



## BRAINWARE UNIVERSITY

### D. Pharm Part I Examination 2018 - 19

Programme– Diploma in Pharmacy

Course Name - Pharmaceutics I

Course Code – 1.1T

(D. Pharm first year final)

Time allotted: 3 Hours

Full Marks: 80

[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)

20 × 1 = 20

1. *Choose the correct alternative from the following*
- (i) According to I.P., sucrose concentration in simple syrup is-
 

a. 66.67% w/w	b. 60.74% w/w
c. 75.87% w/w	d. 55.56 % w/w
- (ii) Liniments are used in –
 

a. Broken skin	b. Intact skin
c. Internal application	d. Intranasal route
- (iii) Dusting powders should be passed through sieve no \_\_\_\_\_ to enhance its effectiveness.
 

a. 85	b. 60
c. 40	d. 20
- (iv) 2-chlorobuta-1,3-diene is commonly known as-
 

a. Butyl rubber	b. Nitrile rubber
c. Neoprene rubber	d. Silicone rubber
- (v) Transmission of gases, vapours, liquids through plastic packaging system is known as-
 

a. Permeation	b. Leaching
c. Sorption	d. Alteration
- (vi) Which one of the following is used to adjust tonicity?
 

a. Dextrose	b. Sodium chloride
c. Calcium carbonate	d. Ferrous sulphate

- (vii) Which mill produces finer particles?
- a. Cutter mill
  - b. Roller mill
  - c. Crusher mill
  - d. Fluid energy mill
- (viii) Enteric coated tablets are disintegrated in-
- a. Oral cavity
  - b. Stomach
  - c. Intestine
  - d. Colon
- (ix) "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
- (x) Amber colour mainly gives protection from-
- a. Oxidation
  - b. Reduction
  - c. Hydrolysis
  - d. Photo-degradation
- (xi) Cold cream is a-
- a. O/W emulsion
  - b. W/O emulsion
  - c. Solution
  - d. Suspension
- (xii) Which of the following is not a mixing mechanism?
- a. Diffusion
  - b. Shear
  - c. Conduction
  - d. Convection
- (xiii) The percentage of ethanol in elixir varies between-
- a. 2-10 %
  - b. 2-20 %
  - c. 4-30 %
  - d. 4-40 %
- (xiv) The process of complete removal of mechanically admixed water is known as-
- a. Desiccation
  - b. Distillation
  - c. Evaporation
  - d. Sublimation
- (xv) In cyclone separator, a powder is separated depending on its-
- a. Particle size
  - b. Density
  - c. Particle size and density
  - d. Shape
- (xvi) When a drug is extracted by heating at a particular pressure, the process is known as
- a. Digestion
  - b. Infusion
  - c. Percolation
  - d. Maceration
- (xvii) What is the storage temperature of Tetanus toxoid vaccine?
- a. 0 - 4° C
  - b. 2 - 8° C
  - c. 8 - 25° C
  - d. 25 - 40° C
- (xviii) Preparation of fine emulsion from coarse emulsion is called as-
- a. Size reduction
  - b. Homogenization
  - c. Mixing
  - d. Creaming

- (xix) A preparation which is free from viable microorganism is called-
- |                            |                    |
|----------------------------|--------------------|
| a. Pasteurized product     | b. Sterile product |
| c. Lyophilised preparation | d. Culture medium  |
- (xx) Mantoux test is carried out for-
- |               |                 |
|---------------|-----------------|
| a. Diphtheria | b. Tuberculosis |
| c. Cholera    | d. Hay fever    |

**Group – B**

(Short Answer Type Questions)

8 × 5 = 40

Answer any *eight* from the following

- |   |     |
|---|-----|
| 2. What is apothecaries system? Prepare 120 g of a 2% hydrocortisone ointment using a 1% ointment and a 2.5% ointment.                              | 2+3 |
| 3. Write a note on weight variation test for tablets according to I. P.   | 5   |
| 4. With a labeled diagram briefly discuss about planetary mixer.  | 5   |
| 5. Briefly discuss the steps involved in sugar coating.   | 5   |
| 6. Write about the factors affecting evaporation.   | 5   |
| 7. With a neat diagram, describe cutter mill.   | 5   |
| 8. Explain why moist heat sterilisation is more effective than dry heat method. Write the advantages and disadvantages of moist heat sterilisation. | 3+2 |
| 9. Briefly discuss the preparation of soft gelatin capsule.   | 5   |
| 10. Discuss about drug- plastic interaction.  | 5   |
| 11. Write a note on effervescent granules.  | 5   |

**Group – C**

(Long Answer Type Questions)

2 × 10 = 20

Answer any *two* from the following

- |  |    |
|--|----|
| 12. With a neat diagram write the theory, construction and working of fluidized bed dryer. | 10 |
| 13. Write in details about manufacturing defects of tablet.                                | 10 |
| 14. With a neat labeled diagram explain the process of percolation.                        | 10 |