

Total No. of printed pages = 2

**MPH 102 T**

Roll No. of candidate

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29/03/22

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**2022**

**M.Pharm. 1<sup>st</sup> Semester (End-Term) Examination**

**Pharmaceutics**

**DRUG DELIVERY SYSTEM**

**(New Regulation w.e.f. 2017-18)**

Full Marks - 75

Time - Three hours

The figures in the margin indicate full marks  
for the questions.

A. Answer *all* :

(10 × 2 = 20)

1. Differentiate Sustained and Controlled Release systems?
2. What do you mean by Low-Density Systems of GRDDS?
3. What is telepharmacy?
4. Compare and contrast Matrix and Reservoir systems.
5. Differentiate Drop on drop deposition and Drop on solid deposition in 3D printing?
6. Explain degree of Polymerization.
7. What are bioelectronic medicines?
8. What is the use of PSA in TDDS systems?
9. What are the therapeutic interests to prolong the gastric residence time of a pharmaceutical dosage form?
10. What are single shot vaccines?

[Turn over



B. Answer any *seven*.

(7 × 5 = 35)

11. Explain different theories of mucoadhesion.
12. Write a short note on Personalized medicine.
13. Express pH-activated drug delivery Systems.
14. Explain the formulation of an osmotic activated drug delivery system.
15. Explain briefly about components of TDDS.
16. Briefly describe general pathways for ocular absorption.
17. Elaborate briefly the barriers for protein and peptide drug delivery.
18. Write a short note on uptake of antigens.
19. Brief about some important properties of polymer to be considered for drug delivery formulation.

C. Answer any *two*.

(2 × 10 = 20)

20. Briefly explain different biological factors influencing the design of CR/ SR products.
  21. Enumerate different technologies or systems used to develop GRDDS.
  22. Write in brief about the procedures of different important parameters, generally tested for TDDS.
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