

LESSON PLAN DIPLOMA IN PHARMACY 1ST YEAR

Name of the Faculty	Mr. Neeraj Kumar
Discipline	D. Pharmacy
Year	Ist year
Subject	Pharmaceutics
Lesson Plan Duration	25 weeks (2 Jan 2024 to 30 July, 2024)

Work load (Lecture/practical) per week (in hrs):

Week		Theory	Practical	
	Lecture Day	Topic/test	Practical day	Topic
1 st	1 st	History of the profession of Pharmacy in India in relation to Pharmacy education, industry, pharmacy practice, and various professional associations.	1 st	To study the official pharmacopeias, formularies with their handling and official references.
	2 nd	industry, pharmacy practice, and various professional associations		
	3 rd	Pharmacy as a career,		
2 nd	1 st	Pharmacopoeia: Introduction to IP, BP, USP, NF and Extra Pharmacopoeia.	2 nd	To prepare and submit liquid oral simple syrup
	2 nd	Salient features of Indian Pharmacopoeia		
	3 rd	Test of chapter-1		
3 rd	1 st	Packaging materials: Types, selection criteria	3 rd	To prepare and submit castor oil emulsion
	2 nd	advantages and disadvantages of glass, plastic		
	3 rd	advantages and disadvantages of metal, rubber		
4 th	1 st	Pharmaceutical aids-Introduction, organoleptic properties- coloring.	4 th	To prepare and submit cod liver oil emulsion
	2 nd	Organoleptic properties- sweetening and flavouring agent.		
	3 rd	Preservatives		
5 th	1 st	Size reduction- definition, hammer mill and ball mill.	5 th	To prepare and submit calamine lotion
	2 nd	Size separation, classification of powder according to IP		
	3 rd	Cyclone separator		
6 th	1 st	Sieves and standards of sieves	6 th	To prepare and submit simple ointment base.
	2 nd	Revision		
	3 rd	Test		
7 th	1 st	Mixing – double cone blender, turbine mixer	7 th	To formulate and submit sulphur ointment
	2 nd	Triple roller mill and silverson		

		mixer homogenizer.		
	3 rd	Assignment		
8 th	1 st	Filtration- theory of filtration,	8 th	To formulate and submit cetrimide cream
	2 nd	Membrane filtration, sintered glass filter		
	3 rd	Drying		
9 th	1 st	Tablets- basics of tablet formation	9 th	To prepare and submit sodium alginate gel
	2 nd	Coated and uncoated		
	3 rd	Various modified tablets- sustained release		
10 th	1 st	1 st Sessional Examination	10 th	
	2 nd	Extended, fast dissolving tablets	11 th	To prepare and submit turpentine liniment
	3 rd	Multilayered		
11 th	1 st	Revision		
	2 nd	Capsules- introduction	12 th	To prepare effervescent powder granules
	3 rd	Hard gelatin capsule		
12 th	1 st	Soft gelatin capsules		
	2 nd	Revision	13 th	To prepare and submit simple dusting powder
	3 rd	Liquid oral preparations- introduction		
13 th	1 st	solutions		
	2 nd	Syrups and elixirs	14 th	To prepare and submit sterile injection of normal saline
	3 rd	Emulsion		
14 th	1 st	Suspensions		
	2 nd	Dry powder for reconstitution	15 th	To prepare and submit calcium gluconate injection
		Revision		
15 th	1 st	Test		
	2 nd	Topical preparation- intro and Ointment introduction	16 th	To prepare and submit paracetamol tablet
	3 rd	Ointment- types and bases		
16 th	1 st	Creams		
	2 nd	Paste	17 th	To formulate and submit cold cream
	3 rd	Gels		
17 th	1 st	Liniments and lotion		
	2 nd	2 nd Sessional Examination		

	3 rd	Suppositories	19 th	To prepare and submit shampoo
18 th	1 st	Pessaries		
	2 nd	Nasal preparations		
	3 rd	Eye preparations	20 th	To prepare and submit lotion
19 th	1 st	Powders and granules- introduction and insufflations		
	2 nd	Dusting powders, effervescent powders		
	3 rd	Effervescent granules	21 st	To prepare and submit toothpaste
20 th	1 st	Sterile formulations- introduction, injectables		
	2 nd	Eye drops		
	3 rd	Eye ointments	22 nd	To demonstrate various stages of tablet manufacturing processes
21 st	1 st	Immunological products- Introduction		
	2 nd	Sera and their manufacturing method		
	3 rd	Vaccines and their manufacturing method	23 rd	To study the method of usage and storage of inhalers
22 nd	1 st	Toxoids and their manufacturing method		
	2 nd	Assignments		
	3 rd	Revision	24 th	To study the method of usage and storage of spacers
23 rd	1 st	Quality control and assurance –definition, concepts		
	2 nd	Current cGMP		
	3 rd	Introduction to the concept of calibration	25 th	To study the method of usage and storage of insulin pens
24 th	1 st	Introduction to the concept of validation		
	2 nd	Novel drug delivery systems- introduction,		
	3 rd	Classification of NDDS	26 th	To demonstrate quality control test and evaluation of tablets
25 th	1 st	Advantages and challenges		
	2 nd	3 rd Sessional Examination	28 th	
	3 rd	Revision	29 th	To demonstrate quality control test and evaluation of emulsion

LESSON PLAN

Name of the Faculty	Mrs. Shashi
Discipline	D. Pharmacy
Year	Ist year
Subject	Pharmaceutical Chemistry
Lesson Plan Duration	25 weeks (2 Jan 2024 to 30 July, 2024)

Work load (Lecture/practical) per week (in hrs):

Week		Theory	Practical
	Lecture Day	Topic/test	Day Topic
1st	1st	Introduction to pharmaceutical chemistry	1st To perform the limit test for Chlorides
	2nd	Scope and objectives	
	3rd	Sources and types of error	
2nd	1st	Sources and types of error	2nd To perform the limit test for Sulphate
	2nd	Impurities in pharmaceuticals	
	3rd	Impurities in pharmaceuticals	
3rd	1st	Impurities in pharmaceuticals	3rd To perform the limit test for Iron
	2nd	Impurities in pharmaceuticals	
	3rd	Volumetric analysis	
4th	1st	Volumetric analysis	4th To perform the limit test for Heavy metals
	2nd	Volumetric analysis	
	3rd	Volumetric analysis	
5th	1st	Gravimetric analysis-principle	5th To perform the identification tests for Anions and Cations as per IP
	2nd	Method of gravimetric analysis	
	3rd	Inorganic pharmaceuticals-haematinics	
6th	1st	Haematinics	6th To prepare and standardize sodium hydroxide solution
	2nd	Gastrointestinal agents	
	3rd	Gastrointestinal agents	
7th	1st	Topical agents	7th To prepare and standardize potassium permanganate
	2nd	Dental products	
	3rd	Medicinal gases	
8th	1st	Introduction to nomenclature	8th To perform assay of ferrous sulphate by redox titration
	2nd	Introduction to nomenclature	
	3rd	Anaesthetics	
9th	1st	Sedative and hypnotics	9th Viva voce
	2nd	Antipsychotics	
	3rd	Antipsychotics	

