

II Pharm D Academic Plan (2022-23)

NAME OF THE SUBJECT	Pathophysiology (Theory)
NAME OF THE FACULTY	Dr. M. Deepalakshmi M.Pharm., Ph.D
DESIGNATION	Asst. Professor, Department of Pharmacy Practice
CONTACT DETAILS	deepapharmacy@jssuni.edu.in Mobile: 9994974663

Sessional	Number of Hours of Didactic Lecture	No of Hours of other Pedagogy	Total Number of Lecture Hours	Tutorial Classes
I	25	02	27	09
II	25	07	32	12
III	25	02	27	06
Total Number of Hours	75	11	86	27

I SESSIONAL: 25 Lectures + 02 Activities

Lecture No.	Date	Lecture Details	Hours
	29.06.2022	Orientation to the subject	
Unit-1: Basic principles of cell injury and Adaptation			
1.	30.06.2022	Introduction, Definitions, Homeostasis, Components and Types of Feedback Systems	05
2.	01.07.2022	Regulation of Metabolism, Regulation of Cell Volume, Etiology of Cell Injury, Pathogenesis of Cell Injury	
Tutorial 1	02.07.2022	-	
3.	06.07.2022	Morphology of cell injury – Adaptive changes	
4.	07.07.2022	Cell swelling, Intra cellular accumulation, Calcification, Enzyme leakage, Cell Death (Necrosis and Apoptosis)	
5.	08.07.2022	Abnormalities in Lipoproteinaemia, Glycogen Infiltration and Glycogen Storage Diseases	
Tutorial 2	09.07.2022	-	
Unit-8: Pathophysiology of common diseases			
1.	13.07.2022	Introduction, Definition, Classification, Physiological Maintenance of Blood Pressure	10

2.	14.07.2022	Pathophysiology of Hypertension	
3.	15.07.2022	Introduction, Etiology of Atherosclerosis	
Tutorial 3	16.07.2022	-	
4.	20.07.2022	Introduction, Definition, Classification and Pathophysiology of Angina	
5.	21.07.2022	Introduction, Types of Acute Myocardial Infarction, Morphology of Acute Myocardial Infarction	
6.	22.07.2022	Pathogenesis of Myocardial Infarction	
Tutorial 4	23.07.2022	Unit Test	
7.	27.07.2022	Introduction, Heart Rate, Stroke Volume (Contractility, Pre – Load, After – Load), Etiology and Classification of Heart Failure	
8.	28.07.2022	Pathophysiology of CCF (Compensatory Mechanisms	
9.	29.07.2022	Pathophysiology of CCF (Compensatory Mechanisms	
Tutorial 5	30.07.2022	-	
10.	03.08.2022	Introduction, Classification of Diabetes Mellitus, Pathophysiology of Type 1 Diabetes Mellitus	
Activity 1	04.08.2022	Kahoot	
Unit-2: Inflammation			
1.	05.08.2022	Introduction, Clinical Signs of Inflammation, Different Types of Inflammation, Types of Chronic Inflammation	
Tutorial 6	06.08.2022	-	
2.	10.08.2022	Chemical Mediators in inflammation	
3.	11.08.2022	Pathogenesis of Chronic Inflammation	
4.	12.08.2022	Repairs of Wounds in the Skin	
Tutorial 7	13.08.2022	-	
5.	17.08.2022	Factors Influencing Healing of Wounds	
Activity 2	18.08.2022	Kahoot	
Tutorial 8	20.08.2022	Unit Test	
Unit-8: Pathophysiology of common diseases			
1.	24.08.2022	Pathophysiology of ischemic stroke	05
2.	25.08.2022	Pathophysiology of Hemorrhagic stroke	
3.	26.08.2022	Pathophysiology of depression & Mania	
Tutorial 9	27.08.2022	-	

4.	01.09.2022	Pathophysiology of Parkinsonism	
5.	02.09.2022	Pathophysiology of schizophrenia	

II SESSIONAL: 25 Lectures + 07 Activities

Lecture No.	Date	Lecture Details	Hours
Tutorial 1	03.09.2022	-	
Tutorial 2	10.09.2022	-	
Unit-8: Pathophysiology of common Diseases			
1.	14.09.2022	Introduction, Aggravating Causes of & Defense Mechanism against Peptic Ulcer	15
2.	15.09.2022	Pathophysiology of Peptic Ulcer	
3.	16.09.2022	Introduction, Pathophysiology of Inflammatory Bowel Disease	
Tutorial 3	17.09.2022	-	
4.	21.09.2022	Introduction to Liver Diseases	
5.	22.09.2022	Pathophysiology of Cirrhosis	
6.	23.09.2022	Pathophysiology of Alcoholic Liver Disease	
Tutorial 4	24.09.2022	Unit Test	
7.	28.09.2022	Introduction and classification of Acute Renal Failure	
8.	29.09.2022	Pathophysiology of Acute Renal Failure	
9.	30.09.2022	Pathophysiology of Chronic Renal Failure	
Tutorial 5	01.10.2022	-	
10.	06.10.2022	Introduction, Intrinsic Asthma, Exercise Induced Asthma	
11.	07.10.2022	Pathophysiology of Asthma	
Tutorial 6	08.10.2022	-	
12.	12.10.2022	Pathophysiology of Asthma	
13.	13.10.2022	Introduction of COPD	
14.	14.10.2022	Pathophysiology of Chronic Obstructive Airway Diseases	
Tutorial 7	15.10.2022	-	
15.	19.10.2022	Pathophysiology of Chronic Obstructive Airway Diseases	
Activity 1	20.10.2022	Kahoot	
Unit-7: Cancer			
1.	21.10.2022	Introduction, Differences between Benign and Malignant Tumors Histological Diagnosis of	05

