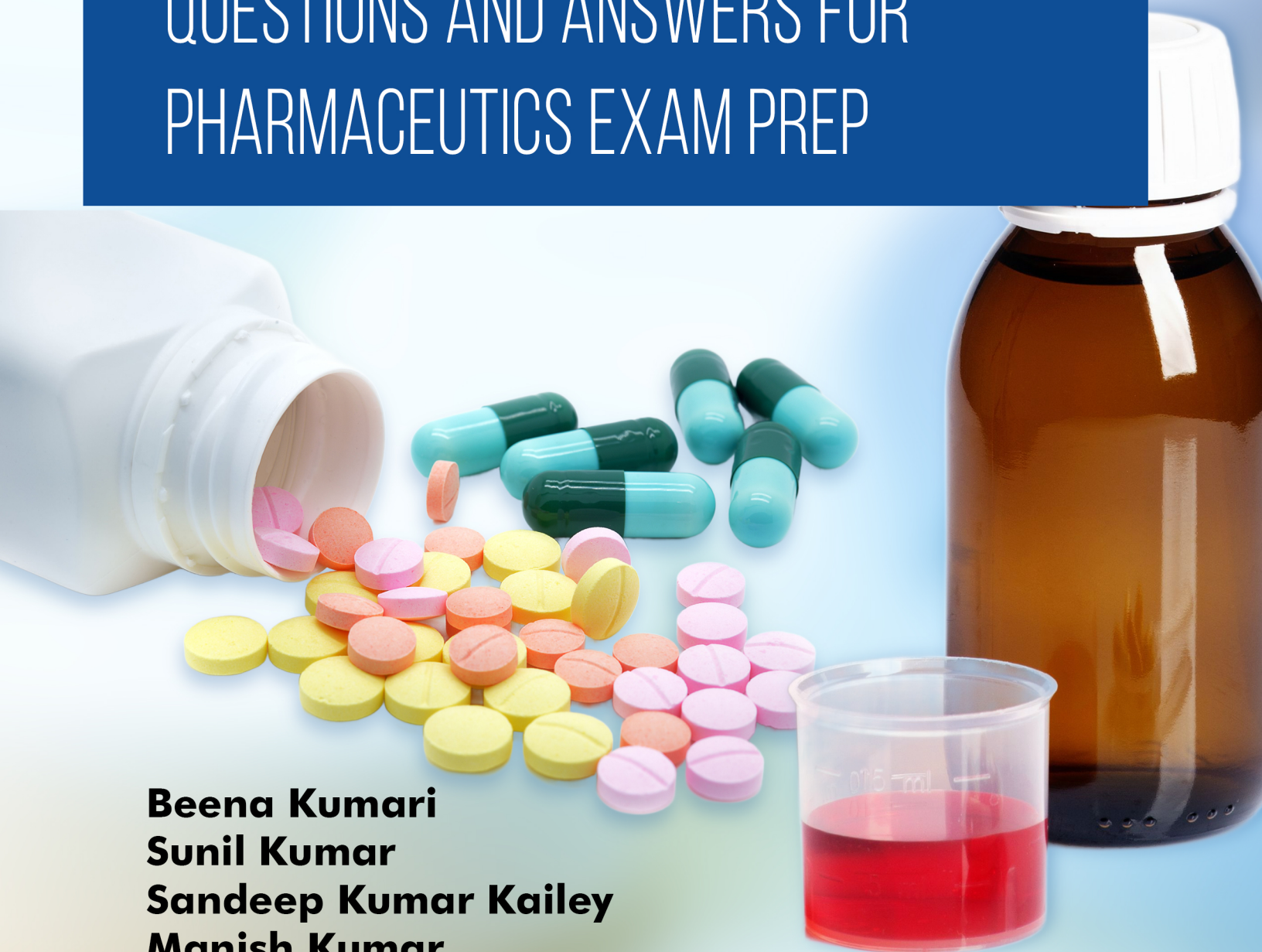


OBJECTIVE PHARMACEUTICS:

A COMPREHENSIVE COMPILATION OF
QUESTIONS AND ANSWERS FOR
PHARMACEUTICS EXAM PREP



Beena Kumari
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Objective Pharmaceuticals: A Comprehensive Compilation of Questions and Answers for Pharmaceuticals Exam Prep

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PREFACE

The main objective of this book is to explain the trend of objective questions of Pharmaceutics including multiple choice questions, one liner, and true and false statements. This compilation provides the most probable questions of upcoming examinations like drug inspector, pharmacist, GPAT, nursing exams, and all the exams of medical lines. These questions range from the very simple to the fairly difficult ones in order to enhance thinking capabilities.

