

SVKM'S NMIMS
Shobhaben Pratapbhai Patel / School of Pharmacy & Technology Management

Programme: M. Pharm / M. Pharm + MBA (Pharmaceutics)
 Academic Year: 2019-20
 Subject: Drug Delivery Systems

Year: I

Semester: I

Marks: 75

Time: 2.00 pm to 5.00 pm

Duration: 3 hrs.

No. of Pages : 1

Date: 20 November 2019

FINAL EXAMINATION

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover of the Answer Book, which is provided for their use.

- 1) Question No. 1 is compulsory.
- 2) Out of remaining questions attempt any 4 questions.
- 3) **In all 5 questions to be attempted.**
- 4) All questions carry equal marks.
- 5) **Answer to each new question to be started on a fresh page.**
- 6) **Figures in brackets on the right hand side indicate full marks.**
- 7) Assume suitable data if necessary.

Section A

Q. 1.	Answer all of the following	3 X 5 = 15
A	In your view, what is rationale for CRDDS?	
B	State whether the following statement is TRUE or FALSE. Justify your answer. Azones are first specially designed permeation enhancer	
C	State whether the following statement is TRUE or FALSE. Justify your answer. Non-corneal absorption of drug is productive.	
D	What do you think, CR and SR systems are same or different? Justify.	
E	Enlist strategies for extension of GI transit.	
Section B		
Q. 2. A	How will you evaluate transdermal patches?	7 Marks
Q. 2. B	Classify rate programmed drug delivery systems. Explain with example feedback regulated system.	8 Marks
Q. 3. A	Discuss pharmacokinetics of ocular drug deliver.	8 Marks
Q. 3. B	Discuss factors influencing buccal drug delivery.	7 Marks
Q. 4. A	Discuss basic components of transdermal patches.	8 Marks
Q. 4. B	Discuss various ocular inserts.	7 Marks
Q. 5. A	What factors will you consider in formulation of protein drugs?	10 Marks
Q. 5. B	Write a note on permeation enhancers.	5 Marks
Q. 6. A	Explain polymers used in sustained drug delivery systems.	10 Marks
Q. 6. B	Write a note on mechanism of mucoadhesion.	5 Marks
Q. 7.	Write short notes on- ANY THREE i) Customized delivery systems ii) Mucosal delivery of vaccines. iii) Advantages of 3D printing to pharma field. iv) Drug candidate selection for CR dosage form.	3 X 5 = 15