Code: 15R00403

**R15**

B.Pharm II Year II Semester (R15) Supplementary Examinations March 2022

**PHARMACEUTICAL TECHNOLOGY – I**

Time: 3 hours

Max. Marks: 70

**PART – A**

(Compulsory Question)

*****

1 Answer the following: (10 X 02 = 20 Marks)

Write short notes on:

(a) Preformulation.
(b) Dielectric constant.
(c) Suspending agent.
(d) Preservatives used in liquid dosage forms.
(e) Displacement value.
(f) Clear gels.
(g) Propellant classification.
(h) Components of aerosol package.
(i) Human thrombin.
(j) Dried human plasma.

**PART – B**

(Answer all the questions: 05 X 10 = 50 Marks)

2 Explain the drug - excipient incompatibility studies required for formulation development.

**OR**

3 Explain the hydrolysis, oxidation reduction, racemization, polymerization effect of drug on formulation development.

4 Write the manufacturing and evaluation of emulsion and suspension.

**OR**

5 Explain about the formulation requirement and containers used dry syrup.

6 Explain the types of semisolid bases and packages required for semisolid dosage form.

**OR**

7 Write about the packaging and evaluation of suppositories.

8 Discuss about the pharmaceutical applications of aerosols with examples.

**OR**

9 Define aerosols, types of propellants and packaging of aerosol.

10 Write collection, processing and storage of dried human plasma, human fibrinogen and concentrated human RBC's.

**OR**

11 Discuss about ideal requirements of PVP, dextran as per IP to maintain blood pressure.

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R15

B.Pharm II Year II Semester (R15) Supplementary Examinations December 2019

**PHARMACEUTICAL TECHNOLOGY – I**

Time: 3 hours

Max. Marks: 70

**PART – A**

(Compulsory Question)

*****

1 Answer the following: (10 X 02 = 20 Marks)

(a) Write the significance of physical form on solubility.
(b) What is the role of density in formulation of suspension?
(c) Why dimethylacetaminde is not used as cosolvent in liquid orals.
(d) Specify the approaches used for polishing of solution.
(e) What is the mechanism of action of sulphoxide as penetration enhancers?
(f) Define spreadability.
(g) Name the methods used for filling of aerosol products.
(h) What is flash point?
(i) Specify the conditions required for fractionation of fibrinogen from plasma.
(j) How thrombin is prepared from prothrombin?

**PART – B**

(Answer all five units, 5 X 10 = 50 Marks)

**UNIT – I**

2 (a) What is the importance of dielectric constant in formulation of syrups?
(b) Discuss the role of wetting in formulation of suspensions.

**OR**

3 (a) Write the significance density in formulation of solid dosage forms.
(b) How hydrolysis data is useful in formulation of dosage forms containing moisture sensitive drugs?

**UNIT – II**

4 (a) Discuss about precipitation methods in formulation of suspension.
(b) Write a note on degree of flocculation.

**OR**

5 (a) Discuss about the mechanical equipment for emulsification.
(b) Write a note on auxiliary emulsifiers.

**UNIT – III**

6 Describe the events and factors governing percutaneous absorption.

**OR**

7 What are ideal requirements of suppository bases? Describe various suppository bases.

**UNIT – IV**

8 (a) Discuss about the aerosol containers.
(b) Write a note on quick breaking foams.

**OR**

9 (a) Discuss about the large scale equipment used in manufactory of aerosols.
(b) Write a note on flammability and combustibility.

**UNIT – V**

10 Give the advantages preparation, storage and uses of dried human plasma.

**OR**

11 (a) What are the requirements of an ideal plasma substitute?
(b) Discuss the production and control of dextran.

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Code: 15R00403

R15

B.Pharm II Year II Semester (R15) Regular & Supplementary Examinations October/November 2020

**PHARMACEUTICAL TECHNOLOGY – I**

Time: 3 hours

Max. Marks: 70

**PART – A**

(Compulsory Question)

*****

1 Answer the following: (10 X 02 = 20 Marks)

(a) Define preformulation. Mention its goals.
(b) Define solubility and dissolution rate.
(c) Enlist various additives in liquid dosage forms with suitable examples.
(d) Write a note on advantages of dry syrup preparation over conventional suspensions or syrup formulations.
(e) Classify the ointments.
(f) What are the ideal characteristics of suppository bases?
(g) Define aerosols. Give its advantages.
(h) Enumerate the general components of an aerosol system with examples.
(i) Give composition of whole blood.
(j) Describe the storage of whole blood as per the standard guidelines.

**PART – B**

(Answer all five units, 5 X 10 = 50 Marks)

**UNIT – I**

2 Write a note on various study parameters in preformulation.

**OR**

3 (a) Describe the ICH guidelines for stability studies of finished products.
(b) Write a note on determination of solubility and partition coefficient.

**UNIT – II**

4 (a) Write a note on evaluation of clear liquids.
(b) What are the different types of additives in suspensions and emulsions?

**OR**

5 (a) Write a note on formulation and storage of dry syrups.
(b) Describe the evaluation of suspension.

**UNIT – III**

6 (a) Write a note on different mechanisms of drug penetration across skin surface.
(b) Explain the concept of displacement value.

**OR**

7 (a) Classify the suppository bases.
(b) Write a note on factors influencing drug penetration.

**UNIT – IV**

8 (a) Describe the evaluation of aerosols.
(b) Enlist the pharmaceutical applications of aerosol.

**OR**

9 (a) Enlist the quality control tests for aerosols.
(b) With a help of a neat diagram, explain the construction of aerosol system.

**UNIT – V**

10 Describe the process of collection and storage of whole blood.

**OR**

11 Describe the clinical applications of dried human plasma and plasma substitutes.

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