10 th	1 st	Sessional	10 th	
	2 nd	Anticonvulsants	11 th	To perform assay of Calcium gluconate by complexometric titration
	3 rd	Anticonvulsants		
11 th	1 st	Antidepressants	12 th	To perform assay of sodium chloride by modified volhard's method
	2 nd	Antidepressants		
	3 rd	Sympathomimetic drugs		
12 th	1 st	Sympathomimetic drugs	13 th	To perform assay of Ascorbic acid by iodimetry
	2 nd	Adrenergic antagonists		
	3 rd	Adrenergic antagonists	14 th	To perform the assay of Ibuprofen by alkalimetry
13 th	1 st	Cholinergic drugs		
	2 nd	Cholinergic drugs		
	3 rd	Cholinergic drugs	15 th	To determine melting point and boiling point of prepared organic compounds
14 th	1 st	Cholinergic blocking agents		
	2 nd	Cholinergic blocking agents	16 th	File checking
		Antiarrhythmic drugs		
15 th	1 st	Antiarrhythmic drugs		
	2 nd	Antihypertensive drugs	17 th	Viva voce
	3 rd	Antihypertensive drugs		
16 th	1 st	Revision	18 th	To synthesize benzoic acid from benzamide
	2 nd	Test		
	3 rd	Anti-anginal agents		
17 th	1 st	Diuretics	19 th	To prepare picric acid from phenol
	2 nd	Sessional		
	3 rd	Diuretics		
18 th	1 st	Hypoglycemic agents	20 th	To perform test of identification and purity for aspirin
	2 nd	Hypoglycemic agents		
	3 rd	Hypoglycemic agents		
19 th	1 st	Analgesics, anti-inflammatory agents	21 st	To perform test of identification and purity for caffeine
	2 nd	NSAIDs		
	3 rd	Anti-fungal agents		
20 th	1 st	Revision	22 nd	Viva voce
	2 nd	Test		
	3 rd	Urinary tract anti-infective agents		
21 st	1 st	Anti-tubercular drugs	23 rd	To perform test of identification and purity for paracetamol
	2 nd	Antiviral agents		
	3 rd	Anti-malarial drugs		
22 nd	1 st	Anti-malarial drugs	24 th	To perform test of identification and purity
	2 nd	Sulphonamides		
	3 rd	Antibiotics		
23 rd	1 st	Tetracyclines	25 th	To perform test of identification and purity
	2 nd	Revision		
	3 rd	Macrolides		
24 th	1 st	Miscellaneous		

	2 nd	Anti-neoplastic agents		for sulfanilamide
	3 rd	Anti-neoplastic agents	26 th	To perform systematic qualitative analysis of unknown substances
25 th	1 st	Anti-neoplastic agents		
	2 nd	3 rd Sessional		
	3 rd	Revision		

LESSON PLAN

Name of the Faculty	Mrs. Sneha Singh
Discipline	D. Pharmacy
Year	I year
Subject	Social Pharmacy
Lesson Plan Duration	25 weeks (2 Jan 2024 to 30 July, 2024)

Work load (Lecture/practical) per week (in hrs):

Week		Theory	Practical Day	Practical Topic
	Lecture Day	Topic/test		
1 st	1 st	Introduction to social pharmacy	1 st	To study the national immunization schedule for children and adult
	2 nd	Definition, scope and role of pharmacist in public health		
	3 rd	Concept of health, who-definition and various dimensions		
2 nd	1 st	Determinants and health indicators	2 nd	To study the vaccines not included in the national immunization schedules
	2 nd	National health policy		
	3 rd	Public and private health system		
3 rd	1 st	National health mission	3 rd	File check and viva
	2 nd	Introduction to development goals		
	3 rd	Revision		
4 th	1 st	Demography	4 th	To study about reproductive and child health in regards to nutritional aspects and relevant national health programmes
	2 nd	Family planning		
	3 rd	Methods of family planning		
5 th	1 st	Mother and child health, importance of breast feeding	5 th	To study family planning devices
	2 nd	Effects of infant milk substitute and bottle feeding		
	3 rd	Overview of vaccines		
	1 st	Types of immunity	6 th	To perform microscopical

6 th	2 nd	Immunization		observation of different microbes using readymade slides
	3 rd	Effects of environment on health- introduction		
	1 st	Water pollution and Water borne disease	7 th	To study oral health and hygiene
7 th	2 nd	Air pollution		
	3 rd	Noise pollution		
	1 st	Sevage and solid waste disposal	8 th	To study personal hygiene and etiquettes
8 th	2 nd	Occupational illness		
	3 rd	Environmental pollution due to pharmaceuticals		
	1 st	Assignment	9 th	To study about the use and disposal of various types of masks, PPE gear
9 th	2 nd	Revision		
	3 rd	Test		
	1 st	Sessional Examination	10 th	1 st Sessional Examination
10 th	2 nd	Drugs of misuse and abuse psychotropics, narcotics, alcohol and tobacco products.	11 th	To study the various products used in menstrual hygiene
	3 rd	Social impacts of these habits on social health		
	1 st	Revision		
11 th	2 nd	Basics of nutrition	12 th	To study the theory, basics, demonstrations of first aid for emergency diseases
	3 rd	micronutrients		
	1 st	Macronutrients		
12 th	2 nd	Importance of water and fibres in diet	13 th	To study the emergency treatment for all medical emergency cases
	3 rd	Balance diet, malnutrition		
	1 st	Nutrition deficiency diseases, ill effects of junk food		
13 th	2 nd	Calorific and nutritive value of various food, fortification of food	14 th	To learn the role of pharmacist and disaster management
	3 rd	Introduction to food safety		
	1 st	Dietary supplement, nutraceuticals		
14 th	2 nd	Food suppliments and drug food interactions	15 th	To observe the marketed preparations of disinfectants, antiseptics, fumigating agents, antilarval agents and mosquito repellants
		Introduction to microbiology and common microorganisms		
	1 st	Introduction to microbiology and common microorganisms		
15 th	2 nd	Introduction to microbiology and common microorganisms	16 th	To study water purification techniques using water testing kit
	3 rd	Introduction to epidermiology and its applications		

	1 st	Understanding of terms		
16 th	2 nd	Revision	17 th	To stimulate the counseling of children on junk food and balance diet using information education and communication
	3 rd	test		
	1 st	Respiratory infections		
17 th	2 nd	Sessional Examination	18 th	2 nd Sessional Examination
	3 rd	Respiratory infections	19 th	To prepare charts on nutrition and its sources
	1 st	Respiratory infections		
18 th	2 nd	Respiratory infections	20 th	To prepare the calculatory chart of caloric needs of different age groups
	3 rd	Intestinal infection		
	1 st	Intestinal infection		
19 th	2 nd	Intestinal infection	21 st	To prepare chart of glycemic index of foods
	3 rd	Intestinal infection		
	1 st	Arthropod borne infections		
20 th	2 nd	Arthropod borne infections	22 nd	To identify various tobacco products through charts and pictures
	3 rd	Arthropod borne infections		
	1 st	Arthropod borne infections		
21 st	2 nd	Surface infections	23 rd	To study about tobacco cessation and counseling
	3 rd	Surface infections		
	1 st	STDs		
22 nd	2 nd	STDs	24 th	Viva-voice
	3 rd	STDs		
	1 st	Introduction to health systems		
23 rd	2 nd	Introduction to health systems	25 th	File check
	3 rd	National health programmes		
	1 st	National health programmes		
24 th	2 nd	Pharmacoeconomics-introduction	26 th	Viva Voice
	3 rd	Basic terms and importance		
	1 st	Revision		
25 th	2 nd	3 rd Sessional		
	3 rd	Revision		

LESSON PLAN

Name of the Faculty	Mr. Ketan Jeet
Discipline	D. Pharmacy
Year	Ist year
Subject	Pharmacognosy
Lesson Plan Duration	25 weeks (2 Jan 2024 to 30 July, 2024)

Work load (Lecture/practical) per week (in hrs):

