



Name :

Roll No. :

Invigilator's Signature :

CS/B. PHARM (OLD)/SEM-4/PT-406 (1)/2011

2011

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) Urethral suppositories is also called
- a) pessaries b) bougies
- c) suppositories d) aquasol system.
- ii) For an ideal suppository base acid value is
- a) 0.5 b) < 0.2
- c) > 0.2 d) 1.0.
- iii) Myrj is chemically
- a) Polyoxyethylene stearates
- b) Polyethylene stearates
- c) Polyoxyethylene glycol
- d) Polyethylene glycol.
- iv) Polytetrafluoroethylene is
- a) Teflon b) Nylon
- c) Polythene d) Rubber.

44173

[Turn over



- v) Hydrocarbon propellant A-70 produces
- a) foam
 - b) spray
 - c) drier particle
 - d) wetter particle.
- vi) The moisture content of suspensoid & propellant must be
- a) < 300 ppm
 - b) > 400 ppm
 - c) 300 ppm
 - d) 400 ppm.
- vii) Which one of the following is used as humectant in creams ?
- a) Sorbitol 70%
 - b) PEG
 - c) Both
 - d) None of these.
- viii) The low-molecular-weight glycols are
- a) Liquid
 - b) solid
 - c) gas
 - d) semi-solid.
- ix) Brij is a
- a) solubilizing agent
 - b) sweetening agent
 - c) flavouring agent
 - d) complexing agent.
- x) Aspartame is times sweeter than sucrose.
- a) 250-500
 - b) 300
 - c) 200
 - d) 150.
- xi) The concentration of sucrose in simple syrup I.P is
- a) 66.7 % W/V
 - b) 66.7 % W/W
 - c) 85% U/V
 - d) 60% W/W.
- xii) Which of the following is used as perservative in ophthalmic preparations ?
- a) Phenol
 - b) Benzalkonium chloride
 - c) Benzoic acid
 - d) Chlorocresol.



GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following.

3 × 5 = 15

2. Discuss the differences between aquasol aerosol system and water based aerosol system.
3. Write short note on Triple maceration process of extraction. What do you mean by 'volume retained by drug' ?
4. Briefly discuss the method of preparation of Dried human plasma.
5. Write a brief account on the theory of emulsion.
6. Write short note on antioxidants used in liquid formulation.

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following. 3 × 15 = 45

7.
 - a) Write a short note on Metered-Dose Inhalers.
 - b) What is the name & structure of propellant -114 ?
 - c) How to increase the stability of aerosol suspension system ?
 - d) What is the difference between aerosol emulsion & non-aerosol emulsion systems ?
 - e) Write a short note on Actuators. 5 + 1 + 5 + 1 + 3
8.
 - a) What do you mean by cracking of an emulsion ? What are the factors responsible for it ?
 - b) How will you differentiate flocculated & deflocculated suspensions ?
 - c) Write a short note on sedimentation rates. Give a brief account on wetting. 5 + 4 + 6

CS/B. PHARM (OLD)/SEM-4/PT-406 (1)/2011



9. a) Write the differences between ointment and paste.
b) Discuss briefly the factors affecting the permeability of the skin.
c) Describe the different types of ointment bases used for the preparation of ointments. Give their merits and demerits. 2 + 6 + 7
10. With proper explanation discuss the following (any five). 5×3
- a) A flocculated suspension is preferred to a deflocculated suspension.
b) A combination of emulsifiers imparts better stability to an emulsion rather than a single agent.
c) Creaming is a reversible process whereas breaking is an irreversible process.
d) Emulsion is thermodynamically unstable system.
e) Thixotropy is a desirable property in pharmaceutical coarse dispersion system.
f) Microemulsions are clear, transparent biphasic system.
11. a) Define eye drops ? 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 sterilizations of ophthalmic preparations. (2 + 3) + 5 + 5
-