		Malignancy	
Tutorial 8	22.10.2022	Unit Test	
2.	26.10.2022	Invasions and Metastasis, Patterns of Spread, Disturbances of Growth of Cells	
3.	27.10.2022	Classification of Tumors, General Biology of Tumors	
4.	28.10.2022	Spread of Malignant Tumors	
Tutorial 9	29.10.2022	-	
5.	02.11.2022	Etiology and Pathogenesis of Cancer	
Activity 2	03.11.2022	Kahoot	
Activity 3	04.11.2022	Kahoot	
Tutorial 10	05.11.2022	-	
Unit-5: Shock			03
1.	09.11.2022	Types of shock, ,	
2.	10.11.2022	Mechanisms of Shock	
3.	11.11.2022	Stages and management	
Tutorial 11	12.11.2022	-	02
Unit-6: Biological effects of radiation			
1.	16.11.2022	Introduction, Types of Radiations	
2.	17.11.2022	Biological Effects of Radiation	
Activity 4	18.11.2022	Kahoot	
Activity 5	23.11.2022	Group Discussion	
Activity 6	24.11.2022	Group Discussion	
Activity 7	25.11.2022	Group Discussion	
Tutorial 12	26.11.2022	Unit Test	

III SESSIONAL: 25 Lectures + 02 Activities

Lecture No.	Date	Lecture Details	Hours
Unit-7: Environmental and nutritional diseases			04
1.	14.12.2022	Protein Calorie Malnutrition, Vitamins	
2.	15.12.2022	Obesity, Pathogenesis of Starvation	
3.	16.12.2022	Air Pollution and Smoking – SO ₂ , NO	
Tutorial 1	17.12.2022	Unit Test	

4.	21.12.2022	Air Pollution and Smoking – NO ₂ , CO	
Unit-3: Diseases of immunity			
1.	22.12.2022	Introduction to T and B Cells	10
2.	23.12.2022	MHC Proteins or Transplantation Antigens, Immune tolerance	
3.	19.01.2023	Allergy due to Food, Chemicals and Drugs	
4.	20.01.2023	Hypersensitivity, Autoimmunity, Criteria for Autoimmunity	
Tutorial 2	21.01.2023	-	
5.	25.01.2023	Classifications of Autoimmune Diseases in Man	
6.	27.01.2023	Mechanism of Autoimmunity, Transplantation and Immunologic Tolerance	
Tutorial 3	28.01.2023	Unit Test	
7.	01.02.2023	Allograft Rejections, Transplantation Antigens	
8.	02.02.2023	Mechanism of Rejection of Allograft	
9.	03.02.2023	Acquired Immune Deficiency Syndrome (AIDS)	
10.	08.02.2023	Amyloidosis	
Activity 1	09.02.2023	Group Discussion	
Unit-9: Infectious Diseases			
1	10.02.2023	Sexually Transmitted Diseases – HIV	11
Tutorial 4	11.02.2023	-	
2.	15.02.2023	Sexually Transmitted Diseases – Syphilis and Gonorrhoea	
3.	16.02.2023	Urinary Tract Infections	
4.	17.02.2023	Pneumonia	
Tutorial 5	18.02.2023	-	
5.	22.02.2023	Typhoid	
Activity 2	23.02.2023	Group Discussion	
6.	01.03.2023	Tuberculosis	
7.	02.03.2023	Leprosy	
8.	03.03.2023	Malaria	
Tutorial 6	04.03.2023	Unit Test	
9.	08.03.2023	Dysentery (Bacterial and Amoebic)	
10.	09.03.2023	Dysentery (Bacterial and Amoebic)	
11.	10.03.2023	Hepatitis- infective Hepatitis	

Text books

1. Pathophysiology- Concepts of Altered Health States- Carol Mattson Porth
2. Pathologic basis of disease by- Cotran, Kumar, Robbins
3. Text book of Pathology- Harsh Mohan
4. Text book of Pathology- Y.M. Bhide

Reference books (Theory)

1. Clinical Pharmacy and Therapeutics; Fourth edition; Walker & Whittle Sea, Churchill Livingstone publication
2. Principles of Pathophysiology- Lippincott Publishe

