

FACULTY OF PHARMACY**M. Pharmacy (Pharmaceutics) II-Semester (PCI) (Suppl.) Examination, February 2019****Subject: Computer Aided Drug Delivery System****Time: 3 Hrs****Max. Marks: 75****Note: Answer any five questions. All questions carry equal marks.**

- 1 Write history of computers in pharmaceutical research and development.
- 2 Discuss the importance and applications of statistical modeling in pharmaceutical research and development.
- 3 Write application of Quality-by-Design (QbD) in pharmaceutical development. Explain QbD approach for formulation development with example.
- 4 (a) Write in brief on computational modeling techniques for drug absorption, drug distribution and drug excretion.
(b) Write a note on P-gp transporters.
- 5 Describe briefly factorial design for optimization and screening of pharmaceutical formulation in formulation development with example.
- 6 (a) Write briefly abt computer aided biopharmaceutical characterization for GI absorption simulation.
(b) Discuss Computer simulations in PK & PD for whole organism.
- 7 Write the applications of computers in clinical data collection and management.
- 8 a) Write abt application of artificial intelligence & robotics in pharmaceutical automation. Write advantages and disadvantages of robotics in pharmacy automation.
b) Write current challenges and future directions of pharmacy automation.
