

## PHARMACEUTICS

Time Allowed : 3:00 Hours

Maximum Marks : 80

Notes: (i) Attempt all parts.

(ii) Students are advised to specially check the numerical data of question paper in both versions. If there is any difference in Hindi translation of any question, the students should answer the question according to the English version.

(iii) Use of pager and mobile phone by the students is not allowed.

## PART-A

## (Long Questions)

Note : Answer any six questions. Each carries equal marks.

[6 × 5 = 30]

- Q.1. Write briefly on materials used for construction of containers.  
 Q.2. Define Extraction. Write in brief on maceration.  
 Q.3. Write note on novel drug delivery system.  
 Q.4. Write about different types of dryers.  
 Q.5. Write about Pharmaceutical applications of size reduction.  
 Q.6. Write in brief about British Pharmacopoeia.  
 Q.7. Write on immunological products.

## PART-B

## (Short Questions)

Note : Answer any ten questions. Each carries equal marks.

[10 × 3 = 30]

- Q.1. Write short note on Pharmaceutical aids.  
 Q.2. Write on working of hammer mill.  
 Q.3. Write about soft gelatin capsules.  
 Q.4. Write note on Fluidized bed dryer.  
 Q.5. Write about application of Ball mill.  
 Q.6. Write note on Homogenizers.  
 Q.7. Write note on glass containers.  
 Q.8. Write note on filter media.  
 Q.9. Write a brief note on Percolation.  
 Q.10. Why drying is an important operation in the formulation of dosage forms?  
 Q.11. Write a note on suspension.

## PART-C

## (Objective Questions)

Note : Answer all questions. Each question carries equal marks.

[20 × 1 = 20]

- Q.1. The first edition of Indian Pharmacopoeia was published in :  
 (a) 1965 (b) 1975 (c) 1955 (d) 1985
- Q.2. Advantages of plastic containers \_\_\_\_\_  
 (a) Poor conductor of heat (b) Sufficient mechanical strength  
 (c) Transported easily (d) All of the above
- Q.3. Different methods of size separation are \_\_\_\_\_  
 (a) Sieving (b) Air separator (c) Elutriation (d) All of the above
- Q.4. Method of extraction \_\_\_\_\_  
 (a) Infusion (b) Decoction (c) Maceration (d) All of the above

- Q.5. The material or medium used for retaining the particles in the process of filtration is known as the \_\_\_\_\_.
- (a) Filtrate (b) Straining (c) Filter media (d) None of the above
- Q.6. The process of final removal of liquid from solid materials by thermal vaporisation is :
- (a) Distillation (b) Vaporisation (c) Drying (d) All of the above
- Q.7. \_\_\_\_\_ refers to the adherence of tablet material to the die walls.
- (a) Picking (b) Sticking (c) Capping (d) All of the above
- Q.8. Which of the following is natural colorant?
- (a) Amaranth (b) Erythrosine (c) Carotenoids (d) Eosin
- Q.9. Bacillus Calmette Guerin (BCG) Vaccine should be stored at a temperature between :
- (a) 10°C to 18°C (b) 18°C to 24°C  
(c) 2°C to 8°C (d) All of the above
- Q.10. Douches are meant for application in \_\_\_\_\_.
- (a) Buccal cavity (b) Rectal cavity (c) Vaginal cavity (d) Nasal cavity
- Q.11. Polymers used for enteric coating \_\_\_\_\_.
- (a) Cellulose acetate phthalat (b) PEG-40  
(c) Ethyl cellulose (d) Hydroxyethylmethyl cellulose
- Q.12. The resistance developed by an individual as a result of an antigenic stimulus is :
- (a) Passive immunity (b) Active immunity  
(c) Both (a) and (b) (d) None of the above
- Q.13. Drugs converted to suitable forms are known as \_\_\_\_\_.
- (a) Excipient (b) Source of drug (c) Dosage form (d) API
- Q.14. Capsules in which powders are enclosed are made up of :
- (a) Gelatin (b) Rice flour (c) Fructose (d) Dextrose
- Q.15. The chairman of the first edition of I.P. was :
- (a) Dr. B.N. Ghosh (b) Dr. B. Mukherjee  
(c) Dr. Nityanand (d) Dr. Prasanna Totta
- Q.16. \_\_\_\_\_ is a drug residue which remains behind after extraction.
- (a) Marc (b) Menstruum  
(c) Both (a) and (b) (d) None of the above
- Q.17. Polymers used for film coating \_\_\_\_\_.
- (a) Cellulose acetate succinate (b) HPMC phthalate  
(c) Carbowax (d) Polymethacrylate
- Q.18. Emulsions are :
- (a) Biphasic liquid (b) Monophasic liquid  
(c) Both (a) and (b) (d) None of the above
- Q.19. Tablets are in :
- (a) Solid dosage form (b) Liquid dosage form  
(c) Both (a) and (b) (d) None of the above
- Q.20. In cyclone separator, the powder is separated depending on its :
- (a) Particle size (b) Particle size and density of particles  
(c) Density of particle (d) Shape of powder