-C**

(Long Answer Type Questions)

5 x 6=30

12. Define GMP with it's significance. (5)
13. Explain advantages and disadvantages of eye drops. (5)
14. Describe principle, working and applications of fluid bed dryer. (5)
15. Define the terms maceration, percolation, decoction, infusion, digestion. (5)
16. Explain and classify preservatives based on mechanism of action. (5)
17. Explain rubber and it's ideal properties. (5)

OR

Explain components of Packaging. (5)

\*\*\*\*\*

Library  
Pharmaceutical Technology  
Birla Institute of Science and Technology  
Mumbai, India-700125