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LECTURE PLAN – Theory

SUBJECT : PHARMACEUTICAL MICROBIOLOGY (THEORY)
FACULTY : Mr. Alin Bose J
DESIGNATION : Lecturer, Department of Pharmaceutical Biotechnology
CONTACT DETAILS : E-Mail: alinbose@jssuni.edu.in Mobile: 8197088591

LECTURE PLAN

Sessional	Number of Hours of Didactic Lecture	No. of Hours of Other Activities	Total Number of Lecture Hours	Tutorial Classes
I	26	04	30	09
II	24	03	27	11
III	25	02	27	10
Total No. of Hours	75	09	84	30

I SESSIONAL: 26 Lectures + 04 Activities

Lecture No.	Date	Lecture Details
Unit-1: Introduction to the Science of Microbiology (03 Hours)		
1.	27.06.2022	Interaction and Introductory class
2.	28.06.2022	Orientation on Microbiology World

3.	04.07.2022	Introduction and Scope of Microbiology
Unit-2: Morphology & Physiology of Microorganisms (07 Hours)		
1.	05.07.2022	Prokaryotes and Eukaryotes - Morphology and fine structure of Bacteria
2.	09.07.2022	Cell Wall – Gram Positive & Gram Negative
3.	11.07.2022	Classification & Morphology of Fungi
4.	12.07.2022	Fine Structure of Fungi
5.	16.07.2022	Classification & Morphology of Virus
6.	18.07.2022	Fine Structure of Virus
7.	23.07.2022	Rickettsia & Spirochetes
Unit-3: Growth & Nutrition (08 Hours)		
1.	25.07.2022	Nutritional Requirements for Growth of Microorganism
2.	26.07.2022	Growth of bacteria
3.	30.07.2022	Growth of virus
4.	01.08.2022	Cultivation of bacteria
5.	02.08.2022	Cultivation of virus
6.	06.08.2022	Cultural Media for Aerobic & Anaerobic Microorganism – Bacteria
7.	03.08.2022	Cultural Media for Aerobic & Anaerobic Microorganism – Fungi
8.	13.08.2022	Maintenance of Lab Culture
Unit-4: Isolation and Identification of Bacteria (08 Hours)		
1.	16.08.2022	Staining Techniques – Negative and Simple staining
2.	20.08.2022	Staining Techniques – Grams Staining

3.	22.08.2022	Acid fast staining
4.	23.08.2022	Capsule Staining and other staining techniques
5.	27.08.2022	Biochemical Reactions
6.	29.08.2022	Biochemical reactions cont...
7.	30.08.2022	IMVIC Test
8.	30.08.2022	Total and Viable counting Techniques.
Activity 1	03.08.2022	Mind mapping of selected topics
Activity 2	10.08.2022	Class test
Activity 3	17.08.2022	Group Discussion on selected topic
Activity 4	24.08.2022	I Sessional Revision Class

II SESSIONAL: 24 Lectures + 03 Activities

Lecture No.	Date	Lecture Details
Unit-5: Sterilization (08 Hours)		
1.	13.09.2022	Introduction to Sterilization
2.	17.09.2022	Different methods of sterilization
3.	19.09.2022	Physical and Chemical method of sterilization
4.	20.09.2022	Radiation and Filtration method of sterilization
5.	24.09.2022	Merits and Demerits of sterilization
6.	26.09.2022	Sterilization methods for pharmaceutical products
7.	27.09.2022	Sterility testing of different pharmaceutical preparations
8.	01.10.2022	Validation of various sterilization techniques
Unit-6: Disinfectants (07 Hours)		

1.	08.10.2022	Introduction of Disinfectants – Antiseptics
2.	10.10.2022	Fungicidal and Virucidal Agents
3.	11.10.2022	Factors affecting the action of disinfectants
4.	15.10.2022	Mechanism of Action of disinfectants
5.	29.10.2022	MoA of disinfectants cont...
6.	31.10.2022	Evaluation of bactericidal bacteriostatics
7.	01.11.2022	Virucidal and preservatives in pharmaceutical preparations
Unit-7: Immunology (09 Hours)		
1.	05.11.2022	Introduction to Immunology – Definition and Classification
2.	07.11.2022	General Principles of natural immunity
3.	08.11.2022	General Principles of immunity cont...
4.	12.11.2022	Phagocytosis
5.	14.11.2022	Acquired Immunity – Active and Passive
6.	15.11.2022	Antigens and Chemical Nature of Antigens
7.	26.11.2022	Structure and formation of Antibodies
8.	28.11.2022	Antigen Antibody reactions
9.	29.11.2022	Bacterial Exotoxins and Endotoxins
Activity1	09.11.2022	Mind mapping on selected topic
Activity2	12.10.2022	Group discussion on selected topic
Activity3	30.11.2022	II Sessional Revision Class

