

BACHELOR OF PHARMACY (B. PHARM.) (CBCS - 2015 COURSE)
Final Year B. Pharm. Sem-VIII : WINTER- 2022
SUBJECT : PHARMACEUTICAL TECHNOLOGY-IV (T UE)

Day : Tuesday

Time : 02:00 PM-05:00 PM

Date : 24-01-2023

W-13729-2022

Max. Marks : 60

N.B.

- 1) Q.1 and Q.5 are **COMPULSORY**. Out of remaining attempt **ANY TWO** questions from each section.
- 2) Answer to the both sections should be written in **SEPARATE** answer book.
- 3) Figures to the right indicate **FULL** marks.

SECTION-I

- Q.1** Attempt **ANY FIVE** of the following: **(10)**
- a) What are matrix DDS?
 - b) Explain transderm nitro systems.
 - c) Draw a neat diagram of progstasert IUD.
 - d) State the significance gastric transit time in oral DDS
 - e) Give an example of Penn Kinetic Systems.
 - f) Draw a neat diagram Alzet osmotic pump.
- Q.2** a) Give a detailed account on influence of diffusivity of drug on its release from DDS. **(07)**
- b) Discuss the mechanistic approach for the release profile of the drug from membrane permeation controlled DDS. **(03)**
- Q.3** a) Discuss the development of floating DDS. **(05)**
- b) Discuss in brief; system parameters influencing release of drug from DDS. **(05)**
- Q.4** Write short note on **ANY TWO** of the following: **(10)**
- a) pH active DDS.
 - b) Iontophoretic DDS.
 - c) Bueche void model.

SECTION-II

- Q.5** Attempt **ANY FIVE** of the following: **(10)**
- a) What are MDI's?
 - b) Draw a neat diagram of Liposome.
 - c) What is retrospective validation?
 - d) Draw a neat diagram of aerosol container.
 - e) Explain principle of inertial sampling.
 - f) Give one example of mix up and contamination.
- Q.6** a) Discuss in detail validation of building facility. **(07)**
- b) Discuss ICH guidelines for stability testing. **(03)**
- Q.7** a) Discuss various QC test of aerosols. **(07)**
- b) Give a detailed account of various propellants used in aerosols. **(03)**
- Q.8** Write short note on **ANY TWO** of the following: **(10)**
- a) Process validation.
 - b) Documentation.
 - c) Nano particulate DDS.

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