

Ref. No.: EX/PG/PHAR/T/111A/2018

**MASTER OF PHARMACY FIRST YEAR FIRST SEMESTER  
EXAMINATION, 2018**

**Subject: Pharmaceutics –I**

Time: three hours

Full Marks 100

**Answer any *five* questions taking at least *two* from each group.**

**GROUP – A**

Q1. Define “Sonophoresis” and “Iontophoresis”. Explain the mechanisms associated with such techniques to improve trans-dermal delivery of a drug.

Q2. Write short note on:

- i) Large Volume Parenterals
- ii) Air handling & maintaining of aseptic manufacturing area.

Q3. i) Give an overview on Parenteral Controlled Release Systems.  
ii) How the drug release rate from injectable aqueous solutions & suspension may be controlled?

**M. PHARM 1<sup>st</sup> YEAR 1<sup>ST</sup> SEMESTER EXAMINATION, 2018**

**SUBJECT PHARMACEUTICS - I**

**GROUP - B**

- 1.a Elaborate the factors that influence the absorption of drugs across the nasal epithelium. With a neat schematic sketch elaborate the pathways of nasal absorption. 5+ 5
- b. Write down the merits and limitations of vaginal mucosa as the route of drug delivery. How do drugs get absorbed from the vaginal mucosa? 5+5
  
- 2.a Elaborate nasal delivery with specific reference to nasal gels. What do you understand by enhancement of nasal absorption? 4+6
- b. Write a detailed note on the delivery of protein and peptide by vaginal route. 10
  
3. (a) With a systematic table enlist the various consideration for the delivery of drugs through various routes of administration. 10
- (b) Write short notes on
  1. Microparticulate systems
  2. Vaginal delivery of peptides and proteins. 5x2