III SESSIONAL: 25 Lectures + 2 Activities

Lecture No.	Date	Lecture Details
Unit-7: Immunology (Contd...) (03 Hours)		
10.	12.12.2022	Signification of Toxoids
11.	13.12.2022	Immunization program
12.	17.12.2022	Importance of booster dose
Unit-08: Diagnostic Tests		
1.	19.12.2022	Schick's Test and ELISA Test
2.	20.12.2022	Western Blotting
3.	21.01.2023	Southern Blotting
4.	23.01.2023	PCR
5.	24.01.2023	Widal and QBC
6.	28.01.2023	Manteaux Peripheral Smear
7.	30.01.2023	Study of malaria Parasite
Unit – 09: Microbiological Assays		
1.	31.01.2023	Introduction to Microbial Culture Sensitivity testing
2.	06.02.2023	Principles and Methods of different microbiological assays
3.	07.02.2023	Penicillin and Streptomycin
4.	11.02.2023	Vitamin B2 and B12
5.	13.02.2023	Standardization of vaccines and sera
Unit-10: Study of Infectious Diseases		
1.	14.02.2023	Typhoid
2.	18.02.2023	Tuberculosis
3.	20.02.2023	Tuberculosis (Cont..)

4.	21.02.2023	Malaria
5.	27.02.2023	Cholera
6.	28.02.2023	Hepatitis
7.	04.03.2023	Meningitis
8.	06.03.2023	Syphilis & Gonorrhoea
9.	06.03.2023	HIV
10.	07.03.2023	Life cycle of HIV
Activity1	01.03.2023	III Sessional Revision Class
Activity2	07.03.2023	Final Examination Discussion

Textbooks (Theory) - Refer the latest versions of the books

- a) Vanitha Kale and Kishor Bhusari "Applied Microbiology" Himalaya Publishing house Mumbai.
- b) Mary Louis Turgeon "Immunology and Serology in Laboratory Medicines" 2nd edition,
- c) Harsh Mohan, "Textbook of Pathology" 3rd edition, 1998, B-3 Ansari Road Daryaganj N. Delhi.

Reference books (Theory) – Refer the latest versions of the books

- a) Ananthanarayan and Paniker's Textbook of Microbiology The Orient Blackswan; 10th Revised edition (2017)
- b) Michael Pelczar, Jr "Microbiology" McGraw Hill Education; 5 edition (2001)
- c) Prescott L.M. Jarley G.P., Klein D.A. "Microbiology." McGraw Hill Education; 8 edition (2011)
- d) War Roitt, Jonathan Brostoff, David male, "Immunology"3rd edition 1996, Mosby-yearbook Europe Ltd, London.
- e) Pharmacopoeia of India, Govt. of India, 2018.

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LECTURE PLAN - Practical

SUBJECT : PHARMACEUTICAL MICROBIOLOGY (Practical)

NAME OF THE STAFF : Dr. Vasanth Raj P

DESIGNATION : Assistant Professor, Department of Pharmaceutical Biotechnology

CONTACT DETAILS : E- Mail: vasanth@jssuni.edu.in Mobile:9500793944

Sessional	Number of Practical (Mention the Highest Number Amongst Various Batches)	Total Number of Practical Hours (Number of Practical X 3)
I	10	30
II	09	27
III	09	27
Total Number of Practical/Hours	28	84

I SESSIONAL

Practical No.	Name of the Experiment	Date(s)	
		Batch I	Batch II
1.	Aseptic handling techniques	27.06.2022	28.06.2022

2.	Study of equipment's I	04.07.2022	05.07.2022
3.	Study of equipment's -II	11.07.2022	12.07.2022
4.	Sterilization of glass ware	18.07.2022	19.07.2022
5.	Preparation of nutrient broth	25.07.2022	26.07.2022
6.	Preparation of nutrient agar	01.08.2022	02.08.2022
7.	Preparation of nutrient agar slant	08.08.2022	-
8.	Simple staining	-	16.08.2022
9.	Gram Staining (Gram Positive organism)	22.08.2022	23.08.2022
10.	Gram Staining (Gram Negative organism)	29.08.2022	30.08.2022
FIRST SESSIONAL EXAMINATION		05.09.2022	06.09.2022

II SESSIONAL

Practical No.	Name of the Experiment	Date(s)	
		Batch I	Batch II
1.	Negative staining	-	13.09.2022
2.	Isolation of pure culture by Streak plate method	19.09.2022	20.09.2022
3.	Isolation of pure culture by Pour plate method	29.09.2022	27.09.2022
4.	Isolation of pure culture by Spread plate method	10.10.2022	11.10.2022
5.	Cultural sensitivity test for pathogenic organism by disc plate method	31.10.2022	01.11.2022
6.	Enumeration of microorganisms by Total count	07.11.2022	08.11.2022

