



MID SEMESTER TEST-II

Autumn 2025 (Jan-2025)

Name of Program: PhD

Course Name- DSE Pharmaceutical Sciences

Course Code – PS21P104

Max. Duration: 1.5 hrs

Max. Marks: 30

SECTION - A

1. Objective Type Questions (ALL QUESTIONS ARE COMPULSORY)

(5X1 = 05)

a) Experimental is/are.....

i. Rats and Mice

ii. Guinea Pig

iii. Rabbits

iv. All

b) Which of the following physicochemical properties is least commonly considered in QSAR studies?

i. Hydrophobicity

ii. Electronic influence of substituents

ii. Size of substituents

iv. Dipole moment

c) Alcoholic solution of volatile substance is called as:

i. Tincture

ii. Spirit

iii. Infusion

iv. None

d) A lipid bilayer structure that encloses an internal aqueous volume:

i. Niosome

ii. Liposome

iii. Nanoparticle

iv. Solid lipid Nanoparticle

e) Validation of Analytical Procedures: Text and Methodology is given under theguidelines of ICH:

i. Q2(R1)

ii. Q2(R3)

iii. Q2(R2)

iv. Q2(R4)

SECTION – B

2. Short Answer Type Questions (Attempt any THREE)

(3X5 =15)

a) Explain in short supercritical carbon dioxide extraction.

b) Write short note on hansch analysis.

c) Write short note on roles of polymer in drug delivery.

d) Discuss in brief Pre-clinical screening model for Anti-inflammatory drugs.

e) Explain in brief genetic markers.

SECTION – C

3. Long Answer Type Questions (Attempt any ONE)

(1X10 =10)

a) Elaborate in detail common technical document for NDA.

b) Discuss in detail concept of bioavailability and bioequivalence.