



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 |
