

# IMPORTANT QUESTION IN UNIT 3

## 2-Mark Questions (Direct/Definition/MCQ/Fill-in-the-blank)

Question	Where/When Asked
Define transdermal drug delivery system (TDDS).	TNMGRMU (Short answers, 2022, 2023), MRB (2023, 2024)
Name two permeation enhancers used in TDDS.	GPAT (2019, 2021 MCQ), MRB (2024 MCQ)
What is a floating drug delivery system?	NIPER (2018, 2020), MRB (2023)
List two advantages of gastroretentive drug delivery systems.	TNMGRMU (2021), GPAT (2022 MCQ)
Define dry powder inhaler (DPI).	MRB (2024), TNMGRMU (2022)
Name two factors affecting drug permeation through the skin.	GPAT (2023 MCQ), MRB (2022)
What is the role of a carrier in DPI formulations?	NIPER (2021), MRB (2023)
Give two disadvantages of nasopulmonary drug delivery.	GPAT (2020), TNMGRMU (2023)

## 5-Mark Questions (Short Notes/Comparison/Brief Explanation)

Question	Where/When Asked
Write a short note on permeation enhancers in TDDS.	GPAT (2020, 2022), TNMGRMU (2021, 2023)
Compare matrix and reservoir type transdermal patches.	NIPER (2020), TNMGRMU (2022)
Explain the mechanism of drug permeation through the skin.	MRB (2023), GPAT (2021)
Describe the formulation and components of a metered dose inhaler (MDI).	TNMGRMU (2021), GPAT (2022)
Discuss the approaches for gastroretentive drug delivery systems.	GPAT (2023), NIPER (2019)
Explain the applications of gastroadhesive systems.	MRB (2024), TNMGRMU (2023)
Write a note on the advantages and disadvantages of nasopulmonary drug delivery.	GPAT (2021), TNMGRMU (2022)
Describe the formulation considerations for nasal sprays.	NIPER (2020), MRB (2022)

## 10-Mark Questions (Essay/Diagram/Long Answer)

Question	Where/When Asked
Explain in detail the factors affecting drug permeation through the skin and discuss the role of permeation enhancers.	TNMGRMU (2022, 2023), GPAT (2021)
Describe the various approaches for gastroretentive drug delivery systems with suitable examples and applications.	GPAT (2022), NIPER (2020), TNMGRMU (2023)
Discuss the formulation, working mechanism, and evaluation of dry powder inhalers and metered dose inhalers.	NIPER (2021), TNMGRMU (2022)
Explain the anatomy of the skin relevant to TDDS and the mechanisms by which drugs permeate through the skin, with diagrams.	TNMGRMU (2021, 2023), GPAT (2020)
Elaborate on the advantages, disadvantages, and clinical applications of nasopulmonary drug delivery systems.	GPAT (2021), NIPER (2020)
Describe the formulation approaches for transdermal drug delivery systems and the evaluation parameters for transdermal patches.	TNMGRMU (2022), NIPER (2021)