7.	Enumeration of microbial count by Viable count	14.11.2022	15.11.2022
8.	Motility of microorganism by hanging drop method (Motile Organism)	28.11.2022	29.11.2022
9.	Motility of microorganism by hanging drop method (Non-Motile Organism)	28.11.2022	29.11.2022
SECOND SESSIONAL EXAMINATION		05.12.2022	06.12.2022

III SESSIONAL

Practical No.	Name of the Experiment	Date(s)	
		Batch I	Batch II
1.	Microbial assay by cup plate method	12.12.2022	13.12.2022
2.	Bacteriological analysis of water	19.12.2022	20.12.2022
3.	Biochemical test- IMViC test	23.01.2023	24.01.2023
4.	Biochemical test- Starch Hydrolysis	30.01.2023	31.01.2023
5.	Sterility testing of liquid formulation	06.02.2023	07.02.2023
6.	Sterility testing of solid formulation	13.02.2023	14.02.2023
7.	Determination of minimum inhibitory concentration by serial dilution method	20.02.2023	21.02.2023
8.	Determination of RWC	27.02.2023	28.02.2023
9.	Repeating the Major practicals	06.03.2023	07.03.2023
THIRD SESSIONAL EXAMINATION		13.03.2023	14.03.2023
Bonification of the Practical Record Notebook		31.03.2023	31.03.2023

LECTURE PLAN – Theory

SUBJECT : Pharmacognosy and Phytopharmaceuticals (Theory)

FACULTY : Mrs. S.Priyadharshini

DESIGNATION : Lecturer, Department of Pharmacognosy

CONTACT DETAILS : E- Mail: priya@jssuni.edu.in Mobile: 9443801876

Sessional	No. of Hours of Didactic Lecture	No of Hours of other pedagogy	Total No. of Lecture Hours	Total No. of Tutorial Hours
	Pharmacognosy & Phytopharmaceuticals			
I	23	04	27	08
II	34	03	37	08
III	18	05	23	07
Total No. of Hours	75	12	87	23

I SESSIONAL :23 Lectures + 04 Activities

Lecture No	Date	Lecture Details
1	30.06.2022	Orientation about the subject
		Unit 1: Introduction
2	01.07.2022	Introduction
		Unit 2: Definition, history and scope of Pharmacognosy 02 Hours
3	02.07.2022	Definition, History and Scope of Pharmacognosy
4	07.07.2022	History and Scope of Pharmacognosy
Tutorial-1	07.07.2022	-
		Unit 3: Classification of crude drugs 05 Hours
5	08.07.2022	Alphabetical and Chemical classification
6	09.07.2022	Taxonomical and Biological classification
7	14.07.2022	Pharmacological classification
Tutorial-2	14.07.2022	-
8	15.07.2022	Chemo taxonomical classification
9	16.07.2022	Sero taxonomical classification

	Unit 4: Cultivation, collection, processing and storage of crude drugs		05 Hours
10	21.07.2022	Cultivation of crude drugs	
Tutorial-3	21.07.2022	-	
11	22.07.2022	Collection of crude drugs	
12	23.07.2022	Processing of crude drugs	
13	29.07.2022	Storage of crude drugs	
14	30.07.2022	Conservation of medicinal plants	
	Unit 5: Detailed method of cultivation of crude drugs		06 Hours
15	04.08.2022	Senna	
Tutorial-4	04.08.2022	-	
16	05.08.2022	Cinchona	
17	06.08.2022	Opium	
18	11.08.2022	Isapgol	
Tutorial-5	11.08.2022	-	
19	12.08.2022	Ergot	
20	13.08.2022	Ginger and Cardamom	
Tutorial-6	13.08.2022	-	
	Unit 6: Study of cell wall constituents and cell inclusions		01 Hours

21	18.08.2022	Study of Cell inclusions
		Unit 7: Study of morphology and microscopy of different plants parts 02 Hours
22	20.08.2022	Leaf: Senna, Datura
23	25.08.2022	Bark: Cinnamon (Cassia), Cinchona
Tutorial-7	25.08.2022	-
Activity1	20.08.2022	Group Discussion / Quiz / Other Pedagogy
Activity2	27.08.2022	Group Discussion / Quiz / Other Pedagogy
Activity3	30.08.2022	Group Discussion / Quiz / Other Pedagogy
Activity4	01.09.2022	Group Discussion / Quiz / Other Pedagogy
Tutorial-8	01.09.2022	-

II SESSIONAL :34 Lectures + 03 Activities

Lecture No	Date	Lecture Details
		Unit 8: Study of morphology and microscopy of different plants parts 05 Hours
1	15.09.2022	Wood: Quassia
		Stem: Ephedra

