

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm – SEMESTER VII– • EXAMINATION – SUMMER -2021

Subject Code:BP704TT**Date: 06/08/2021****Subject Name: Novel Drug Delivery Systems****Time:10:30AM TO 01:30PM****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) State the physico chemical properties influencing controlled release | 06 |
| | (b) Name the different controlled release delivery systems and differentiate one from each other | 05 |
| | (c) Define: controlled, sustained, delayed, time and prolonged releases | 05 |
| Q.2 | (a) Classify polymers based on sources. Explain Acrylic polymers in detail | 06 |
| | (b) Explain different methods of formulating Nanoparticles | 05 |
| | (c) Give a brief account on biodegradable polymers | 05 |
| Q.3 | (a) Differentiate microsphere and microcapsule. Explain solvent evaporation method of microsphere formulation | 06 |
| | (b) Differentiate buccal and sublingual route. What are the basic excipients required for formulating transmucosal delivery? | 05 |
| | (c) Write short notes on tests to determine bioadhesive strength. | 05 |
| Q.4 | (a) Comment on suitability of drug candidates for transdermal delivery with few examples. | 06 |
| | (b) Discuss different parameters to be evaluated for transdermal patches. | 05 |
| | (c) Write short notes on Dental implants | 05 |
| Q.5 | (a) Give a brief account on Floating drug delivery systems. | 06 |
| | (b) Write short notes on applications of GRDDS. | 05 |
| | (c) How the particle size plays role in pulmonary delivery and methods of controlling the size? | 05 |
| Q.6 | (a) Define Liposome. Write methods of formulating SUVs. | 06 |
| | (b) Discuss the advantages of Targeted delivery. | 05 |
| | (c) Discuss ALZET type of pump. | 05 |
| Q.7 | (a) What are the barriers of ocular delivery and methods of overcoming the same? | 06 |
| | (b) Write short notes on contraceptive IUDs. | 05 |
| | (c) Justify: MoAbs are targeted delivery systems. | 05 |
