

Unit 5 Ocular Drug Delivery Systems

Possible 2-Mark Questions (Short definitions or basic facts)

1. Define ocular drug delivery system.
2. What is an ocusert? Give one example.
3. Name two intraocular barriers to drug absorption.
4. List two methods to overcome intraocular barriers.
5. What is the purpose of preliminary studies in ocular formulations?
6. Name two types of ocular formulations.
7. What is the cornea's role as a barrier in ocular drug delivery?
8. Mention one advantage of using ocuserts over eye drops.

Possible 5-Mark Questions (Brief explanations or lists with short descriptions)

1. Explain the introduction to ocular drug delivery systems and their importance.
2. Describe the major intraocular barriers and one method to overcome each.
3. Discuss preliminary studies involved in developing ocular formulations.
4. Compare ocular formulations like eye drops and ointments.
5. What are ocuserts? Explain their mechanism and one application.
6. Outline methods to enhance drug penetration across intraocular barriers.
7. Describe the challenges in ocular drug delivery and basic strategies to address them.
8. Explain the role of physiological barriers in the eye and how formulations help overcome them.

Possible 20-Mark Questions (Detailed essays or comprehensive discussions)

1. Provide a detailed introduction to ocular drug delivery systems, including intraocular barriers, methods to overcome them, preliminary studies, various ocular formulations, and the role of ocuserts with examples and applications.
2. Discuss in detail the intraocular barriers in ocular drug delivery. Elaborate on methods to overcome these barriers, supported by preliminary studies, and evaluate the effectiveness of ocular formulations and ocuserts.
3. Give a comprehensive overview of ocular drug delivery systems, starting from their introduction, analyzing intraocular barriers and overcoming strategies, detailing preliminary studies, and critically assessing ocular formulations versus ocuserts in terms of design, advantages, and limitations.

Possible 2-Mark Questions (Short definitions or basic facts)

1. Define intrauterine drug delivery system.
2. Name two advantages of intrauterine devices (IUDs).
3. List two disadvantages of IUDs.
4. What is the primary application of hormonal IUDs?
5. Mention one type of IUD used for drug delivery.
6. What is the role of copper in certain IUDs?
7. State the basic principle behind the development of IUDs.
8. Give one example of a medicated IUD.

Possible 5-Mark Questions (Brief explanations or lists with short descriptions)

1. Explain the introduction to intrauterine drug delivery systems.
2. Discuss the advantages and disadvantages of intrauterine devices (IUDs).
3. Outline the development process of intrauterine devices (IUDs).
4. Describe the applications of intrauterine drug delivery systems in contraception and therapy.
5. Compare non-medicated and medicated IUDs with examples.
6. Explain how IUDs provide localized drug delivery and their benefits.
7. Discuss potential side effects of IUDs and ways to mitigate them.
8. Describe the evolution of IUD technology from early designs to modern applications.

Possible 20-Mark Questions (Detailed essays or comprehensive discussions)

1. Provide a detailed introduction to intrauterine drug delivery systems, including their advantages and disadvantages, the development of intrauterine devices (IUDs), and their various applications in medical practice.
2. Discuss in detail the advantages and disadvantages of intrauterine drug delivery systems. Elaborate on the historical and technical development of IUDs, and evaluate their clinical applications with examples.
3. Give a comprehensive overview of intrauterine drug delivery systems, starting from their introduction, analyzing advantages versus disadvantages, detailing the development process of IUDs, and critically assessing their applications in contraception, hormone therapy, and other areas.