Tutorial-1	15.09.2022	
2	16.09.2022	Root: Rauwolfia, Liquorice
		Rhizome: Ginger, Podophyllum
3	22.09.2022	Flower buds: Clove
Tutorial-2	22.09.2022	-
4	23.09.2022	Fruits: Coriander, Fennel
		Seeds: Isapgol
5	24.09.2022	Seeds: Nux Vomica
6	Unit 9: Detailed study of various plant constituents	
		10 Hours
8	29.09.2022	Carbohydrates
Tutorial-3	29.09.2022	
9	30.09.2022	Guar gum
10	06.10.2022	Honey
Tutorial-4	06.10.2022	-
11	07.10.2022	Acacia
12	08.10.2022	Sodium Alginate

13	13.10.2022	Pectin
Tutorial-5	13.10.2022	-
14	17.10.2022	Tragacanth
15	15.10.2022	Agar
16	20.10.2022	Cellulose Products
Tutorial-6	20.10.2022	-
17	Unit 10: Lipids	08 Hours
18	22.10.2022	a) Definition, sources, method extraction, chemistry and method of analysis of Lipids.
19	27.10.2022	Introduction – Lipids
20	29.10.2022	Production, Chemistry and Analysis of Lipids
Tutorial-7	29.10.2022	-
		b) Study of method of production, chemical constituents, tests, uses and adulterants
21	03.11.2022	Shark Liver Oil and Castor Oil
22	04.11.2022	Olive oil and Chaulmoogra Oil
24	05.11.2022	Wool fat

25	10.11.2022	Cocoa Butter and Beeswax
26	11.11.2022	Spermaceti
Unit 8: Study of natural pesticides		04 Hours
27	12.11.2022	Introduction
28	17.11.2022	Pyrethrum
29	18.11.2022	Neem
30	19.11.2022	Tobacco
Unit 11:Therapeutic application of herbal drugs, poisonous plants, herbal-drug interaction, edible vaccines, marine Pharmacognosy.		02 Hours
33	24.11.2022	Edible Vaccines
Tutorial-8	24.11.2022	-
34	25.11.2022	Marine Pharmacognosy
Activity1	26.11.2022	Activity- Assignment on marine drugs

Activity2	1.12.2022	Group discussion
Activity3	2.12.2022	Seminar

III SESSIONAL: 18 Lectures + 05 Activities

Lecture No	Date	Lecture Details
Unit 14: Different methods of adulteration of crude drugs and general methods of detection of adulterants. 02 Hours		
1.	15.12.2022	Adulterants, Detection of Adulterants
Tutorial-1	15.12.2022	-
2.	16.12.2022	Adulterants, Detection of Adulterants
		Unit 11:Therapeutic application of herbal drugs, poisonous plants, herbal-drug interaction, edible vaccines, marine Pharmacognosy. 02 Hours
3.	17.12.2022	Herb-Drug Interaction
4..	22.12.2022	Therapeutic application of herbal drugs, Poisonous Plants
Tutorial -2	22.12.2022	-
		Unit 13: Study of plants fibers used in surgical dressings and related products.

5.	23.12.2022	Study of Plant Fibers	04 Hours
6.	24.12.2022	Surgical dressings- Catgut	
7.	29.12.2022	Surgical dressings-Variou types	
8.	30.12.2022	Surgical dressings-Variou types	
		Unit 12: Introduction, definition, classification, general properties, chemical tests and general method of isolation	09 Hours
9.	31.12.2022	Alkaloids	
10.	19.01.2023	Alkaloids	
Tutorial -3	19.01.2023		
11.	20.01.2023	Resins	
12.	21.01.2023	Resins	
13.	27.01.2023	Glycosides	
14.	28.01.2023	Glycosides (Contd..)	
15	02.03.2023	Essential oils	
Tutorial -4	02.03.2023	Revision	
16	03.02.2023	Essential oils (Contd...)	

17	09.02.2023	Tannins
Tutorial -5	09.02.2023	-
18	10.02.2023	Tannins (Contd..)
Activity1	23.02.2023	Test on classification of secondary metabolites
Activity2	02.03.2023	Group discussion
Tutorial-6	02.03.2023	-
Activity3	03.03.2021	Seminar
Activity4	04.03.2023	Class Test
Activity5	09.03.2023	Class test
Tutorial-7	09.03.2023	-

Text books

1. Pharmacognosy by G.E. Trease & W.C. Evans.
2. Pharmacognosy by C.K. Kokate, Gokhale & A.C. Purohit.

Reference books

1. Pharmacognosy by Brady & Tyler.E.
2. Pharmacognosy by T.E. Wallis.
3. Pharmacognosy by C.S. Shah & Qadery.
4. Pharmacognosy by M.A. Iyengar.

