

M. PHARMACY (SUPPLE) DEGREE EXAMINATIONS, JANUARY - 2022**First Semester****INDUSTRIAL PHARMACY****NOVEL DRUG DELIVERY SYSTEMS**

Time : Three Hours

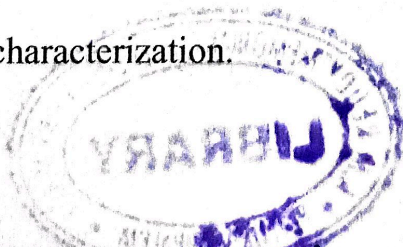
Maximum : 75 Marks

SECTION - A**Answer any FIVE Questions.****5x5 = 25 M**

1. What are the regulatory requirements for controlled drug delivery systems ?
2. Write about the applications of TDDS.
3. Discuss about issues and challenges in ocular drug delivery.
4. Define dendrimers. Describe various methods of preparation and applications of dendrimers.
5. Brief out the regulatory aspects of sub micron cosmeceuticals.
6. Write a short note on niosomes.
7. Explain the methods and technologies of 3D printing of pharmaceuticals. Add a note on its challenges.

SECTION - B**Answer any FIVE Questions.****5x10 = 50 M**

8. Describe briefly one and two compartment models.
9. Explain the basic aspects of micro emulsions. Give its applications.
10. Describe in detail about the various methods for drug loading to the erythrocytes and their characterization.



11. Describe the significance of drug protein binding.
12. Enlist various pharmacokinetic and pharmacodynamic characteristics of a drug in the design of controlled release formulations.
13. Describe various approaches for improving stability of biotechnological pharmaceuticals.
14. Explain the categories of patients for personalized medicines. Discuss about telepharmacy.



Total No. of Questions :14]

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M.PHARMACY (Regular) DEGREE EXAMINATIONS, FEB/MAR-2020

First Semester

M.PHARMACY

INDUSTRIAL PHARMACY

NOVEL DRUG DELIVERY SYSTEMS

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Maximum marks:75

SECTION-A

Answer any FIVE Questions

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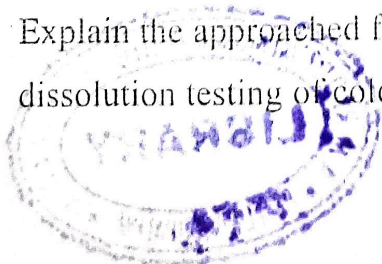
1. Write the applications of block copolymers and dendrimers with suitable examples
2. Write the need for pulsatile drug delivery and mention their applications with suitable examples.
3. Explain the specific evaluation tests for transdermal drug delivery systems.
4. Explain the formulation of nail polish.
5. Give the differences between micro and multiple emulsions. Give two examples each.
6. Discuss the causes for protein destabilization.
7. Write the need for personalized medicine and write about the concepts of personalized medicine for hypertension.

SECTION-B

Answer any FIVE Questions

5X10=50M

8. Enumerate the role of pharmacokinetics with suitable examples in the design of controlled drug delivery.
9. Explain the approached for colon drug delivery and significance of medium in dissolution testing of colon drug delivery systems.



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10. Write about formulation additives suitable for transdermal drug delivery citing suitable examples.
11. Explain the formulation and evaluation of antidandruff shampoo.
12. Explain the approaches for drug targeting highlighting their relative merits.
13. Explain the methods for oral delivery of protein and peptide drugs.
14. Write about the following:
 - a) Telepharmacy
 - b) Categories of patients suitable for personalized medicine.