

**J R KISSAN COLLEGE OF PHARMACY AND
HEALTH SCIENCE, ROHTAK**

LESSON PLAN

D.Pharmacy 1st yr. (session 2022-23)

Subject- Pharmaceutics

Name of Faculty- Dr. SAVITA DAHIYA

S.No.	Date	Theory Topic	Practical Topic
1	02-01-2023 - 05-01-2023	Introduction to Pharmaceutics	To study various type of dosage form
2	06-01-2023- 13-01-2023 (Quiz/Oral Exam On Wednesday)	History of the profession of Pharmacy in India in relation to Pharmacy education, industry, pharmacy practice, and various professional associations.	
3	14-01-2023- 21-01-2023	• Pharmacy as a career • Pharmacopoeia: Introduction to IP, BP, USP, NF and Extra Pharmacopoeia. Salient features of Indian Pharmacopoeia	To study route of drug administration
4	22-01-2023- 29-01-2023	Packaging materials: Types, selection criteria, advantages and disadvantages of glass, plastic, metal, rubber as packaging materials	
5	30-01-2023- 06-02-2023	Induction Program	
6	07-02-2023- 13-02-2023	Pharmaceutical aids: Organoleptic (Colouring, flavouring, and sweetening) agents Preservatives: Definition, types with examples and uses	To prepare simple syrup

7	14-02-2023- 20-02-2023 (Quiz/Oral Exam On Wednesday)	Unit operations: Definition, objectives/applications, principles, construction, and workings of: Size reduction: hammer mill and ball mill Size separation: Classification of powders according to IP, Cyclone separator, Sieves and standards of sieves	To prepare piperazine citrate elixer
8	21-02-2023- 28-02-2023	Unit operations: Definition, objectives/applications, principles, construction, and workings of: Mixing: Double cone blender, Turbine mixer, Triple roller mill and Silverson mixer homogenizer	
9	01-03-2023- 07-03-2023	1stInternal Assessment Exam	
10	08-03-2023- 15-03-2023 (Quiz/Oral Exam On Wednesday)	Unit operations: Definition, objectives/applications, principles, construction, and workings of: Filtration: Theory of filtration, membrane filter and sintered glass filter	To prepare castor oil emulsion
11	16-03-2023- 23-03-2023	Unit operations: Definition, objectives/applications, principles, construction, and workings of: Drying: working of fluidized bed dryer and process of freeze drying	
12	23-03-2023- 31-03-2023	Unit operations: Definition, objectives/applications, principles, construction, and workings of: Extraction: Definition, Classification, method, and applications	To prepare cod liver oil emulsion
13	01-04-2023- 07-04-2023 (Seminar on	Unit operations: Definition, objectives/applications, principles, construction, and workings of: Extraction: Definition, Classification, method, and applications	

	Friday)		
14	08-04-2023-15-04-2023	Tablets – coated and uncoated, various modified tablets (sustained release, extended-release, fast dissolving, multilayered)	
15	16-04-2023-23-04-2023 (Quiz/Oral Exam On Wednesday)	Tablets – coated and uncoated, various modified tablets (sustained release, extended-release, fast dissolving, multilayered)	To prepare glycerol suppositories
16	24-04-2023-30-04-2023	Capsules - hard and soft gelatine capsules	To prepare sodium alginate gel
17	01-05-2023-07-05-2023 (Seminar on Friday)	Liquid oral preparations - solution, syrup, elixir, emulsion, suspension, dry powder for reconstitution	
18	08-05-2023-15-05-2023	Topical preparations - ointments, creams, pastes, gels, liniments and lotions, suppositories, and pessaries	To study about prescription writing
19	16-05-2023-23-05-2023 (Quiz/Oral Exam On Wednesday)	Topical preparations - ointments, creams, pastes, gels, liniments and lotions, suppositories, and pessaries	
20	24-05-2023-30-05-2023	Nasal preparations, Ear preparations	To study about good manufacturing practices
21	01-06-2023-07-06-2023	2nd Internal Assessment Exam	

22	08-06-2023- 15-06-2023	Powders and granules - Insufflations, dusting powders, effervescent powders, and effervescent granules	To prepare magnesium hydroxide mixture
23	16-06-2023- 20-06-2023 (Quiz/Oral Exam On Wednesday)	Sterile formulations – Injectables, eye drops and eye ointments	To prepare normal saline solution
24	21-06-2023- 23-06-2023	Field Visit	
25	24-06-2023- 26-06-2023	Immunological products: Sera, vaccines, toxoids, and their manufacturing methods.	
26	27-06-2023- 30-06-2023 (Seminar on Friday)	Basic structure, layout, sections, and activities of pharmaceutical manufacturing plants	To prepare cold cream
27	31-06-2023- 02-07-2023 (Quiz/Oral Exam On Wednesday)	Quality control and quality assurance: Definition and concepts of quality control and quality assurance	
28	03-07-2023- 10-07-2023	Current good manufacturing practice (cGMP), Introduction to the concept of calibration and validation.	To demonstrate tablet manufacturing process
29	11-07-2023- 15-07-2023	Novel drug delivery systems: Introduction	
30	16-07-2023- 18-07-2023	Novel drug delivery systems- Classification with examples, advantages, and challenges	To demonstrate size reduction process
31	19-07-2023- 20-07-2023	Novel drug delivery systems- Classification with examples, advantages, and challenges	

32	From 21-07-2023 onward	Revision/ Problem Discussion	