Week		Theory	Practical	Practical
	Lecture Day	Topic/test	Day	Topic
1st	1st	Definitions, history and scope	1st	To perform morphological identification of ispaghula, senna.
	2nd	Definitions, History and scope		
	3rd	Test		
2nd	1st	Classification of drugs	2nd	To perform morphological identification of corriander, fennel
	2nd	Alphabetical and taxonimal		
	3rd	Morphological and pharmacological		
3rd	1st	Chemical and chemotaxonomical	3rd	File check and viva
	2nd	Quality control of crude drugs- introduction		
	3rd	Adulteration of crude drugs- introduction		
4th	1st	Methods of adulteration	4th	To perform morphological identification of cardamom, ginger
	2nd	Evaluation of crude drugs		
	3rd	Evaluation of crude drugs		
5th	1st	Alkaloids	5th	Viva-voice
	2nd	Terpenoids		
	3rd	Glycosides		
6th	1st	Volatile oil	6th	To perform morphological identification of nutmeg, blackpepper
	2nd	Tannins		
	3rd	Resins		
7th	1st	Revision	7th	To perform morphological identification of clove, rauwolfia.
	2nd	Test		
	3rd	Laxatives		
8th	1st	Cardiotonic	8th	Viva voice
	2nd	Carminative and GI regulators		
	3rd	Carminative and GI regulators		
9th	1st	Astringents	9th	To perform morphological identification of gokhru, punarnava.
	2nd	Drugs acting on nervous system		
	3rd	Revision		
10th	1st	Sessional Examination	10th	1 st Sessional Examination
	2nd	Drugs acting on nervous system	11th	To perform morphological identification of
	3rd	Antihypertensive		

	1 st	Antitussive		cinchona, agar
11 th	2 nd	Antirheumatics	12 th	To perform morphological identification of cinchona, agar
	3 rd	Antitumour		
	1 st	Anti-diabetics		
12 th	2 nd	Diuretics	13 th	To perform anatomical studies (transverse section) of ajwain, datura, cinnamon
	3 rd	Antiseptics and disinfectants		
	1 st	Revision		
13 th	2 nd	Test	14 th	To perform anatomical studies (transverse section) of ajwain, datura, cinnamon
	3 rd	Anti-malarials		
	1 st	Oxytocic		
14 th	2 nd	Vitamins	15 th	Viva-voce
		Enzymes		
	1 st	Pharmaceutical aids		
15 th	2 nd	Pharmaceutical aids	16 th	To perform anatomical studies (transverse section) of cinchona, coriander, ashwagandha
	3 rd	Pharmaceutical aids		
	1 st	Miscellaneous		
16 th	2 nd	Miscellaneous	17 th	To perform anatomical studies (transverse section) of cinchona, coriander, ashwagandha
	3 rd	Revision		
	1 st	Test		
17 th	2 nd	Sessional Examination	18 th	2 nd Sessional Examination
	3 rd	Surgical dressings-cotton, silk	19 th	To perform anatomical studies (transverse section) of liquorice, clove
	1 st	Wool and regenerated fibres		
18 th	2 nd	Surgical catgut and ligatures	20 th	To perform anatomical studies (transverse section) of liquorice, clove
	3 rd	Traditional system of medicines-introduction		
	1 st	Ayurveda, siddha		
19 th	2 nd	Unani and homeopathy	21 st	To perform anatomical studies (transverse section) of curcuma, nux-vomica, vasaka
	3 rd	Methods of preparation of arista, ashwa and gutika		
	1 st	Taila, churna, lehya and bhasma		
20 th	2 nd	Role of medicinal plants in national economy and their export potential	22 nd	To perform anatomical studies (transverse section) of curcuma, nux-vomica, vasaka
	3 rd	Role of aromatic plants in national economy and their export potential		
	1 st	Introduction and therapeutic application – neutraceuticals,		

		antioxidants		
21 st	2 nd	Probiotic, prebiotics and dietary fibres		
	3 rd	Omega-3 fatty acids, spirulina	23 rd	To perform physical and chemical test for evaluation for asafetida, castor oil
	1 st	Carotenoids, soya and garlic		
22 nd	2 nd	Revision		
	3 rd	Introduction to herbal formulations	24 th	Viva-voice
	1 st	Introduction to herbal formulations		
23 rd	2 nd	Introduction to herbal formulations		
	3 rd	Herbal cosmetics- introduction	25 th	To perform physical and chemical test for evaluation for agar, guar gum
	1 st	Alovera gel, almond oil		
24 th	2 nd	Lavender oil, olive oil		
	3 rd	Rosemary oil, sandalwood oil	26 th	Viva Voice
	1 st	Phytochemical investigation of drugs		
25 th	2 nd	Phytochemical investigation of drugs		
	3 rd	3 rd Sessional		

LESSON PLAN

Name of the Faculty	Mrs. Jyoti Yadav
Discipline	D. Pharmacy
Year	Ist year
Subject	HAP
Lesson Plan Duration	25 weeks (2 Jan 2024 to 30 July, 2024)

Work load (Lecture/practical) per week (in hrs):

Week		Theory	Practical	Practical
	Lecture Day	Topic/test	Practical Day	Topic
1st	1st	Scope of anatomy	1st	Study of microscope
	2nd	Definition of various terms		
	3rd	Structure of cell		
2nd	1st	Function and its composition	2nd	To perform general techniques for blood collection
	2nd	Brief introduction mitochondria and microsomes		
	3rd	Introduction to tissue		
3rd	1st	Classification of tissue	3rd	To perform microscopic examination of epithelial tissues, cardiac muscles, smooth muscles of pre prepared slides
	2nd	Epithelial tissue		
	3rd	Muscular tissue		
4th	1st	Muscular tissue	4th	To perform microscopic examination of epithelial tissues, cardiac muscles, smooth muscles of pre prepared slides
	2nd	Connective tissue		
	3rd	Connective tissue		
5th	1st	Nervous tissue	5th	Viva-voice
	2nd	Nervous tissue		
	3rd	Structure of skeleton system		
6th	1st	Structure of skeleton system	6th	To perform microscopic examination of skeletal muscles, connective tissues and nervous tissues of pre prepared slides
	2nd	Function of skeleton system		
	3rd	Function of skeleton system		
7th	1st	Introduction to joints	7th	Viva-voice
	2nd	Function of joints		
	3rd	Introduction to joints		
8th	1st	Function of joints	8th	To study the human skeletal
	2nd	Joint disorder		
	3rd	Joint disorder		
9th	1st	Introduction to blood	9th	Viva-voice
	2nd	Function of blood		
	3rd	Revision		
10th	1st	Sessional Examination	10th	1st Sessional Examination
	2nd	Blood coagulation	11th	To determine blood

	3 rd	Blood coagulation		group, ESR.
11 th	1 st	Blood coagulation		
	2 nd	Disorder of blood	12 th	Viva-voice
	3 rd	Name and function of lymphatic system		
12 th	1 st	Name and function of lymphatic system		
	2 nd	Structure and function of heart	13 th	To determine haemoglobin content of blood.
	3 rd	Structure and function of heart		
13 th	1 st	Introduction to blood Pressure		
	2 nd	Various parts of respiratory System	14 th	To determine bleeding time clotting time
	3 rd	Function of respiratory System		
14 th	1 st	Physiology of respiration		
	2 nd	Various parts of urinary System	15 th	Viva-voce
		Structure and function of urinary system		
15 th	1 st	Introduction to edema		
	2 nd	Structure of skeletal muscle	16 th	To determine WBC count of blood
	3 rd	Name of attachments and their functions		
16 th	1 st	Name of attachments and their functions		
	2 nd	Name and position of various muscles	17 th	To determine RBC count of blood
	3 rd	physiology of various neuromuscular junctions		
17 th	1 st	physiology of various neuromuscular junctions		
	2 nd	Sessional Examination	18 th	2 nd Sessional Examination
	3 rd	CNS	19 th	To determine and evaluate differential count of blood
18 th	1 st	CNS		
	2 nd	Brain and its parts	20 th	To record the pressure of blood in various postures
	3 rd	Function and reflex action		
19 th	1 st	ANS		
	2 nd	Function and reflex action	21 st	To record body temperature, pulse rate, heart rate and respiratory rate
	3 rd	ANS		
20 th	1 st	Introduction to tongue		
	2 nd	Introduction to tongue		
	3 rd	Smell,ear	22 nd	To record pulse oxygen (before and after exertion)
21 st	1 st	Smell,ear		
	2 nd	Eye and skin physiology of Pain		
	3 rd	Introduction to digestive System	23 rd	To record force of expelled air using peak flow meter
22 nd	1 st	Function of digestive system		
	2 nd	Structure and function of Liver		
	3 rd	Structure and function of Liver	24 th	To measure the height, weight and BMI of the

