

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM. – SEMESTER VIII– • EXAMINATION – SUMMER 2017

Subject Code: 2280016

Date: 09/05/2017

Subject Name: Current Advances in Novel Drug Delivery Systems

Time: 10:30 AM to 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) | What are different possible designs of Transdermal therapeutic systems? | 06 |
| | (b) | What are Nanoparticle? Explain its method of preparation. | 05 |
| | (c) | Write a note on Novel liposome. | 05 |
| Q.2 | (a) | Write a note on different techniques of Pelletization. | 06 |
| | (b) | Give the difference between Liposomes and Niosomes | 05 |
| | (c) | Explain the Temperature Sensitive <i>In-situ</i> gelation process | 05 |
| Q.3 | (a) | Enlist different methods used to prepare Microsphere and explain any one method in detail. | 06 |
| | (b) | Write a note on characterization of Liposomes. | 05 |
| | (c) | Write a short note on Diskette. | 05 |
| Q.4 | (a) | Write a note on <i>In-vitro</i> release of Nanoparticle. | 06 |
| | (b) | Explain how drug particles are targeted to Macrophages. | 05 |
| | (c) | Write a short note on Sonophoresis. | 05 |
| Q.5 | (a) | How Transdermal Systems are tested <i>In-vitro</i> for drug delivery and absorption? | 06 |
| | (b) | Explain the evaluation techniques of Self Emulsifying Drug Delivery System. | 05 |
| | (c) | Write a short note on Microcapsules. | 05 |
| Q. 6 | (a) | What is Mucoadhesive film? Classify them and discuss in brief about evaluation parameters. | 06 |
| | (b) | Describe evaluation parameters of Self emulsifying drug delivery system. | 05 |
| | (c) | Explain different method of characterization of Microsphere in detail. | 05 |
| Q.7 | (a) | Define Niosomes. Explain different methods of preparation of Niosomes. | 06 |
| | (b) | Define Liposomes. Classify them and list their advantages. | 05 |
| | (c) | Explain the selection procedure of excipients in self emulsifying drug delivery systems. | 05 |
