



LESSON PLAN

Faculty Name: Ms. Kavita

Subject Name: Pharmaceutics- I

Class: B. Pharmacy – Ist Semester

Subject Code: BP103T

Scope of the Subject: This course is designed to impart a fundamental knowledge on the preparatory pharmacy with arts and science of preparing the different conventional dosage forms. The aim of this course is to provide a core for future studies in formulation of pharmaceutical preparations. This field is related to production of medicines and technology that is used in production of drugs used in pharmaceutical companies.

Course outcome: Upon completion of this course the student should be able to:

- Know the history of profession of pharmacy
- Understand the basics of different dosage forms, pharmaceutical incompatibilities and pharmaceutical calculations
- Understand the professional way of handling the prescription
- Preparation of various conventional dosages.

Number of Lectures: 45 + 5

Each lecture: 01 hour

Lecture No.	Particular	Remark/Date
Introduction		
1.	General discussion about dosage forms and subject	
Module 1: Historical background and development of profession of pharmacy, Prescription, posology		
2.	History of profession of Pharmacy in India in relation to pharmacy education	
3.	History of profession of Pharmacy in India in relation to Industry and organization	
4.	Pharmacy as a career	
5.	Pharmacopoeias: Introduction to IP, BP	
6.	USP and Extra Pharmacopoeia.	
7.	Dosage forms: Introduction to dosage forms, classification and definitions	
8.	Prescription: Definition, Parts of prescription	
9.	Handling of Prescription and Errors in prescription	
10.	Posology: Definition, Factors affecting posology	
11.	Pediatric dose calculations based on age, body weight and body	

	surface area.	
Module 2: Pharmaceutical calculations, powders, liquid dosage forms		
12.	Pharmaceutical calculations: Weights and measures – Imperial & Metric system	
13.	Calculations involving percentage solutions,	
14.	Alligation method, Proof spirit	
15.	Isotonic solutions based on freezing point and molecular weight	
16.	Powders: Definition, classification, advantages and disadvantages	
17.	Simple & compound powders – official preparations, dusting powders, effervescent powders	
18.	Efflorescent and hygroscopic powders, eutectic mixtures. Geometric dilutions	
19.	Liquid dosage forms: Advantages and disadvantages of liquid dosage forms	
20.	Excipients used in formulation of liquid dosage forms	
21.	Solubility enhancement techniques	
Module 3: Monophasic and Biphasic liquid dosage forms		
22.	Monophasic liquids: Definitions and preparations of Gargles, Mouthwashes, Throat Paint	
23.	Definitions and preparations of Eardrops, Nasal drops, Enemas, Syrups	
24.	Definitions and preparations of Elixirs, Liniments and Lotions	
25.	Suspensions: Definition, advantages and disadvantages, classifications, Preparation of suspensions	
26.	Flocculated and Deflocculated suspensions	
27.	Suspension : stability problems and methods to overcome	
28.	Emulsions: Definition, classification, emulsifying agent	
29.	Test for the identification of type of Emulsion, Methods of preparation	
30.	Stability problems and methods to overcome in emulsion	
Module 4: Suppositories and pharmaceutical incompatibilities		
31.	Suppositories: Definition, types, advantages and disadvantages	
32.	Suppositories: types of bases, methods of preparations	
33.	Displacement value & its calculations	
34.	Evaluation of suppositories	
35.	Pharmaceutical incompatibilities: Definition, classification	
36.	Physical incompatibility with examples	
37.	Chemical incompatibility with examples	
38.	Therapeutic incompatibility with examples	
Module 5: Semisolid dosage forms		
39.	Definitions, classifications	
40.	Mechanisms of dermal penetration of drugs	
41.	Factors influencing dermal penetration of drugs	
42.	Preparation of ointments, pastes	

43.	Preparation of creams and gels.	
44.	Excipients used in semi solid dosage forms	
45.	Evaluation of semi solid dosages forms	
Revision		
46.	Revision of previous question papers	
47.	Revision of previous question papers	
48.	Revision of previous question papers	
49.	Revision of previous question papers	
50.	Revision of previous question papers	

Teacher in-charge

HOD

Principal