23 rd	1 st	Physiology of digestion		body
	2 nd	Endocrine glands		
	3 rd	Endocrine glands	25 th	To study the various system and organs using chart, models and specimens
24 th	1 st	Location of Endocrine crine gland		
	2 nd	Their functions		
	3 rd	Reproductive system	26 th	Viva-voice
25 th	1 st	Reproductive system		
	2 nd	Reproductive system		
	3 rd	3 rd Sessional		

LESSON PLAN DIPLOMA IN PHARMACY 2nd YEAR

Performa : Jhankar College of Pharmacy				
Lesson Plan				
Name of the faculty		Sneha Singh		
Discipline		Pharmacy		
Semester		2nd Year		
Subject		Pharmacotherapeutics		
Lesson plan Duration		25 weeks (4 sept. 2023 to 30 June, 2024)		
Work Load/week(In hour)		Lecture- 03; Practical- 03		
Week	Theory		Practical	
	Lecture Day	Topic	Practical	Topic
1st	1st	Pharmacotherapeutics – Introduction, scope, and objectives	1st	To study the Preparation and discussion of SOAP on Hypertension
	2nd	Rational use of Medicines	2nd	----do----
	3rd	Evidence Based Medicine	3rd	----do----
2nd	1st	Essential Medicines List	1st	To study the Preparation and discussion of SOAP on Angina Pectoris.
	2nd	Standard Treatment Guidelines (STGs)	2nd	----do----
	3rd	Revision	3rd	----do----
3rd	1st	Cardiovascular System – Hypertension- Definition, Etiopathogenesis	1st	To study the Preparation and discussion of SOAP on Myocardial infraction
	2nd	Hypertension- Clinical manifestations, Management of the Diseases	2nd	----do----
	3rd	Angina and Myocardial infarction- Definition, Etiopathogenesis	3rd	----do----
4th	1st	Angina and Myocardial infarction- Clinical manifestations, Management of the Diseases	1st	Viva voca
	2nd	Hyperlipidaemia- Definition, Etiopathogenesis	2nd	----do----
	3rd	Hyperlipidaemia- Clinical manifestations, Management of the Diseases	3rd	----do----
5th	1st	Congestive Heart Failure- Definition, Etiopathogenesis	1st	To study the Preparation and discussion of SOAP on Hyperlipidemia
	2nd	Congestive Heart Failure- Clinical manifestations, Management of the Diseases	2nd	----do----

	3 rd	Revision	3 rd	----do----
6 th	1 st	Respiratory System- Asthma- Definition, Etiopathogenesis	1 st	To study the Preparation and discussion of SOAP on Rheumatoid Arthritis
	2 nd	Asthma- Clinical manifestations, Management of the Diseases	2 nd	----do----
	3 rd	COPD- Definition, Etiopathogenesis	3 rd	----do----
7 th	1 st	COPD- Clinical manifestations, Management of the diseases	1 st	To study the Preparation and discussion of SOAP on Asthma
	2 nd	Endocrine System Diabetes- Definition, Etiopathogenesis	2 nd	----do----
	3 rd	Diabetes- Clinical manifestations, Management of the Diseases	3 rd	----do----
8 th	1 st	Hypothyroidism- Definition, Etiopathogenesis, Clinical manifestations, Management of the Diseases	1 st	Viva Voca
	2 nd	Hyperthyroidism- Definition, Etiopathogenesis, Clinical manifestations, Management of the Diseases	2 nd	----do----
	3 rd	Revision	3 rd	----do----
9 th	1 st	Central Nervous System- Epilepsy- Definition, Etiopathogenesis	1 st	To study the Preparation and discussion of SOAP on COPD
	2 nd	Epilepsy-, Clinical manifestations, Management of the Diseases	2 nd	----do----
	3 rd	Parkinson's disease- Definition, Etiopathogenesis	3 rd	----do----
10 th	1 st	Parkinson's disease-, Clinical manifestations, Management of the Diseases	1 st	To study the Preparation and discussion of SOAP on Diabetes
	2 nd	Alzheimer's disease- Definition, Etiopathogenesis, Clinical manifestations, Management of the Diseases	2 nd	----do----
	3 rd	Stroke- Definition, Etiopathogenesis, Clinical manifestations, Management of the Diseases	3 rd	----do----
11 th	1 st	Migraine- Definition, Etiopathogenesis, Clinical manifestations, Management of the Diseases	1 st	To study the Preparation and discussion of SOAP on Epilepsy
	2 nd	Revision	2 nd	----do----
	3 rd	Gastro oesophageal reflux	3 rd	----do----

		disease- Definition, Etiopathogenesis		
12 th	1 st	Gastro oesophageal reflux disease- Clinical manifestations, Management of the Diseases	1 st	To study the Preparation and discussion of SOAP on Stroke
	2 nd	Peptic Ulcer Disease- Definition, Etiopathogenesis	2 nd	----do----
	3 rd	Peptic Ulcer Disease- Clinical manifestations, Management of the Diseases	3 rd	----do----
13 th	1 st	Alcoholic liver disease- Definition, Etiopathogenesis	1 st	To study the Preparation and discussion of SOAP on Depression
	2 nd	Alcoholic liver disease- Clinical manifestations, Management of the Diseases	3 rd	----do----
	3 rd	Inflammatory Bowel Diseases- Definition, Etiopathogenesis		----do----
14 th	1 st	Inflammatory Bowel Diseases- Clinical manifestations, Management of the Diseases	1 st	To study the Preparation and discussion of SOAP on Tuberculosis
	2 nd	Revision	2 nd	----do----
	3 rd	Iron deficiency anaemia- Etiopathogenesis	3 rd	----do----
15 th	1 st	Iron deficiency anaemia- Clinical manifestations, Management	1 st	To study the Preparation and discussion of SOAP on Anemia
	2 nd	Iron deficiency anaemia- Etiopathogenesis	2 nd	----do----
	3 rd	Iron deficiency anaemia- Clinical manifestations, Management	3 rd	----do----
16 th	1 st	Tuberculosis	1 st	Viva voce
	2 nd	Pneumonia	2 nd	----do----
	3 rd	Urinary tract infections	3 rd	----do----
17 th	1 st	Hepatitis	1 st	To study the Preparation and discussion of SOAP on Conjunctivitis viral infection
	2 nd	Gonorrhoea and Syphilis	2 nd	----do----
	3 rd	Malaria	3 rd	----do----
18 th	1 st	Malaria	1 st	To study the Preparation and discussion of SOAP on Psoriasis
	2 nd	HIV and Opportunistic infections	2 nd	----do----
	3 rd	Viral Infections (SARS, CoV2)	3 rd	----do----

19 th	1 st	Revision	1 st	Viva voce
	2 nd	Rheumatoid arthritis	2 nd	----do----
	3 rd	Osteoarthritis	3 rd	----do----
20 th	1 st	Osteoarthritis- Definition, Etiopathogenesis, Clinical manifestations, Management	1 st	To perform the study of medication condition, life style modification, monitoring parameters and maintaining documentation of patient counselling on Rheumatoid Arthritis
	2 nd	Psoriasis- Definition, Etiopathogenesis, Clinical manifestations, Management	2 nd	----do----
	3 rd	Scabies- Definition, Etiopathogenesis, Clinical manifestations, Management	3 rd	----do----
21 st	1 st	Eczema- Definition, Etiopathogenesis, Clinical manifestations, Management	1 st	To perform the study of medication condition, life style modification, monitoring parameters and maintaining documentation of patient counselling on Hypertension
	2 nd	Psychiatric Disorders- Depression, Definition, Etiopathogenesis, Clinical manifestations, Management	2 nd	----do----
	3 rd	Anxiety- Definition, Etiopathogenesis, Clinical manifestations, Management	3 rd	----do----
22 nd	1 st	Psychosis- Definition, Etiopathogenesis, Clinical manifestations, Management	1 st	To perform the study of medication condition, life style modification, monitoring parameters and maintaining documentation of patient counselling on Asthma
	2 nd	Psychosis- Definition, Etiopathogenesis, Clinical manifestations, Management	2 nd	----do----
	3 rd	Revision	3 rd	----do----
23 rd	1 st	Conjunctivitis (bacterial and)- Definition, Etiopathogenesis, Clinical manifestations, Management	1 st	To perform the study of medication condition, life style modification, monitoring parameters and maintaining documentation of patient counselling on Stroke
	2 nd	Conjunctivitis (viral)- Definition, Etiopathogenesis, Clinical manifestations, Management	2 nd	----do----
	3 rd	Glaucoma- Definition, Etiopathogenesis, Clinical manifestations, Management	3 rd	----do----

