

# S.D.College of Pharmacy (245)

Janaula, Pataudi (Gurugram)

## Lesson Plan

Name of the Faculty : Jaipal Singh

Discipline : Pharmacy

Year : 2<sup>nd</sup> year

Subject : Pharmaceutics-II

Lesson plan duration : weeks (16<sup>th</sup> July.2018 to April 2019)

Work load : Theory -Lecture 03hours / week, Practical- 03 hours /week

Week	Theory			Practical		
	Lecture Day	Topic (including assignment / test)	Covered Date	Practical Day	Topic	Covered Date
1.	1	<b>Prescriptions</b> - Reading and understanding of prescriptions			Introduction of Powders	
	2	<b>Prescriptions</b> - Reading and understanding of prescriptions				
	3	<b>Prescriptions</b> - Latin terms commonly used				
2.	1	<b>Prescriptions</b> - Modern methods of prescribing,			Oral divided Powders (Aspirin + Paracetamol)  Four powders	
	2	<b>Prescriptions</b> - adoption of metric system.				
	3	<b>Prescriptions</b> - Calculations involved in Dispensing				
3.	1	Test			Oral divided Powders (Aspirin + Paracetamol +Caffeine)  Eight powders	
	2	<b>Incompatibilities in prescriptions</b> - study of various types of incompatibilities-physical				
	3	<b>Incompatibilities in prescriptions</b> - study of incompatibilities-Chemical				
4.	1	<b>Incompatibilities in prescriptions</b> - study of incompatibilities-Therapeutics			The Compound Magnesium Trisilicate Oral Bulk powder (25 gm)	
	2	Assignment on Incompatibility				
	3	<b>Posology</b> - Dose and dosage of drugs				
5.	1	<b>Posology</b> - factors influencing dose			The Compound Calcium Carbonate Powder (50gm)	
	2	<b>Posology</b> - calculations of doses on the basis of age, sex, surface area and veterinary doses				

	3	Test				
6.	1	<b>Powders</b> -Type of powders			The compound NaCl and Dextrose Powder (22gm)	
	2	<b>Powders</b> - Advantages and disadvantages of powders				
	3	<b>Powders</b> - Granules, cachets and tablet triturates				
7.	1	<b>Powders</b> - preparation of different types of powders encountered in prescriptions			Compound Powder (20 gm) Menthol+ Camphor+ NH <sub>4</sub> Cl+ Light Mag. Carbonate	
	2	<b>Powders</b> - Weighing methods, possible errors in weighing				
	3	<b>Powders</b> - minimum weighable amounts and weighing of a material below the minimum weighable amount				
8.	1	<b>Powders</b> - geometric dilution and proper usage and care of dispensing balance			Dusting Powder (50gm) (Talc+ Starch+ ZnO)	
	2	Test				
	3	<b>Liquid oral Dosage forms: Monophasic</b> - Theoretical aspects including commonly used vehicles				
9.	1	<b>Liquid oral Dosage forms: Monophasic</b> - essential adjuvant like stabilizers, colorants and flavors, with examples			Dusting Powder (20gm) (Salicylic Acid+ Starch+ ZnO)	
	2	<b>Liquid oral Dosage forms: Monophasic</b> - Mixtures and concentrates, Gargles				
	3	<b>Liquid oral Dosage forms: Monophasic</b> - Syrups				
10	1	<b>Liquid oral Dosage forms: Monophasic</b> - Mouth washes			The Compound Tragacanth Powder (50gm)	
	2	<b>Liquid oral Dosage forms: Monophasic</b> - Throat-paints, Elixirs				
	3	<b>Liquid oral Dosage forms: Monophasic</b> -Douches Ear Drops				
11	1	<b>Liquid oral Dosage forms: Monophasic</b> - Nasal drops Sprays			Introduction of Capsules	
	2	<b>Liquid oral Dosage forms: Monophasic</b> - Liniments, Lotions				
	3	Test				
12		<b>1<sup>st</sup> Sessional</b>				
13	1	<b>Biphasic Liquid Dosage Forms: Suspensions</b> - Suspensions containing diffusible solids and liquids and their preparations			Haematinic Capsules (7 caps.)	

14	1	<b>Biphasic Liquid Dosage Forms: Suspensions-</b> Study of the adjuvant used like thickening agents, wetting agents, their necessity and quantity to be incorporated			Haematinic Capsules (7 caps.)	
	2	<b>Biphasic Liquid Dosage Forms: Suspensions-</b> Study of the adjuvant used like thickening agents, wetting agents, their necessity and quantity to be incorporated				
15	1	<b>Biphasic Liquid Dosage Forms: Suspensions-</b> suspensions of precipitate forming liquids like tinctures, their preparations and stability			Introduction of Mixtures	
	2	<b>Biphasic Liquid Dosage Forms: Suspensions-</b> suspensions of precipitate forming liquids like tinctures, their preparations and stability				
	3	<b>Biphasic Liquid Dosage Forms: Suspensions -</b> An introduction to flocculated /non-flocculated suspension system.				
16	1	Test			Simple Mixture (100ml) Ferric Ammonium Citrate+ Chloroform Water	
	2	<b>Biphasic Liquid Dosage Forms: Emulsions-</b> Types of emulsions				
	3	<b>Biphasic Liquid Dosage Forms: Emulsions-</b> identification of emulsion system				
17	1	<b>Biphasic Liquid Dosage Forms: Emulsions-</b> formulation of emulsions			Simple Mixture (15ml) Sodium Salicylate + NaHCO <sub>3</sub> , Sodium metabisulphite+ Chloroform water	
	2	<b>Biphasic Liquid Dosage Forms: Emulsions-</b> formulation of emulsions				
	3	<b>Biphasic Liquid Dosage Forms: Emulsions-</b> selection of emulsifying agent				
18	1	<b>Biphasic Liquid Dosage Forms: Emulsions-</b> Instabilities in emulsions, preservation of emulsions.			Simple Mixture (15ml) NH <sub>4</sub> Cl+NH <sub>4</sub> HCO <sub>3</sub> +Liquid Extract of Liquorice +Chloroform Water	
	2	Test				
	3	<b>Semi-Solid Dosage Forms: Ointments:</b> Types of ointments				
19	1	<b>Semi-Solid Dosage Forms: Ointments:</b> classification and selection of dermatological vehicles			Mixtures containing Diffusible Solids (90ml) Light mag. Carbonate + Mag. Sulphate +Peppermint Water	
	2	<b>Semi-Solid Dosage Forms: Ointments:</b> reparation and stability of ointments by – Trituration, Fusion				

