

Final Year B. Pharm Sem VIII (CBCS)
Pharmaceutics IV – Descriptive Question Set
Semester Examination- FH2021
Academic Year 2020-2021

Set I

Q I. Attempt any one question

1. Explain the principle of freeze drying with the help of phase diagram and write the process of freeze drying. 8M
2. Elaborate on the critical parameters to be evaluated during pilot plant study of tablets by wet granulation method. 8M

Q II. Attempt any four questions

1. Explain in detail leaker test and metal particle test performed on ophthalmic ointments packaged in collapsible tubes. 8M
2. Discuss in detail evaluations of sustained release systems. 8M
3. Classify different methods of microencapsulation and mention the role and application of microencapsulation in pharmaceutical industry. 8M
4. a. Write in detail advantages of Novel drug delivery systems. 3M
b. Explain concept of targeting and types of targeting. 5M
5. Classify different pharmacokinetic models and describe any one model in detail. 8M

Q I. Attempt any one question

1. Discuss pyrogen test in detail. 8M
2. With the help of diagram explain the design and components of elementary osmotic pump. 8M

Q II. Attempt any four questions

1. Explain different stages of microencapsulation brought about by phase separation coacervation. 8M
2. Explain the importance of validation. Write in detail about retrospective validation.
3. State types of lenses and elaborate on contact lens solutions. 8M
4. What are the limitation of conventional drug delivery system? Compare sustained and controlled release drug delivery system. 8M
5. Define bioavailability and bioequivalence and illustrate its significance in drug discovery and development. 8M

Q I. Attempt any one question

1. Describe LAL test in detail. 8M
2. What are floating drug delivery systems? Explain design and composition of any one system in detail 8M

Q II. Attempt any four questions

1. Write a note on particulate matter evaluation in ophthalmic solutions 8M
2. Explain method of residuals and state its applications. 8M
3. What are the personnel and space requirements of pilot plant? 8M
4. Classify different types of microcapsules and mention in details required properties of core and coating materials that makes them suitable for microencapsulation. 8M
5. Explain various types of sustained release systems and write their advantages. 8M