LECTURE PLAN – Practical

SUBJECT : Pharmacognosy and Phytopharmaceuticals (Theory)

FACULTY : Mrs. S.Priyadharshini

DESIGNATION : Lecturer, Department of Pharmacognosy

CONTACT DETAILS : E- Mail: priya@jssuni.edu.in Mobile: 9443801876

Sessional	Number of Practical (Mention the Highest Number Amongst Various Batches)	Total Number of Practical Hours (Number of Practical X 3)
I	09	27
II	11	33
III	07	21
Total Number of Practical/Hours	27	81

I SESSIONAL

Practical No.	Name of the Experiment	Date(s)	
		Batch I	Batch II
8.	Introduction of Pharmacognosy laboratory and Experiments	04.07.2022	05.07.2022
9.	Section cutting techniques, staining, Mounting	11.07.2022	12.07.2022
10.	Macro, powder and microscopic study of Datura Leaf	18.07.2022	19.07.2022
11.	Macro, powder and microscopic study of Senna Leaf	25.07.2022	26.07.2022
12.	Macro, powder and microscopic study of Cassia Cinnamon	01.08.2022	02.08.2022
13.	Macro, powder and microscopic study of Cinchona Bark	08.08.2022	09.08.2022
14.	Macro, powder and microscopic study of Quassia wood	15.08.2022	16.08.2022
15.	Repeat	22.08.2022	23.08.2022
16.	Repeat	29.08.2022	30.08.2022
I Sessional Examination		19.09.2022	20.09.2022

II SESSIONAL

Practical No.	Name of the Experiment	Date(s)	
		Batch I	Batch II
10.	Macro, powder and microscopic study of Clove	26.09.2022	26.09.2022
11.	Macro, powder and microscopic study of Fennel fruit	10.10.2022	11.10.2022
12.	Macro, powder and microscopic study of Coriander fruit	17.10.2022	18.10.2022
13.	Macro, powder and microscopic study of Isapgol	31.10.2022	1.11.2022
14.	Macro, powder and microscopic study of Nux vomica Seed	07.11.2022	08.11.2022
15.	Macro, powder and microscopic study of Rauwolfia root	14.11.2022	15.11.2022
16.	Macro, powder and microscopic study of Liquorice root	28.11.2022	29.11.2022
SECOND SESSIONAL EXAMINATION		12.12.2022	13.12.2022

III SESSIONAL

Practical No.	Name of the Experiment	Date(s)	
		Batch I	Batch II
1.	Macro, powder and microscopic study of Podophyllum	23.01.2023	24.01.2023

2.	Determination of Saponification Value	30.01.2023	31.01.2023
3.	Determination of Acid Value	06.02.2023	07.02.2023
4.	Determination of Moisture content of Crude Drug	13.02.2023	14.02.2023
5.	Chemical test for Agar	20.02.2023	21.02.2023
6.	Chemical test for Tragacanth	27.02.2023	28.02.2023
7.	Chemical test for Gelatin	06.03.2023	07.03.2023
THIRD SESSIONAL EXAMINATION		27.03.2022	28.03.2022

Text books

3. Pharmacognosy by G.E. Trease & W.C. Evans.
4. Pharmacognosy by C.K. Kokate, Gokhale & A.C. Purohit.

Reference books

5. Pharmacognosy by Brady & Tyler.E.
6. Pharmacognosy by T.E. Wallis.
7. Pharmacognosy by C.S. Shah & Qadery.
8. Pharmacognosy by M.A. Iyengar.

LECTURE PLAN – Theory

SUBJECT : Pharmacology-I (Theory)
FACULTY : Dr JUSTIN A
DESIGNATION : Associate Professor, Department of Pharmacology
CONTACT DETAILS : E- Mail: justin@jssuni.edu.in Mobile: 9942932150

Sessional	Number of Hours of Didactic Lecture	No of Hours of other Pedagogy	Total Number of Lecture Hours	Tutorial Classes
I	25	03	28	09
II	29	04	33	12
III	23	06	29	10
Total Number of Hours	77	13	90	31

I SESSIONAL: 25 Lectures + 03 Activities

Lecture No.	Date	Lecture Details
Unit-1: General Pharmacology		16 Hours
1	26.06.2022	Orientation to the subject
Tutorial-1	26.06.2022	-
2	30.06.2022	Introduction, definitions and scope of pharmacology
3	01.07.2022	Routes of drug administration
4	06.07.2022	Pharmacokinetics - Absorption

Tutorial-2	06.07.2022	-
5.	07.07.2022	Pharmacokinetics - Absorption
6.	08.07.2022	Pharmacokinetics - Distribution
7.	13.07.2022	Pharmacokinetics - Distribution
Tutorial-3	13.07.2022	-
8.	14.07.2022	Pharmacokinetics - Metabolism
9.	15.07.2022	Pharmacokinetics - Metabolism
10.	20.07.2022	Pharmacokinetics - Excretion
Tutorial-4	20.07.2022	-
11.	21.07.2022	Pharmacodynamics
12.	22.07.2022	Pharmacodynamics
13.	27.07.2022	Factors modifying drug effects
Tutorial-5	27.07.2022	Monthly test
14.	28.07.2022	Drug toxicity-Basic concepts, acute, sub-acute, chronic toxicity
15.	29.07.2022	Pre-clinical evaluation
16.	03.08.2022	Drug interactions
Unit-2: Pharmacology of drugs acting on ANS		09 Hours
Tutorial -6	03.08.2022	-
17.	04.08.2022	Introduction to neurotransmission
18.	05.08.2022	Cholinergic drugs
19.	10.08.2022	Anti-cholinergic drugs
Tutorial -7	10.08.2022	-
20.	11.08.2022	Neuromuscular blockers
21.	12.08.2022	Adrenergic drugs
22.	17.08.2022	Anti-adrenergic drugs
Tutorial-8	17.08.2022	-
23.	18.08.2022	Mydriatics and miotics
24.	24.08.2022	Drugs used in Parkinsonism
Tutorial-9	24.08.2022	Monthly test
25.	25.08.2022	Drugs used in Myasthenia gravis

