

Assignment Questions

1. Explain the anatomy of the eye, focusing on the structural and functional significance of the cornea, aqueous humour, and retina. *(4 marks)*
2. Discuss the challenges associated with drug delivery to the eye. How do anatomical barriers and physiological processes affect the bioavailability of ophthalmic preparations? *(4 marks)*
3. Compare and contrast eye drops, eye ointments, and ocular implants in terms of their formulation, advantages, limitations, and clinical applications. *(4 marks)*
4. Describe the key requirements for ophthalmic preparations, including sterility, isotonicity, pH compatibility, and viscosity. Why are these factors crucial for patient safety and efficacy? *(4 marks)*
5. Explore recent advancements in ophthalmic drug delivery systems, such as nanocarriers, contact lens-based systems, and microneedles. How do these innovations address the limitations of conventional preparations? *(4 marks)*