24 th	1 st	Anti-microbial Resistance	1 st	To perform the study of medication condition, life style modification, monitoring parameters and maintaining documentation of patient counselling on Tuberculosis
	2 nd	Anti-microbial Resistance	2 nd	----do----
	3 rd	Polycystic Ovary Syndrome- Definition, Etiopathogenesis, Clinical manifestations, Management	3 rd	----do----
25 th	1 st	Dysmenorrhoe- Definition, Etiopathogenesis, Clinical manifestations, Management a	1 st	To performed the dose calculation for the paediatrics and geriatric patient.
	2 nd	Premenstrual Syndrome- Definition, Etiopathogenesis, Clinical manifestations, Management	2 nd	----do----
	3 rd	Revision	3 rd	----do----

Lesson Plan

Lesson Plan				
Name of the faculty		Pankaj		
Discipline		Pharmacy		
Semester		2nd Year		
Subject		Biochemistry and Clinical Pathology		
Lesson plan Duration		25 weeks (4 sept. 2023 to 30 June, 2024)		
Work Load/week(In hour)		Lecture- 03; Practical- 09 Hrs		
Week	Theory		Practical	
	Lecture Day	Topic	Practical Day	Topic
1 st	1 st	Introduction to biochemistry: Scope of biochemistry in Pharmacy	1 st	1 st
	2 nd	Cell and its biochemical organization.	2 nd	2 nd
	3 rd	Carbohydrates-Definition, classification with examples, chemical Properties	3 rd	3 rd
2 nd	1 st	Monosaccharides - Structure of glucose, fructose, and galactose	1 st	1 st
	2 nd	Disaccharides - structure of maltose, lactose, and Sucrose	2 nd	2 nd
	3 rd	Polysaccharides - chemical nature of starch and	3 rd	3 rd

		Glycogen		
3rd	1st	Qualitative tests and biological role of carbohydrates	1st	1st
	2nd	Proteins-Definition, classification of proteins based on composition and solubility with examples	2nd	2nd
	3rd	Definition, classification of amino acids based on chemical nature and nutritional requirements with examples	3rd	3rd
4th	1st	Structure of proteins (four levels of organization of protein structure)	1st	1st
	2nd	Qualitative tests and biological role of proteins and amino acids	2nd	2nd
	3rd	Diseases related to malnutrition of proteins.	3rd	3rd
5th	1st	Class Test	1st	1st
	2nd	Lipids- Definition, classification with examples	2nd	2nd
	3rd	Structure and properties of triglycerides (oils and fats)	3rd	3rd
6th	1st	Fatty acid classification - Based on chemical and nutritional requirements with Examples	1st	1st
	2nd	Structure and functions of cholesterol in the body	2nd	2nd
	3rd	Lipoproteins - types, composition and functions in the Body	3rd	3rd
7th	1st	Qualitative tests and functions of lipids	1st	1st
	2nd	Nucleic acids-Definition, purine and pyrimidine bases	2nd	2nd
	3rd	Components of nucleosides and nucleotides with examples	3rd	3rd

8 th	1 st	Structure of DNA (Watson and Crick model)	1 st	1 st
	2 nd	RNA and their functions	2 nd	2 nd
	3 rd	Enzymes-Definition, properties and IUB and MB classification	3 rd	3 rd
9 th	1 st	Factors affecting enzyme activity	1 st	1 st
	2 nd	Mechanism of action of enzymes, Enzyme inhibitors	2 nd	2 nd
	3 rd	Therapeutic and pharmaceutical importance of Enzymes	3 rd	3 rd
10 th	1 st	Vitamins-Definition and classification with examples	1 st	1 st
	2 nd	Sources, chemical nature, functions	2 nd	2 nd
	3 rd	Coenzyme form, recommended dietary requirements	3 rd	3 rd
11 th	1 st	Deficiency diseases of fat	1 st	1 st
	2 nd	Water-soluble vitamins	2 nd	2 nd
	3 rd	Metabolism (Study of cycle/pathways without chemical structures)	3 rd	3 rd
12 th	1 st	Metabolism of Carbohydrates: Glycolysis	1 st	1 st
	2 nd	TCA cycle and glycogen metabolism, regulation of blood glucose	2 nd	2 nd
	3 rd	Diseases related to abnormal metabolism of Carbohydrates	3 rd	3 rd
13 th	1 st	Metabolism of lipids: Lipolysis, β -oxidation of Fatty acid	1 st	1 st
	2 nd	Palmitic acid, ketogenesis and ketolysis.	3 rd	3 rd
	3 rd	Diseases related to abnormal metabolism of lipids such as Ketoacidosis, Fatty liver, Hypercholesterolemia		
14 th	1 st	Metabolism of Amino acids Proteins: General reactions of amino acids	1 st	1 st
	2 nd	Its significance– Transamination, deamination, Urea cycle	2 nd	2 nd

	3 rd	Decarboxylation. Diseases related to abnormal metabolism of amino acids	3 rd	3 rd
15 th	1 st	Disorders of ammonia metabolism, phenylketonuria,	1 st	1 st
	2 nd	Alkaptonuria	2 nd	2 nd
	3 rd	Biological oxidation:	3 rd	3 rd
16 th	1 st	Oxidative phosphorylation	1 st	1 st
	2 nd	Revision	2 nd	2 nd
	3 rd	Minerals: Types, Functions, Deficiency diseases	3 rd	3 rd
17 th	1 st	Recommended dietary requirements	1 st	1 st
	2 nd	Water and Electrolytes Distribution, functions of water in the body	2 nd	2 nd
	3 rd	Water turnover and balance	3 rd	3 rd
18 th	1 st	Electrolyte composition of the body fluids	1 st	1 st
	2 nd	Dehydration, causes of dehydration and	2 nd	2 nd
	3 rd	Introduction to Biotechnology	3 rd	3 rd
19 th	1 st	Organ function tests Functions of kidney	1 st	1 st
	2 nd	Routinely performed tests to assess the functions of kidney and their clinical significances	2 nd	2 nd
	3 rd	Functions of liver and routinely performed tests to assess the functions of liver	3 rd	3 rd
20 th	1 st	Their clinical significance	1 st	1 st
	2 nd	Lipid profile tests	2 nd	2 nd
	3 rd	Its clinical significances	3 rd	3 rd
21 st	1 st	Revision	1 st	Determination of constituents of blood/serum (simulated) (Creatine, glucose, cholesterol, Calcium, Urea, SGOT/SGPT)
	2 nd	Oral rehydration therapy	2 nd	----do----
	3 rd	Dietary intake of electrolyte and Electrolyte balance	3 rd	----do----
22 nd	1 st	Dietary intake of electrolyte and Electrolyte balance	1 st	Determination of constituents of blood/serum (simulated) (Creatine, glucose, cholesterol, Calcium, Urea, SGOT/SGPT)
	2 nd	Electron transport chain	2 nd	----do----
	3 rd	Jaundice.	3 rd	----do----