This book was written with a series of learning objectives in mind. After reading this book, the student should be able to clear many exams. Above all, we thank the Almighty for getting us towards the fulfillment of a long cherished dream.

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Multiple Choice Questions

1. Identify the wrong statement for pyrogens:
 - a. They are water-soluble components that are metabolic products of growing bacteria.
 - b. Pyrogens are lipopolysaccharide compounds that are produced by gram-negative bacteria.
 - c. LAL or BET (bacterial endotoxin test) represents the gelling property of pyrogens with RBCs and is a common test for pyrogen.
 - d. They can be destroyed by autoclaving and gaseous sterilization.

Ans. d

2. The Brownian motion is due to:
 - a. Impact of molecules of the dispersion medium on the colloidal particles.
 - b. Convective currents.
 - c. Temperature fluctuation within the liquid phase.
 - d. Attraction and repulsion between charges on the colloidal particles.

Ans. a

3. Which of the following drug delivery systems comprises a hydrophobic core and a hydrophilic surface?
 - a. Liposomes
 - b. Micelles
 - c. Reverse micelles
 - d. None of the above.

Ans. b

4. The simplest way to check whether a system is a colloid is by using:
 - a. Brownian movement
 - b. Tyndall effect
 - c. Electrodialysis
 - d. Finding out particle size

Ans. b

5. Gold numbers of protective colloids A, B, C, and D are 0.50, 0.01, 0.10, and 0.005, respectively. Which of them has the highest protective powers?
- A
 - B
 - C
 - D

Ans. d

6. The random movement of particles *i.e.*, Brownian movement which is responsible for light scattering, resistant to sedimentation under gravity and rapid diffusion is exhibited by the particle less than
- 1 nm
 - 2 μm
 - 10 μm
 - 5 μm

Ans. b

7. The factors which are responsible for the stability of lyophilic sols are:
- Size of the colloidal particles
 - Charge of the colloidal particles
 - Charge and solvation of the colloidal particles
 - Solvation of the colloidal particles

Ans. c

8. Which of the following methods of distillation is also known as high vacuum distillation?
- Steam Distillation
 - Azeotropic Distillation
 - Molecular Distillation
 - Extractive distillation

Ans. c

9. The graph between rate of shear and shear stress is called as
- Rheogram
 - Viscogram
 - Deltagram
 - Fluidgram

Ans. a

10. Which flow is also called Bingham's Flow/bodies?

- a. Plastic
- b. Pseudoplastic
- c. Dilatant
- d. Thixotropic

Ans. a

11. Which pair of the flow represents time-dependent non-Newtonian flow?

- a. Plastic: Thixotropy
- b. Pseudoplastic: Dilatant
- c. Thixotropy: Rheopexy
- d. Anti-thixotropic: Rheopexy

Ans. a

12. Yield value is a characteristic of which flow?

- a. Plastic fluids
- b. Dilatant fluids
- c. Newtonian fluids
- d. Pseudoplastic fluids

Ans. a

13. Which flow is called the opposite of dilatant fluid?

- a. Plastic
- b. Pseudoplastic
- c. Thixotropic
- d. Rheopexy

Ans. b

14. Which of the following values for contact angle with water corresponds to a hydrophobic drug particle?

- a. 45°
- b. 120°
- c. 0°
- d. None of the above.

Ans. b

One Liner Questions

Q. 1 What is the most common method of microencapsulation?

Ans- Spray drying technique.

Q. 2 Which microencapsulation technique is also known as the Wurster process?

Ans- Air -suspension coating.

Q. 3 What is the size range of the products obtained from microencapsulation?

Ans- Particles with a diameter of 1–1000 μm .

Q. 4 Who presented the Coacervation theory?

Ans- Russian biochemist A.I. Oparin in 1936.

Q. 5 Which method is also known as complex coacervation microencapsulation?

Ans- Polymer -Polymer interaction.

Q. 6 In the polymer-polymer interaction method, the negative charge is given by:

Ans- Gum-arabic.

Q. 7 In the polymer-polymer interaction method, the positive charge is given by:

Ans- Gelatin.

