

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
M. Pharm. – SEMESTER – II • EXAMINATION – WINTER 2013

Subject Code: 2920102

Date: 28-11-2013

Subject Name: Novel Drug Delivery System Part-1

Time: 10.30 am - 01.30 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) Mention the modified forms of Elementary osmotic pump and explain any two. | 06 |
| | (b) What are the basic components of Osmotic drug delivery system? Explain. | 05 |
| | (c) Discuss the factors affecting drug release rate of Osmotic dosage forms. | 05 |
| | | |
| Q.2 | (a) Explain drug suitability & physiological factors governing the colon targeting. | 06 |
| | (b) Discuss microbial triggered drug delivery to colon. | 05 |
| | (c) Enumerate in vitro and in vivo evaluation methods of colon delivery systems. | 05 |
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| Q.3 | (a) State various approaches of GRDDS and factors controlling it. | 06 |
| | (b) Give a brief account on effervescent type of floating drug delivery systems. | 05 |
| | (c) Discuss in vitro and in vivo evaluation methods of GRDDS. | 05 |
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| Q.4 | (a) Discuss merits, demerits and limitations of trans mucosal drug delivery and permeability characteristics of oral mucosa. | 06 |
| | (b) Write short notes on in vitro assessment of mucoadhesion. | 05 |
| | (c) Discuss different depot types of controlled release formulation. | 05 |
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| Q.5 | (a) Enumerate various approaches for parenteral drug delivery based on activation mechanism. | 06 |
| | (b) Explain long acting insulin (OR) long acting steroidal preparation | 05 |
| | (c) Give a brief account on pulsatile drug delivery system. | 05 |
| | | |
| Q. 6 | (a) Discuss child resistant and tamper proof packaging. | 06 |
| | (b) Explain various approaches of taste masking. | 05 |
| | (c) Write short notes on SMEDDS. | 05 |
| | | |
| Q.7 | (a) Define microencapsulation and detail out the coacervation phase separation techniques. | 06 |
| | (b) Discuss novel innovations of semisolid gels. | 05 |
| | (c) Explain the evaluation test of aerosol packaging containers. | 05 |
