

B.Pharm III Year I Semester (R19) Regular & Supplementary Examinations January 2023  
**INDUSTRIAL PHARMACY - I**

Time: 3 hours

Max. Marks: 75

**PART – A**

(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- |   |    |
|---|----|
| (a) Define intrinsic solubility with its significance.  | 2M |
| (b) Explain BCS class-II drugs and give example.  | 2M |
| (c) Give the specifications for tablets friability test.                                      | 2M |
| (d) Give the cause and remedy of "Maillard reaction".   | 2M |
| (e) Give the nature of the drugs which are to be incorporated in soft gelatine capsule shell. | 2M |
| (f) Mention the relative humidity and temperature in capsule filling area.                    | 2M |
| (g) White soft paraffin is not used to manufacture eye ointment. Why?                         | 2M |
| (h) Mention the pore size of HEPA filter and membrane filter.                                 | 2M |
| (i) Explain the role of stearic acid in vanishing cream.                                      | 2M |
| (j) Define propellant. Give the chemical name of propellant 114 with proper diagram.          | 2M |

**PART – B**

(Answer any two questions: 02 X 10 = 20 Marks)

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|--|----|
| 2 (a) Define preformulation studies.   | 2M |
| (b) Describe in short the physical parameters to be studied in preformulation phase. | 8M |
| 3 (a) Explain details the wet granulation technique for tablet manufacturing.        | 9M |
| (b) Define "slug".   | 1M |
| 4 (a) Define cosmetics. Classify with example.                                       | 5M |
| (b) Write a short note on cold cream.  | 5M |

**PART – C**

(Answer any seven questions: 07 X 05 = 35 Marks)

- |   |    |
|---|----|
| 5 (a) Define partition co-efficient.  | 1M |
| (b) Give its significance in drug design.   | 4M |
| 6 (a) Define solubility.  | 1M |
| (b) Write in short about the complexation as a technique to improve the solubility of poorly water soluble drugs. | 4M |
| 7 (a) Explain the steps of sugar coating.   | 4M |
| (b) Give the use of HPMC.   | 1M |
| 8 Differentiate flocculated and deflocculated suspension.   | 5M |
| 9 (a) Define bloom strength.  | 2M |
| (b) Give the various sizes of capsules with their capacities.   | 3M |
| 10 (a) Define eye drops.  | 1M |
| (b) Name any four preservatives used in ophthalmics.  | 4M |
| 11 (a) Define isotonic solution.  | 2M |
| (b) All the isotonic solutions are iso-osmotic but not the reverse. Explain it.                                   | 3M |
| 12 (a) Define aerosol.  | 1M |
| (b) Give a note on chlorofluorocarbon.  | 4M |
| 13 Give the classification of glass as per USP.   | 5M |

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B.Pharm III Year I Semester (R19) Supplementary Examinations July/August 2022  
**INDUSTRIAL PHARMACY – I**

Time: 3 hours

Max. Marks: 75

**PART – A**  
 (Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
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|---|----|
| (a) Define polymorphism. Give two examples.   | 2M |
| (b) What is racemisation? Give an example.  | 2M |
| (c) What is meant by mottling in tablets?   | 2M |
| (d) Give the purpose of enteric coating of tablets. Give two examples for enteric coating material used in tablets. | 2M |
| (e) Differentiate between hard gelatin capsule and soft gelatin capsule.  | 2M |
| (f) Give the formulation requirements for pellets.  | 2M |
| (g) Define parenteral formulations.   | 2M |
| (h) Define sealing of ampoules.   | 2M |
| (i) Write a note on vanishing cream.  | 2M |
| (j) Commonly used ingredients in tooth paste and their purpose.   | 2M |

**PART – B**  
 (Answer any two questions: 02 X 10 = 20 Marks)

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|--|----|
| 2 (a) Explain preformulation studies and their significance.                         | 5M |
| (b) Discuss the quality control tests for tablets.                                   | 5M |
| 3 (a) Write formulation and quality control of hard gelatin capsules.                | 5M |
| (b) Write formulation and evaluation of eye drops.                                   | 5M |
| 4 (a) With a neatly labelled diagram, explain the components of aerosol formulation. | 5M |
| (b) Write formulation and manufacturing considerations of syrups.                    | 5M |

**PART – C**  
 (Answer any seven questions: 07 X 05 = 35 Marks)

- |  |      |
|--|------|
| 5 (a) Explain partition coefficient and its significance.                        | 2.5M |
| (b) Give the flow properties of pharmaceutical powders and its significance.     | 2.5M |
| 6 (a) What are the different types of tablets? Explain.                          | 2.5M |
| (b) Briefly explain coating of tablets.  | 2.5M |
| 7 (a) Discuss the formulation of a suspension.                                   | 2.5M |
| (b) Write a detailed note on production and evaluation of soft gelatin capsules. | 2.5M |
| 8 (a) Discuss the methods of sterilization of parenteral formulations.           | 2.5M |
| (b) Write the formulation and evaluation of cold cream.                          | 2.5M |

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B.Pharm III Year I Semester (R19) Regular Examinations February 2022  
**INDUSTRIAL PHARMACY – I**

Time: 3 hours

Max. Marks: 75

**PART – A**  
(Compulsory Question)

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- 1 Answer the following: (10 X 02 = 20 Marks)
- Define pH. What is pH scale?
  - What is polymerization? Give example.
  - What is meant by capping and chipping of tablets?
  - What are excipients in tablet dosage forms? Mention the various excipients used in tablets with two examples for each.
  - List the composition of soft gelatine capsule shell.
  - What is an isotonic solution? Give its significance.
  - What are ophthalmic preparations? Mention various types.
  - Define and classify parenterals formulations.
  - What are the compositions of lipsticks?
  - Write commonly used ingredients in shampoo and their purpose.

**PART – B**  
(Answer any two questions: 02 X 10 = 20 Marks)

- Explain preformulation studies in the development of solid oral dosage forms.
  - Explain the formulation of tablets.
- Discuss the production and quality control of soft gelatine capsules.
  - Explain the formulation and evaluation of parenteral formulations.
- Discuss the materials used for the packaging of pharmaceutical products.
  - Explain coating of tablets.

**PART – C**  
(Answer any seven questions: 07 X 05 = 35 Marks)

- Give the classification biopharmaceutical of drugs and its significance.
  - Write about hydrolysis and oxidation of drugs.
- Discuss the methods of coating of tablets.
  - Discuss the formulation of an emulsion.
- Write about packing and evaluation of liquid orals.
  - Write a detailed note on evaluation of hard gelatine capsules.
- What are the merits and demerits of parenterals formulations? Discuss briefly large volume parenterals.
  - Explain filling of capsules.

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