Q. 8 Which methods are applicable for solid core material only?

Ans- Air-suspension Method and Pan coating Method.

Q. 9 Which type of microencapsulation technique coacervation method is?

Ans- Physico-chemical technique.

Q. 10 How many phases are there in the coacervation method?

Ans- Three phases.

Q. 11 Which oral liquid formulations would be considered an oropharyngeal formulation?

Ans: Mouthwash

Q. 12 Which of the following formulations would not be applicable to ocular administration?

Ans: Liniment

Q. 13 A tablet to treat a headache must first be dissolved in water before swallowing. Which one of the following best describes this type of tablet?

Ans: Effervescent

Q. 14 Capsules normally fall into two main categories. Name them.

Ans: Hard gelatin capsules and soft gelatin capsules.

Q. 15 Intravenous, intramuscular, and subcutaneous are all examples of which routes of administration?

Ans: Parenteral administration.

Q. 16 Where is the site of administration for a dosage form that uses transdermal delivery?

Ans: The skin

Q. 17 Which of the dosage forms delivers the API to the GI tract?

Ans: Rectal suppositories

Q. 18 Name two different types of inhale.

Ans: DPI and MDI

Q. 19 Nasal administration is commonly used for the relief of:

Ans: Congestion

Q. 20 Ocular administration involves the treatment of which area?

Ans: The eye

Q. 21. Two routes of ocular drug absorption

Ans: 1. Corneal Route - primary - (>aqueous humor > ocular tissues)

2. Conjunctival/Scleral Route (straight to ocular tissues)

Q. 22 Amount of dose absorbed *via* ocular routes:

Ans. <10%

Q. 23 Eye drop *vs.* conjunctival sac capacity

Ans. Eye drops = 50uL. sac capacity = 30uL

Q. 24 Goal of eye dosage.

Ans. Increase residence time

Q. 25 Articulate instructions for administering eye drops.

Ans. 1. Tilt the head back.

2. Gently pull the lower eyelid down to form a pouch.

3. Hold the dropper directly above the eye and look up.

4. squeeze a drop into the pouch

5. Do not let the tip of the dropper touch the eye or other surface.

6. Close the eye for a minute.

True/False Statements

1. Polysorbates are also called Tweens.

Ans. True

2. Spans have higher HLB so they are emulsifying agents for o/w emulsions.

Ans. False

3. Lecithin is a zwitter-ionic surfactant.

Ans. True

4. The first stage during wet granulation is the capillary motion of the granulating fluid.

Ans. False

5. Aerosil is the brand name of cross-linked carboxymethyl cellulose.

Ans. False

6. Ac-Di-Sol is the brand name of colloidal silicon dioxide.

Ans. False

7. Type A gelatin is obtained from green bones.

Ans. False

8. pH-controlled system is also called delayed-release system.

Ans. True

9. Hydrocarbons are restricted to systemic use as they are better propellants than CFC.

Ans. False

10. Flocculated suspension delivers a uniform dose as compared to deflocculated suspensions.

Ans. True

11. Non-ionic surfactants are less sensitive to pH and the addition of electrolytes than anionic or cationic surfactants.

Ans. True

12. Monovalent metal ion soaps produce w/o emulsion while divalent or trivalent metal soaps produce o/w emulsions.

Ans. False

13. Noyes Whitney equation is related to the rate of diffusion of drugs.

Ans. False

14. Adipic acid in parenteral acts as a buffering agent.

Ans. True

15. Aspartame is carcinogenic in nature.

Ans. False

16. Benzyl alcohol in parenteral is commonly used as a local anesthetic.

Ans. True

17. Salol treatment to gelatin shell increases its water solubility.

Ans. False

18. Nephelometry is appropriate for the measurement of optical density for concentrated solutions.

Ans. False

19. As per Bancroft's rule, the phase in which the emulsifier is more soluble constitutes the internal/disperse phase.

Ans. False

20. For intramuscular injections, generally, solutions are hypotonic.

Ans. False

21. Lakes are colorants mostly used in wet granulations.

Ans. False

22. Mannitol has good flow property.

Ans. False

23. Pyrogen testing is not required for ophthalmic preparations.

Ans. True

24. Spans will produce w/o emulsions.

Ans. True

25. Drugs that are weakly acidic are absorbed from the intestine.

Ans. False

26. Anhydrous lactose can give Millard's reaction.

Ans. False

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