

Enrolment No. \_\_\_\_\_

**PARUL UNIVERSITY**  
**PARUL INSTITUTE OF PHARMACY**

**B.PHARM EIGHTH SEMESTER · INTERNAL EXAMINATION: 2020-21**

**Subject Name: Dosage Form Design**  
**Subject Code: 08101453**  
**Time: 10.00 to 11.15 am**

**Date: 10/03/2021**  
**Total Marks: 25**

**Instructions:**

- 1. Question 1 is compulsory**
- 2. Attempt any 2 questions from Q.2 to Q.4**
- 3. Make suitable assumptions wherever necessary.**
- 4. Figures to the right indicate full marks.**

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|------------|------------|--|-----------|
| <b>Q.1</b> | <b>(a)</b> | Write a note on factors affecting dissolution.   | <b>04</b> |
|            | <b>(b)</b> | Enlist different types of formulation additives used in the formulation of tablet with example of each.                  | <b>03</b> |
|            | <b>(c)</b> | Draw the Plasma concentration Vs Time Profile for conventional, controlled and sustained drug delivery systems.          | <b>02</b> |
| <b>Q.2</b> | <b>(a)</b> | Explain the concept of similarity and dissimilarity factors with equations.  | <b>03</b> |
|            | <b>(b)</b> | What are the advantages and disadvantages of controlled drug delivery system?  | <b>03</b> |
|            | <b>(c)</b> | Explain the Matrix and Reservoir systems.  | <b>02</b> |
| <b>Q.3</b> | <b>(a)</b> | List out various types of dissolution apparatus as per pharmaceutical compendia and explained Type I and II in detailed. | <b>05</b> |
|            | <b>(b)</b> | What is the importance of dissolution study?   | <b>03</b> |
| <b>Q.4</b> | <b>(a)</b> | Give various techniques for enhancement of solubility of drug. Explain any one in detail.                                | <b>05</b> |
|            | <b>(b)</b> | Write in brief about Transdermal Drug Delivery System.   | <b>03</b> |

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