23 rd	1 st	Introduction to Pathology of Blood and Urine	1 st	Determination of constituents of blood/serum (simulated) (Creatine, glucose, cholesterol, Calcium, Urea, SGOT/SGPT)
	2 nd	Lymphocytes	2 nd	----do----
	3 rd	Platelets	3 rd	----do----
24 th	1 st	Their role in health and disease	1 st	Determination of constituents of blood/serum (simulated) (Creatine, glucose, cholesterol, Calcium, Urea, SGOT/SGPT)
	2 nd	Erythrocytes	2 nd	----do----
	3 rd	Abnormal cells and their significance	3 rd	----do----
25 th	1 st	Normal and Abnormal constituents of Urine	1 st	Study the hydrolysis of starch from acid and salivary amylase enzyme
	2 nd	Their Significance	2 nd	----do----
	3 rd	Revision	3 rd	----do----

Performa : Jhankar College of Pharmacy		
Lesson Plan		
Name of the faculty	Shashi	
Discipline	Pharmacy	
Semester	2nd Year	
Subject	Pharmacy Law & Ethics	
Lesson plan Duration	25 weeks (4 sept. 2023 to 30 June, 2024)	
Work Load/week(In hour)	Lecture- 03	
Week	Theory	
	Lecture Day	Topic
1st	1 st	General Principles of Law, History
	2 nd	Various Acts related to Drugs and Pharmacy profession
	3 rd	Pharmacy Act 1948 and Rules: Objectives, Definitions, Pharmacy Council of India
2nd	1 st	Its constitution and functions
	2 nd	Education Regulations
	3 rd	Revision
3rd	1 st	State and Joint state pharmacy councils
	2 nd	Registration of Pharmacists, Offences and Penalties. Pharmacy Practice Regulations 2015
	3 rd	Drugs and Cosmetics Act 1940 and Rules 1945 and New Amendments: Objectives, Definitions
4th	1 st	Legal definitions of schedules to the Act and Rules
	2 nd	Import of drugs ,Classes of drugs and cosmetics

	3 rd	Manufacture of drugs – Prohibition of manufacture and sale of certain drugs
5 th	1 st	Conditions for grant of license
	2 nd	Conditions of license for manufacture of drugs
	3 rd	Revision
6 th	1 st	Manufacture of drugs for test
	2 nd	Examination and analysis, manufacture of new drug
	3 rd	Loan license and repacking license.
7 th	1 st	Study of schedule C and C1
	2 nd	Schedule H, H1
	3 rd	Schedule G, K
8 th	1 st	Schedule P, M
	2 nd	Schedule N, and X.
	3 rd	Revision
9 th	1 st	Sale of Drugs – Wholesale, Retail sale and Restricted license
	2 nd	Records to be kept in a pharmacy
	3 rd	Drugs Prohibited for manufacture and sale in India
10 th	1 st	Administration of the Act and Rules Drugs Technical Advisory Board, Central Drugs Laboratory
	2 nd	Drugs Consultative Committee
	3 rd	Government analysts, licensing authorities
11 th	1 st	Controlling authorities, Drug Inspectors
	2 nd	Narcotic Drugs and Psychotropic Substances Act 1985 and Rules Objectives, Definitions, Authorities and Officers
	3 rd	Prohibition, Control and Regulation, Offences and Penalties.
12 th	1 st	Drugs and Magic Remedies (Objectionable Advertisements) Act 1954 Objectives, Definitions, Prohibition of certain advertisements,
	2 nd	Classes of Exempted advertisements, Offences and Penalties.
	3 rd	Class Test
13 th	1 st	Prevention of Cruelty to Animals Act-1960: Objectives, Definitions, CPCSEA - brief overview, Institutional Animal Ethics Committee, Breeding and Stocking of Animals
	2 nd	Performance of Experiments, Transfer and Acquisition of animals for experiment, Records, Power to suspend or revoke registration, Offences and Penalties.
	3 rd	Poisons Act-1919: Introduction, objective, definition, possession,
14 th	1 st	Possession for sales and sale of any poison, import of poisons
	2 nd	FSSAI (Food Safety and Standards Authority of India) Act and Rules: brief overview and aspects related to manufacture,
	3 rd	Storage, sale, and labelling of Food Supplements
15 th	1 st	National Pharmaceutical Pricing Authority: Drugs Price Control Order (DPCO) - 2013. Objectives, Definitions
	2 nd	Sale prices of bulk drugs, Retail price of formulations,
	3 rd	Revision
16 th	1 st	Retail price and ceiling price of scheduled formulations,
	2 nd	Pharmaceutical Policy 2002
	3 rd	National List of Essential Medicines (NLEM)
17 th	1 st	Code of Pharmaceutical Ethics: Definition, ethical principles
	2 nd	Ethical problem solving, registration
	3 rd	Code of ethics for Pharmacist in relation to his job
18 th	1 st	Trade, medical profession and his profession
	2 nd	Pharmacist's oath
	3 rd	Class Test

19 th	1 st	Medical Termination of Pregnancy Act and Rules basic understanding
	2 nd	MTP salient features, and Amendments
	3 rd	Central Drugs Standards Control Organization (CDSCO) Indian Pharmacopoeia Commission (IPC)
20 th	1 st	Good Regulatory practices (documentation, licenses, Renewals, e governance) in Community Pharmacy, Wholesale business,
	2 nd	Hospital pharmacy, Pharma Manufacturing,
	3 rd	Inspections, import, export of drugs and medical devices
21 st	1 st	Introduction to BCS system of classification, Basic concepts of Clinical Trials
	2 nd	ANDA, NDA, New Drug development,
	3 rd	New Drugs and Clinical Trials Rules, 2019.
22 nd	1 st	Brand v/s Generic, Trade name concept,
	2 nd	Introduction to Patent Law and Intellectual Property Rights, Emergency Use Authorization
	3 rd	Revision
23 rd	1 st	Blood bank – basic requirements and functions
	2 nd	Clinical Establishment Act and Rules – Aspects related to Pharmacy
	3 rd	Biomedical Waste Management Rules 2016 Basic Aspects.
24 th	1 st	Aspects related to pharma manufacture to disposal of pharma / medical waste at homes, pharmacies and hospitals
	2 nd	Bioethics - Basic concepts, history and principles. Brief overview of ICMR's
	3 rd	National Ethical Guidelines for Biomedical and Health Research involving human participants
25 th	1 st	Introduction to the Consumer Protection Act
	2 nd	Introduction to the Disaster Management Act
	3 rd	Medical Devices – Categorization, basic aspects related to manufacture and sale

Lesson Plan

Name of the Faculty	Mrs. Juhi Saxena
Discipline	D. Pharmacy
Year	IInd year
Subject	Hospital and clinical pharmacy
Lesson Plan Duration	25 weeks (4 sept. 2023 to 30 June, 2024)

Work load (Lecture/practical) per week (in hrs):

Week		Theory	Practical	
Week	Theory	Topic/test	Practical Day	Topic
	Lecture Day	Hospitals Definition, Function, Classifications based on various criteria, organization.		Introduction to the HCP
1 st	1 st	Management and Health delivery system in India.		
	2 nd	Hospital Pharmacy: (a) Definition Functions and objectives of Hospital Pharmaceutical services.		
	3 rd	Test		To study the construction and

2 nd	1 st	Location, Layout, Flow chart of material and men.		working of hot air oven
	2 nd	Personnel and facilities requirements including equipments based on individual and basic needs.		
	3 rd	Requirements and abilities required for Hospital pharmacists.		To prepare 100 ml of 5% dextrose injection
3 rd	1 st	Drug Distribution system in Hospitals: (a) Out – patient services. In-patient services – (a) types of services (b) detailed discussion of unit Dose system		
	2 nd	Floor ward stock system, Satellite pharmacy services, Central sterile services, Bed Side Pharmacy.		
	3 rd	Manufacturing:(a) Economical considerations, estimation of demand.		To study the construction and working of autoclave
4 th	1 st	(b) Sterile manufacture-large and small volume parenterals, facilities, requirements, layout production planning, manpower requirements.		
	2 nd	(c)Non-sterile manufacture –Liquid orals, externals-bulk concentrates.		
	3 rd	Test		To design patient and physician information leaflet for the drug salbutamol
5 th	1 st	(d)Procurement of stores and testing of raw materials.		
	2 nd	Nomenclature and uses of surgical instruments and Hospital Equipments and health accessories.		
	3 rd	Revision		To design patient and physician information leaflet for the drug Rifampicin
6 th	1 st	P.T.C (Pharmacy Therapeutic Committee),		
	2 nd	Hospital Formulary System and their organization		
	3 rd	Functioning and composition of hospital formulary.		To design patient and physician information leaflet for the drug Omeprazole

