



Name : .....

Roll No. : .....

Invigilator's Signature : .....

**CS/B.Pharm (New)/SEM-4/PT-406/2010  
2010**

**PHARMACEUTICS ( PHARMACEUTICAL  
TECHNOLOGY-I )**

Time Allotted : 3 Hours

Full Marks : 70

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

**GROUP – A**

**( Multiple Choice Type Questions )**

1. Choose the correct alternatives for any *ten* of the following :

10 × 1 = 10

- i) Chemical name of propellant 12 is
  - a) Dichlorodifluoromethane
  - b) Trichloromonoluromethane
  - c) Propane
  - d) None of these.
- ii) The human blood should be stored at
  - a) 8°C – 25°C
  - b) 2°C – 8°C
  - c) 20°C – 25°C
  - d) less than 10°C.
- iii) Methyl paraben is highly inactivated in presence of
  - a) Gelatin
  - b) Methyl Cellulose
  - c) Carbomer
  - d) Tween 80.

4173

[ Turn over

CS/B.Pharm (New)/SEM-4/PT-406/2010



- iv) The solubilizer which increase the solubility of testosterone, is
- Sucrose monoesters
  - Lanolin esters
  - BRIJ and MYRJ series
  - Tween series.
- v) Extraction of drug by Soxhlet apparatus is not applied for
- Thermostable drug
  - Thermo sensitive drug
  - Both (a) and (b)
  - None of these.
- vi) Polymethyl methacrylate is used to prepare
- soft contact lenses
  - hard contact lenses
  - semi soft contact lenses
  - none of these.
- vii) Multiple emulsion may be used
- for prolongation of drug action
  - localization of drug action in the body
  - in the treatment of drug overdose
  - all of these.
- viii) Which of the following additives is used to increase the ocular contact time in ophthalmic preparation ?
- Thiomersal
  - Sodium metabisulphite
  - Methyl cellulose
  - Benzalkonium chloride.



- ix) Orange tincture is prepared by
- Maceration process
  - Infusion process
  - Soxhlet process
  - Decoction process.
- x) For drying blood plasma which of the following techniques is used ?
- Vacuum drying
  - Spray drying
  - Freeze drying
  - Fluidized bed drying.
- xi) According to Stoke's law increasing the radius of dispersed globules will
- increase creaming
  - decrease creaming
  - does not produce creaming
  - none of these.
- xii) Most stable form of cocoa butter is
- $\alpha$
  - $\beta$
  - $\beta^1$
  - $\gamma$ .

**GROUP – B**

**( Short Answer Type Questions )**

Answer any *three* of the following.  $3 \times 5 = 15$

- Write short notes on contact lenses.
- Write short notes on breaking test and softening time test for suppository.
- Differentiate between the following :
  - Infusion and decoction
  - Maceration and percolation.
- Write a short note on preservative used in oral liquid dosage form.
- Describe the ideal requirements for plasma substitutes.



**GROUP – C**

**( Long Answer Type Questions )**

Answer any *three* of the following.  $3 \times 15 = 45$

7. a) Explain the technique used to increase the solubility of a drug in aqueous vehicle.  
b) What are the stability problems of an emulsion ?  
c) Write a short note on flavoring agents used in liquid oral preparations.  $5 + 6 + 4$
8. a) Define the term 'eye drop'. What are the requirements for the preparation of an eye drop ?  
b) What are the preservatives used in ophthalmic preparations ?  
c) Write about the various methods of sterilization of ophthalmic preparations.  $( 1 + 4 ) + 4 + 6$
9. a) What are the galenicals ?  
b) Discuss the factors to be considered during selection of extraction process.  
c) Write about the different steps of percolation process.  $2 + 5 + 8$
10. Define an aerosol. What are the advantages of an aerosol ?  
Write a note on evaluation and quality control of an aerosol dosage form.  $2 + 3 + 10$
11. Write a note on the type of bases available for the preparation of ointments. Discuss their advantages and disadvantages. Give your answer with suitable example.  $10 + 5$