

PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY, PANIPAT DEPARTMENT OF PHARMACY



Course: Diploma in Pharmacy

LESSON PLAN

Faculty Name: Ms. Suman Subject Name: Pharmaceutics-II

Class: D. Pharmacy – 2nd year Subject Code: 2131

Scope of the Subject: The aim of this course is to provide a core for future studies in formulation of pharmaceutical preparations. The subject covers the information about the various formulations. This course mainly deals with prescription and compatibility in extemporaneous formulations and also preparation of various formulations and labeling and storage conditions.

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

- ➤ Reading and receiving the prescription and the error present in the prescription
- ➤ Latin terms used in prescription
- ➤ Pharmaceutical incompatibilities in the formulations
- > Factors affecting dose
- ➤ Preparation and formulations of solid dosage forms, liquid dosage forms, ophthalmic preparations and parenteral formulations

Number of Lectures: 75 + 5 **Each lecture**: 01 hour

Lecture No.	Particular	Remark/Date		
Module1: Prescription				
1.	Prescriptions Reading and understanding of prescription,			
2.	Latin terms used			
3.	Modern methods of prescribing, Adoption of matric system			
4.	Calculation involved in dispensing			
5.	Test/revision			
Module 2: Ph	narmaceutical Incompatibility			
6.	Physical incompatibility			
7.	Chemical incompatibility, Therapeutic incompatibility			
8.	Test/revision			
Module 3: Po	osology			
9.	Dose and dosage of drugs,			
10.	factors affecting dose, Calculation of dose on the basis of age, sex and surface area, veterinary dose			
11.	Dispensed medication Methods of preparation, use of appropriate containers and closures			
12.	Special labeling requirements and storage conditions			
13.	Test/revision			
Module 4: Po	owders			
14.	Type of powders, advantages, disadvantages, Granules,			

	introduction	
15.	cachets, tablet triturates	
16.	Preparation of powders, Weighing methods, errors on weighing	
17.	Geometric dilution,	
18.	usage and care of dispensing balance	
19.	Possible errors, minimum weighable amounts	
20.	Test/revision	
Module 4: L	iquid Oral Dosage Form	
21.	Monophasic essentials adjuvant like stabilizers	
22.	, colourants and flavours	
23.	Mixtures and concentrates	
24.	Gargle, mouthwashes	
25.	Syrups, douches	
26.	Elixirs	
27.	Sprays, throat paint	
28.	Ear drop, nasal drops	
29.	Liniments	
30.	Lotions	
31.	Test/revision	
Module 5: B	i-Phasic Liquid Dosage form	
32.	Suspensions: containing diffusible solids	
33.	Suspension containing Indiffusible solids	
	adjuvants used in suspension preparation	
34.	Suspension of precipitate forming liquids, suspension	
	produced by chemical reactions	
35.	Flocculated and non flocculated suspension	
36.	Emulsions Types of emulsion, identification tests,	
37.	Formulation of emulsions	
38.	Selection of emulsifying agent	
39.	Instabilities in emulsion,	
40.	Preservation of emulsion	
41.	Test/Revision	
Module 6: So	emi-Solid dosage form	
42.	Ointments : Types, classification	
43.	Selection of vehicles,	
44.	Preparation of ointments	
45.	Trituration methods, Fusion method,	
46.	Chemical reaction, emulsification method	
47.	Test/revision	
48.	Pastes Difference between Ointments and pastes, bases of	
	pastes,	
49.	Preparation of Pastes and their conservation	
50.	Jellies	
51.	Poultice	
52.	Suppositories and pessaries Merits and demerits, types,	
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53.	Types of bases, classification			
54.	Packing of suppositories,			
55.	use of suppositories in drug absorption			
56.	Test/revision			
Module 7: De	ntal and Cosmetic Preparation			
57.	Dentrifices introduction, facial cosmetics,			
58.	Deodrants, antiseptics, shampoos			
59.	Hair dressing, hair removers			
60.	Test/Revision			
Module 8: Sterile dosage form				
61.	Sterile dosage form Parenteral dosage form types,			
62.	Requirements and types of parenteral dosage form			
63.	Vehicles, adjuvants, processing			
64.	Personnel, facilities			
65.	quality control,			
66.	Preparation of IV Fluids			
67.	Admistures Total parenteral nutrition,			
68.	Dialysis fluids			
69.	Sterlity tests, particular matter monitoring			
70.	Faulty seal packaging			
71.	Ophthalmic products			
72.	Essential characteristics of ophthalmic products,			
73.	Formulation additives			
74.	Precaution in handling and storage			
75.	Test/Revision			
Revision				
76.	Revision of previous question papers			
77.	Revision of previous question papers	1		
78.	Revision of previous question papers			
79.	Revision of previous question papers	1		
80.	Revision of previous question papers	1		

Teacher in-charge HOD Principal