7 th	1 st	Drug Information service		
	2 nd	Drug Information Bulletin		
	3 rd	Revision		Viva Voice
8 th	1 st	Introduction to Clinical Pharmacy Practice – Definition, scope.		
	2 nd	Introduction to Clinical Pharmacy Practice – Definition, scope.		
	3 rd	Modern dispensing aspects		
9 th	1 st	medication history		Sterlization of glasswares and surgical instruments
	2 nd	Revision		
	3 rd	1 st Sessional Examination		
10 th	1 st	Patient counseling		
	2 nd	Advice for the use of common drugs		Testing of water for injection used in the preparation of transfusion fluid
	3 rd	Common daily terminology used in the Practice of Medicine.		
11 th	1 st	Common daily terminology used in the Practice of Medicine.		Testing of dextrose as raw material used in the preparation of transfusion fluid.
	2 nd	Surgical dressing like cotton, gauze, bandages and adhesive tapes		
	3 rd	Pharmacopeial tests of surgical dressings		Testing of mannitol as raw material used in the preparation of transfusion fluid.
12 th	1 st	I.V sets B.G sets, Ryals tubes		
	2 nd	Catheters, Syringes		
	3 rd	Test		Testing of potassium as raw material used in the preparation of transfusion fluid.
13 th	1 st	Common terminologies used		
	2 nd	Diseases manifestations and syndromes of Hepatitis		
	3 rd	Diseases manifestations and syndromes of Hypertension		To carry out hydrolytic test on glass bottles
14 th	1 st	Diseases manifestations and syndromes of Angina		
	2 nd	Diseases manifestations and syndromes of Arrhythmia		

		3rd		
15 th	1 st	Diseases manifestations and syndromes of Tuberculosis		
	2 nd	Diseases manifestations and syndromes of Diabeties		
	3 rd	Peptic ulcer		Viva voice
16 th	1 st	Epilepsy		
	2 nd	Revision		
	3 rd	2 nd Sessional Examination		
17 th	1 st	Diseases manifestations and syndromes of Rheumatoid arthritis		Testing of adsorbent cotton for acidity and alkanity
	2 nd	Treatment strategies for peptic ulcer and diabeties		
	3 rd	Physiological parameters with their significance		
18 th	1 st	Physiological parameters with their significance		An introduction to the aseptic room and construction and working of laminar air flow
	2 nd	Revision		
	3 rd	Introduction to drug interaction		
19 th	1 st	Drug interactions significance		To perform tests for Sterlity testing
	2 nd	Mechanisms involved in drug- drug and drug and food interaction		
	3 rd	Drug –drug interaction with reference to analgesics		
20 th	1 st	Drug –drug interaction		Sterlity testing by turbidetric method
	2 nd	Drug –drug interaction with reference to Cardiovascular		
	3 rd	Revision		
21 st	1 st	Drug –drug interaction		Viva Voice
	2 nd	Vitamins and oral hypoglycemic agents		
	3 rd	Adverse Drug Reactions		
22 nd	1 st	Adverse Drug Reactions and their significance		Viva Voice
	2 nd	Drug induced diseases		
	3 rd	Teratogenecity		
23 rd	1 st	Drugs in Clinical Toxicity – Introduction, general treatment of poisoning,		To prepare culture media for microbial growth

	2 nd	Revision		
	3 rd	systematic antidotes		
24 th	1 st	Treatment of insecticide poisoning, heavy metal poison		To prepare saubords agar media for microbial growth
	2 nd	Narcotic drugs		
	3 rd	Barbiturate, Organophosphours poisons		
25 th	1 st	Drug dependences, Drug abuse, addictive drugs and their treatment, complications		To prepare fluid thiogcollate media for microbial growth
	2 nd	Bio-availability of drugs, including factors		
	3 rd	3 rd Sessional Examination		

Lesson Plan

Name of the Faculty	Mrs. Jyoti Yadav
Discipline	D. Pharmacy
Year	IInd year
Subject	Pharmacology
Lesson Plan Duration	25 weeks (4 sept. 2023 to 30 June, 2024)

Work load (Lecture/practical) per week (in hrs):

Week		Theory	Practical	
	Lecture Day	Topic/test	Practical Day	Topic
1 st	1 st	Introduction to Pharmacology, scope of Pharmacology- introduction, pharmacokinetics & pharmacodynamics & scope of pharmacology.		Introduction to pharmacology & toxicology laboratory.
	2 nd	Routes of administration of drugs, their advantages and disadvantages-		

		Enteral route, Parenteral route		
	3 rd	Routes of administration of drugs, their advantages and disadvantages- Topical & other routes		
2 nd	1 st	Various processes of absorption of drugs and the factors affecting them		Introduction of software
	2 nd	Metabolism, Distribution and Excretion of drugs		
	3 rd	Test		
3 rd	1 st	Drug receptor interaction- Ligand Gated Ion channel, G-Protien coupled receptor		To select the animals for experimental use in pharmacology.
	2 nd	Enzyme linked receptor & Intracellular receptor		
	3 rd	General Anaesthetics, adjunction to anesthesia, intravenous Anaesthetics		
4 th	1 st	Analgesic antipyretics and non-steroidal, anti-inflammatory drugs and Narcotic analgesics		To study the common instrument & equipment and equipments used in experimental pharmacology.
	2 nd	Anti-rheumatic and antigout remedies		
	3 rd	Sedatives and Hypnotics		
5 th	1 st	Psychopharmacological agents		To prepare physiological salt solutions
	2 nd	Anti convulsants, analeptics, Centrally acting muscle relaxants		
	3 rd	Anti- Parkinsonism agents, Local Anesthetics		
6 th	1 st	Cholinergic drug		To study the effect of adrenaline on heart rate & force of contraction on Isolated frog heart by using software.
	2 nd	Revision		
	3 rd	Anti- Cholinergic drugs		
7 th	1 st	Adrenergic drugs		To study the effect of acetylcholine on heart rate & force of contraction on isolated frog heart by using software.
	2 nd	Anti- cholinesterase drugs		

	3 rd	Adrenergic receptor blockers		To study the effect of acetylcholine on isolated rectus abdominus muscle by using software.
8 th	1 st	Neurone blockers and Ganglion blockers		
	2 nd	Neuromuscular blockers		
	3 rd	Drugs used in myasthenia gravis		To study the effect of acetylcholine on ileum of guinea pig by using software.
9 th	1 st	Drugs acting on eye, mydriatics		
	2 nd	1 st Sessional Examination		
	3 rd	Drugs used in glaucoma		
10 th	1 st	Drugs acting on respiratory system- Respiratory stimulant		To study the effect of mydriatics on rabbit cornea by using software.
	2 nd	Bronchodilators, Nasal decongestants		
	3 rd	Expectorants and Antitussive agents		
11 th	1 st	Antacids		To study the effect of acetylcholine on ileum of guinea pig by using software.
	2 nd	Physiological role of histamine and serotonin		
	3 rd	Histamine and Antihistamines		To study the effect of mydriatics on rabbit cornea by using software.
12 th	1 st	Prostaglandins		
	2 nd	Cardio Vascular drugs		
	3 rd	Cardio tonics		To study the effect of miotics on rabbit cornea by using software.
13 th	1 st	Anti-arrhythmic agents		
	2 nd	Antianginal agents		
	3 rd	Antihypertensive agents		To study the effect of digitalis on heart rate & force of contraction on isolated frog heart by using software.
14 th	1 st	Peripheral vasodilators		
	2 nd	Drugs used in atherosclerosis		
		Haematinics		To observe the effect of convulsant & anticonvulsant in mice by using CD.
15 th	1 st	Coagulants and Anti-coagulants		
	2 nd	Haemostatic		To study the effect of chlorpromazine
	3 rd	Blood substitutes		
16 th	1 st	Blood expanders		
	2 nd	2 nd Sessional Examination		
	3 rd	Physiology of renal tract- excretion, urine formation & UTI		To study the various laboratory techniques used in experimental pharmacology.
17 th	1 st	Diuretics		
	2 nd	Antidiuretics		
	3 rd	Hormones – Introduction to		Viva voice

