

GUJARAT TECHNOLOGICAL UNIVERSITY
M.PHARM - SEMESTER-1 EXAMINATION – SUMMER-2019

Subject Code: MPH103T**Date: 01/06/2019****Subject Name: Modern Pharmaceutics****Time: 02:30 PM TO 05:30 PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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| Q.1 | (a) Comment on the following:
1. Change in the initial oral drug dose changes the t_{max} .
2. Zeta potential is an important evaluation parameter for osmotically controlled tablets. | 06 |
| | (b) Explain: Total Clearance, Volume of distribution | 05 |
| | (c) Enlist the model dependant methods for explaining kinetics of drug release from extended release tablets. Discuss any one. | 05 |
| Q.2 | (a) Explain the following terms: compression, compaction, consolidation | 06 |
| | (b) Elucidate different properties of tablet influenced by compression. | 05 |
| | (c) Write a note on “Inventory management and control”. | 05 |
| Q.3 | (a) Discuss the scope and merits of validation. | 06 |
| | (b) Write a short note on Heckel Plot. | 05 |
| | (c) Write a note on “Students T-test”. | 05 |
| Q.4 | (a) Explain: Independent variables, Dependent variables, P value. | 06 |
| | (b) Write a note on contour plots. | 05 |
| | (c) Enlist the different types of validation. Discuss any one in detail. | 05 |
| Q.5 | (a) Discuss DSC as a method to study Drug-Excipient compatibility. | 06 |
| | (b) Write a note on formulation of SMEDDS. | 05 |
| | (c) Discuss the Evaluation parameters for small volume parenterals. | 05 |
| Q. 6 | (a) Discuss the layout of building as per cGMP guidelines. | 06 |
| | (b) Write a note on “Total Quality Management” | 05 |
| | (c) Write a note on real time and accelerated stability studies. | 05 |
| Q.7 | (a) Give the merits, demerits and application of statistical designs in formulation development. | 08 |
| | (b) Enlist various parameters affecting Dissolution and describe any one in detail | 08 |
