

PHARMACEUTICS

Time : 3:00 Hours]

[Maximum Marks : 80

NOTES :

- i) Attempt **all** questions.
- 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

Answer any six questions. Each question carries equal marks.

[6 × 5 = 30]

- Q1) Define extraction. Name the various methods of extraction. Describe in brief the stepwise percolation. [1+1+3=5]
- Q2) Write any five salient features of eighth edition of Indian Pharmacopoeia. [5]
- Q3) Discuss the advantages and disadvantages of plastic as packaging material. [5]
- Q4) What are pharmaceutical aids? Name the various types of pharmaceutical aids with examples. [1+4=5]
- Q5) Differentiate between the following. [2½+2½=5]
- a) Hard and soft gelatine capsules.
 - b) Quality control and Quality Assurance.
- Q6) Write in short the various activities of pharmaceutical manufacturing plants. [5]
- Q7) Classify the novel drug delivery systems (NDDS) with examples. Write the advantages of novel drug delivery systems. [2+3=5]

PART - B

Answer any ten questions. Each question carries equal marks.

[10 × 3 = 30]

- Q1) Discuss in short on "Pharmacy as a career". [3]
- Q2) Define preservative. Mention various types of preservatives used in pharmaceutical preparations. [1+2=3]
- Q3) Classify the powders according to Indian pharmacopoeia. [3]
- Q4) Discuss the theory of filtration. [3]
- Q5) Describe in brief about Ball Mill. [3]

- Q6) Write short note on -
Sustained Release Tablets

OR

Effervescent Powders.

- Q7) Define any three of the following :

[3 × 1 = 3]

- a) Elixirs
- b) Creams
- c) Vaccines
- d) Insufflations

- Q8) Discuss in short on freeze drying.

[3]

- Q9) Write short note on -
Storage of immunological products.

[3]

- Q10) Name any three tests for the evaluation of following :

[1½+1½=3]

- a) Parenteral Products
- b) Tablets

- Q11) Write in short on current Good Manufacturing Practice (cGMP).

[3]

PART - C

Multiple Choice Questions / Fill-in the blanks. Answer all questions. Each question carries equal marks. [20 × 1 = 20]

Multiple Choice Questions :

- Q1) The full form of FIP in pharmacy is :

- a) Faculty Induction Programme
- b) Fair Information Practices
- c) International Pharmaceutical Federation
- d) Indian Pharmaceutical Federation

- Q2) The solvent used for extraction is known as:

- a) Menstruum
- b) Mare
- c) Extract
- d) Slurry

- Q3) Simple Syrup I.P. is :

- a) 66.7% w/w solution of sucrose
- b) 66.7% w/v solution of sucrose
- c) 56.7% w/w solution of sucrose
- d) 56.7% w/v solution of sucrose

Q4) cGMP is a part of :

- | | |
|-----------------------------|----------------------|
| a) Quality Control | b) Quality Assurance |
| c) Research and Development | d) Marketing |

Q5) The freezing point of blood serum / plasma and tears is :

- | | |
|-----------|-------------|
| a) 0.52°C | b) - 0.52°C |
| c) - 52°C | d) 52°C |

Q6) BCG vaccine is used to protect from which of the following?

- | | |
|------------------|-----------------|
| a) Smallpox | b) Typhoid |
| c) Poliomyelitis | d) Tuberculosis |

Q7) Which of the following is an example of Novel Drug Delivery System?

- | | |
|-----------------|----------------|
| a) Insufflation | b) Suppository |
| c) Implant | d) Liniment |

Q8) Minimum qualification to become a registered pharmacist under Pharmacy Act 1948 is :

- | | |
|------------|------------|
| a) Pharm.D | b) D.Pharm |
| c) B.Pharm | d) M.Pharm |

Q9) In Sugar coating of tablet, sealing is done by :

- | | |
|------------|------------|
| a) Acacia | b) Beeswax |
| c) Gelatin | d) Shellac |

Q10) Rectified spirit contains :

- | | |
|-----------------------|-----------------------|
| a) 60% v/v of Ethanol | b) 70% v/v of Ethanol |
| c) 80% v/v of Ethanol | d) 90% v/v of Ethanol |

Fill-in the blanks :

Q11) The metabolic products of microbial growth causing increase in body temperature are called _____.

Q12) The first edition of Indian Pharmacopoeia was published in _____.

Q13) In the sieving method, the powder is passed through a set of sieves which are arranged in _____ order.

Q14) Phenyl Mercuric Nitrate is used as _____ in ophthalmic preparations.

- Q15) Large volume parenterals are also called _____.
- Q16) The largest size of hard gelatin capsule for human use is ^{1.5cm} _____.
- Q17) Covishield vaccine is used for the prevention of ^(COVID-19) _____.
- Q18) For sterile filtration, the grade of sintered glass filter used is _____.
- Q19) The ratio of Oil, water and gum for primary emulsion of a fixed oil is ^{5:5:7} _____.
- Q20) Liniment may be defined as _____.