		Pituitary gland hormones, Thyroid & Adrenal gland hormones		
18 th	1 st	Hormone antagonists-hypoglycemic agents		
	2 nd	Sex hormones and oral contraceptive		Viva voice
	3 rd	Corticosteroids		
19 th	1 st	Car-minatives, Digestants & Bitters		
	2 nd	Antacids and drugs used in Peptic Ulcer		To understand the adverse drug reaction and monitor the same
	3 rd	Purgative and Laxatives		
20 th	1 st	Ant-diarrhoeals & Emetics		
	2 nd	Anti-emetics, Anti-spasmodic		To understand the adverse drug reaction and monitor the same
	3 rd	Urinary Anti-septic		
21 st	1 st	Sulphonamides		
	2 nd	Penicillin, Streptomycin		To understand the adverse drug reaction and monitor the same
	3 rd	Tetracyclines and other antibiotics		To visit a nearby hospital
22 nd	1 st	Anti-tubercular agents		
	2 nd	Antifungal agents, antiviral drugs		Viva voice
	3 rd	Test		
23 rd	1 st	Malaria- Introduction, Life cycle of Malaria parasite		
	2 nd	Antimalarials		
	3 rd	Anthelmintic drugs		Viva voice
24 th	1 st	Cancer- introduction & cause of cancer, types of cancer		
	2 nd	Anticancer drugs		
	3 rd	Disinfectants		Viva voice
25 th	1 st	Anti-septic		
	2 nd	3 rd Sessional Examination		
	3 rd	Revision		

Performa : Jhankar College of Pharmacy**Lesson Plan**

Name of the faculty	Umesh Yadav			
Discipline	Pharmacy			
Semester	2nd Year			
Subject	Community Pharmacy and Management			
Lesson plan Duration	25 weeks (4 sept. 2023 to 30 June, 2024)			
Work Load/week(In hour)	Lecture- 03; Practical- 03			
Week	Theory		Practical	
	Lecture Day	Topic	Practical Day	Topic
1st	1st	Community Pharmacy Practice – Definition, history and development of community pharmacy		To perform the study of prescription, handling with professional standards.
	2nd	International and Indian Scenarios		
	3rd	Professional responsibilities of community pharmacists		
2nd	1st	Introduction to the concept of Good Pharmacy Practice		To perform study on the drug interaction.

	2 nd	Good Pharmacy Practice and SOPs.		
	3 rd	Good Pharmacy Practice and SOPs.		
3 rd	1 st	Prescription and prescription handling Definition, parts of prescriptions brief instructions on medication usage		To perform the study on dispensing and auxiliary Labels
	2 nd	Legality of prescriptions, prescription handling		
	3 rd	Labelling of dispensed medications (Main label, ancillary label, pictograms)		
4 th	1 st	Labelling of dispensed medications (Main label, ancillary label, pictograms)		To perform the screening and recording of blood pressure
	2 nd	Dispensing process, Good Dispensing Practices		
	3 rd	dispensing errors and strategies to minimize them		
5 th	1 st	Class Test		Viva voce
	2 nd	Communication skills Definition, types of communication skills		
	3 rd	Interactions with professionals and patients		
6 th	1 st	Verbal communication skills (one-to-one, over the telephone)		To perform the determination of capillary blood glucose level
	2 nd	Written communication skills And Body language		
	3 rd	Patient interview techniques		Determination of tidal volume vital capacity by using spirometer
7 th	1 st	Patient counseling- Definition and benefits of patient counseling		
	2 nd	Stages of patient counselling - Introduction, counselling Content		
	3 rd	Counselling process, and closing the counselling Session		
8 th	1 st	Barriers to effective counseling - Types and strategies to overcome the barriers		To measure body ,mass index with the help of BMI formula to identify the actual body weight status and desirable body status
	2 nd	Hypertension, Asthma		
	3 rd	Diabetes, , Tuberculosis		
9 th	1 st	Chronic obstructive pulmonary disease		Viva voce.
	2 nd	AIDS		
	3 rd	Patient Package Inserts -		

		Definition, importance and Benefits		
10 th	1 st	Scenarios of PPI use in India and other countries		To perform the patient counselling on asthma
	2 nd	Patient Information leaflets - Definition and uses		
	3 rd	Class test		
11 th	1 st	Medication Adherence Definition, factors influencing non-adherence		To perform the patient counselling on Hypertension
	2 nd	Strategies to overcome non-adherence		
	3 rd	Health Screening Services in Community Pharmacy Introduction, scope		
12 th	1 st	importance of various health screening services		To perform the patient counselling on Diabetes mellitus
	2 nd	Routine monitoring of patients		
	3 rd	Early detection, and referral of undiagnosed cases		
13 th	1 st	Early detection, and referral of undiagnosed cases		Viva voce
	2 nd	Over The Counter (OTC) Medications-Definition, need and role of Pharmacists in OTC medication Dispensing		
	3 rd	OTC medications in India,		
14 th	1 st	Counseling for OTC products		To perform the patient counselling on rheumatoid arthritis
	2 nd	Self-medication and role of pharmacists in promoting the safe practices during self-medication		
	3 rd	Self-medication and role of pharmacists in promoting the safe practices during self-medication		
15 th	1 st	Responding to symptoms, minor ailments,		Viva voce
	2 nd	advice for self-care in conditions such as - Pain management, Cough,		
	3 rd	Cold, Diarrhea, Constipation,		
16 th	1 st	Vomiting, Fever, Sore throat,		To perform the patient counselling on hyperlipidemia
	2 nd	Skin disorders		
	3 rd	Skin disorders		
17 th	1 st	Class test		To perform the patient counselling on headache to a patient
	2 nd	Oral health (mouth ulcers)		
	3 rd	Oral health-dental pain, gum		

		swelling		
18 th	1 st	Community Pharmacy Management- Introduction, Community Pharmacy, responsibility of pharmacy manager		To perform the patient counselling on gastrointestinal disturbances
	2 nd	Legal requirements to set up a community pharmacy		
	3 rd	Legal requirements to set up a community pharmacy		
19 th	1 st	Site selection requirements		To perform the patient counselling on worm infection
	2 nd	Pharmacy designs and interiors		
	3 rd	Pharmacy designs and interiors		
20 th	1 st	Pharmacy designs and interiors		Viva voce
	2 nd	Vendor selection		
	3 rd	Ordering in Pharmacy		
21 st	1 st	Ordering in Pharmacy		To study and perform the counselling on pyrexia
	2 nd	Procurement,		
	3 rd	Inventory control methods,		
22 nd	1 st	Inventory control methods,		To perform the study on counselling on Upper respiratory tract infection
	2 nd	Inventory management		
	3 rd	Financial planning and management Accountancy in community pharmacy – Day book,		
23 rd	1 st	Cash book		Viva voce
	2 nd	Introduction to pharmacy operation softwares usefulness and availability		
	3 rd	Customer Relation Management (CRM)		
24 th	1 st	Audits in Pharmacies		To perform the study on counselling on skin infections
	2 nd	SOP of Pharmacy Management		
	3 rd	Introduction to Digital Health		
25 th	1 st	Introduction to mHealth		To perform the study on counselling on Teeth disorder
	2 nd	Online Pharmacies		
	3 rd	Online Pharmacies		