



Program	Master of Pharmacy (M.Pharm)	Semester - 2
Type of Course	-	
Prerequisite		
Course Objective	-	
Effective From A.Y.	2023-24	

Teaching Scheme (Contact Hours)				Examination Scheme				
Lecture	Tutorial	Lab	Credit	Theory Marks		Practical Marks		Total Marks
				External Marks (T)	Internal Marks (T)	External Marks (P)	Internal Marks (P)	
-	-	12	6	-	-	100	50	150

SEE - Semester End Examination, CIA - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc.)

Suggested Distribution Of Theory Marks Using Bloom's Taxonomy		
Level	Analyze	Evaluate
Weightage	30	70

NOTE : This specification table shall be treated as a general guideline for the students and the teachers. The actual distribution of marks in the question paper may vary slightly from above table.

Course Outcomes	
At the end of this course, students will be able to:	
C01	Ability to formulate different dosage forms and evaluate them for their quality.
C02	Ability to conduct data analysis



List of Practical

1.	To study the effect of temperature change, non-solvent addition, incompatible polymer addition in microcapsules preparation
2.	Preparation and evaluation of Alginate beads
3.	Formulation and evaluation of gelatin /albumin microspheres
4.	Formulation and evaluation of liposomes/niosomes
5.	Formulation and evaluation of spherules
6.	Improvement of dissolution characteristics of slightly soluble drug by Solid dispersion technique.
7.	Comparison of dissolution of two different marketed products /brands
8.	Protein binding studies of a highly protein bound drug & poorly protein bound drug
9.	Bioavailability studies of Paracetamol in animals.
10.	Pharmacokinetic and IVIVC data analysis by Winnoline R software
11.	In vitro cell studies for permeability and metabolism
12.	DoE Using Design Expert® Software
13.	Formulation data analysis Using Design Expert® Software
14.	Quality-by-Design in Pharmaceutical Development
15.	Computer Simulations in Pharmacokinetics and Pharmacodynamics
16.	Computational Modeling of Drug Disposition
17.	To develop Clinical Data Collection manual
18.	To carry out Sensitivity Analysis, and Population Modeling.
19.	Development and evaluation of Creams
20.	Development and evaluation of Shampoo and Toothpaste base
21.	To incorporate herbal and chemical actives to develop products
22.	To address Dry skin, acne, blemish, Wrinkles, bleeding gums and dandruff