	3	<b>Semi-Solid Dosage Forms: Ointments:</b> reparation and stability of ointments by - chemical reaction Emulsification				
20	1	Presentation on Emulsion			Mixtures containing Diffusible Solids (60ml) Mag. Trisilicate + NaHCO <sub>3</sub> + Light Mag. Carbonate + Peppermint Water	
	2	<b>Semi-Solid Dosage Forms: Pastes:</b> Differences between ointments and pastes, Bases of pastes				
	3	<b>Semi-Solid Dosage Forms:</b> preparation of pastes and their preservation				
21	1	<b>Semi-Solid Dosage Forms: Jellies:</b> An introduction to the different types of jellies and their preparation.			Mixtures containing In-Diffusible Solids (30ml)	
	2	<b>Semi-Solid Dosage Forms:</b> An elementary study of poultice.				
	3	<b>Test</b>				
22	1	<b>Suppositories and pessaries-</b> Their relative merits and demerits, types of suppositories			Introduction of Emulsion	
	2	<b>Suppositories and pessaries-</b> suppository bases, classification				
	3	<b>Suppositories and pessaries-</b> properties. preparation and packing of suppositories				
23		<b>Winter Vacation</b>				
24		<b>2<sup>nd</sup> Sessional</b>				
25		<b>2<sup>nd</sup> Sessional</b>				
26	1	<b>Suppositories and pessaries-</b> Use of suppositories of drug absorption.			O/W type emulsion for internal use (30ml) Castor Oil + Water	
	2	<b>Dental and cosmetic preparations:</b> Introduction to Dentifrices				
	3	<b>Dental and cosmetic preparations:</b> facial cosmetics				
27	1	<b>Dental and cosmetic preparations:</b> facial cosmetics			O/W type emulsion for internal use (60ml) Olive oil + Water	
	2	<b>Dental and cosmetic preparations:</b> facial cosmetics				
	3	<b>Dental and cosmetic preparations:</b> facial cosmetics				
28	1	<b>Dental and cosmetic preparations:</b> Deodorants			O/W type emulsion for Oral use (50ml) Liquid Paraffin + Water	
	2	<b>Dental and cosmetic preparations:</b> Antiperspirants				

	3	<b>Dental and cosmetic preparations:</b> shampoo,				
29	1	<b>Dental and cosmetic preparations:</b> Hair dressings and Hair removers.			Introduction to Semi- Solid Dosage form	
	2	<b>Dental and cosmetic preparations:</b> Hair dressings and Hair removers.				
	3	Test				
30	1	<b>Parenteral dosage forms :</b> Definition, Types of parenteral formulations			The Calamine Ointment (50g)	
	2	<b>Parenteral dosage forms:</b> General requirements for parenteral dosage forms				
	3	<b>Parenteral dosage forms:</b> General requirements for parenteral dosage forms				
31	1	<b>Parenteral dosage forms:</b> vehicles, adjuvant			Absorption Ointment Base (50gm)	
	2	<b>Parenteral dosage forms:</b> processing and personnel				
	3	<b>Parenteral dosage forms:</b> Facilities and quality control.				
32	1	<b>Parenteral dosage forms:</b> Preparation of Intravenous fluids and admixtures			The Ointment (50gm)  Zno+ Simple Ointment	
	2	<b>Parenteral dosage forms</b> Total parenteral nutrition,				
	3	<b>Parenteral dosage forms</b> Dialysis fluids				
33	1	<b>Sterility testing:</b> particulate matter monitoring- Faculty seal packaging			Prepare 50 gm of Emulsifying Ointment  Emulsifying Wax + Liquid Paraffin + White Soft Paraffin	
	2	<b>Test</b>				
	3	<b>Ophthalmic products:</b> study of essential characteristics of different ophthalmic preparations				
34	1	<b>Ophthalmic products:</b> Formulation:			Prepare 50gm Wool Alcohol Ointment	
	2	<b>Ophthalmic products:</b> additives,				
	3	<b>Ophthalmic products:</b> special precautions in handling and storage of ophthalmic products				
35		<b>3<sup>rd</sup> Sessional</b>				

36	1	Revision			Introduction To Monophasic Liquid Dosage Form	
	2	Revision				
	3	Revision				
37	1	Revision			Evacuant Enema (100ml) Soft Soap + Purified Water	
	2	Revision				
	3	Revision				

Name and sign. of Lect.

Name and sign. of Principal