Activity-1	26.08.2022	Seminar/Group Discussion/ Class test
Activity-2	01.09.2022	Seminar/Group Discussion/ Class test
Activity-3	02.09.2022	Seminar/Group Discussion/ Class test

II SESSIONAL: 29 Lectures + 04 Activities

Lecture No.	Date	Lecture Details
Unit-3: Pharmacology of drugs acting on Cardiovascular System		09 Hours
1.	14.09.2022	Anti-hypertensives
Tutorial-1	14.09.2022	-
2.	15.09.2022	Anti-anginal drugs
3.	16.09.2022	Anti-hypertensives
4.	21.09.2022	Anti-anginal drugs
Tutorial-2	21.09.2022	-
5.	22.09.2022	Anti-arrhythmic drugs
6.	23.09.2022	Anti-arrhythmic drugs
7.	28.09.2022	Drugs used for therapy of Congestive Heart Failure
Tutorial-3	28.09.2022	Monthly test
8.	29.09.2022	Drugs used for Hyperlipidaemias
9.	30.09.2022	Drugs used for Hyperlipidaemias
Unit-4: Pharmacology of drugs acting on Central Nervous System		20 Hours
9.	06.10.2022	Excitatory and inhibitory neurotransmitters of CNS
10.	07.10.2022	General anaesthetics
12.	12.10.2022	General anaesthetics
Tutorial-4	12.10.2022	-
13.	13.10.2022	Anticonvulsants
14.	14.10.2022	Anticonvulsants
15.	19.10.2022	Sedatives and hypnotics
Tutorial-5	19.10.2022	-
16.	20.10.2022	Sedatives and hypnotics

Tutorial-6	21.10.2022	-
17.	26.10.2022	Analgesics
Tutorial-7	26.10.2022	Monthly test
18.	27.10.2022	Analgesics
19.	28.10.2022	Anti-inflammatory agents
20.	02.11.2022	Anti-inflammatory agents
Tutorial-8	02.11.2022	-
21.	03.11.2022	Psychotropic drugs
22.	04.11.2022	Psychotropic drugs
23.	09.11.2022	CNS stimulants and cognition enhancers
Tutorial-9	09.11.2022	-
24.	10.11.2022	CNS stimulants and cognition enhancers
25.	11.11.2022	Alcohol and methyl alcohol
26.	16.11.2022	Alcohol and methyl alcohol
Tutorial-10	16.11.2022	-
27.	17.11.2022	Centrally acting skeletal muscle relaxants
28.	23.11.2022	Drug dependence, abuse and tolerance
Tutorial-11	23.11.2022	-
29.	24.11.2022	List of drugs causing drug dependence, abuse and tolerance
Activity-1	25.11.2022	Seminar/Group Discussion/ Class test
Activity-2	30.11.2022	Seminar/Group Discussion/ Class test
Tutorial-12	30.11.2022	Monthly test
Activity-3	01.12.2022	Seminar/Group Discussion/ Class test
Activity-4	02.12.2022	Seminar/Group Discussion/ Class test

III SESSIONAL: 23 Lectures + 06 Activities

Lecture No.	Date	Lecture Details
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Unit-5: Pharmacology of Local Anesthetic			02 Hours
1.	14.12.2022	Pharmacology of Local Anesthetics	
Tutorial-1	14.12.2022	-	
2.	15.12.2022	Pharmacology of Local Anesthetics	
Unit-6: Pharmacology of drugs acting on Respiratory tract			05 Hours
3.	16.12.2022	Bronchodilators	
4.	21.12.2022	Mucolytics	
Tutorial-2	21.12.2022	-	
5.	22.12.2022	Expectorants	
6.	23.12.2022	Anti-tussive	
7.	18.01.2023	Nasal Decongestants	
Tutorial-3	18.01.2023	-	
Unit-7: Pharmacology of Hormones and Hormone antagonists			08 Hours
8.	19.01.2023	Thyroid hormones	
9.	20.01.2023	Anti-thyroid drugs	
10.	21.01.2023	Insulin, Insulin analogues	
11.	25.01.2023	Oral hypoglycemic agents	
Tutorial-4	25.01.2023	Monthly test	
12.	27.01.2023	Oral hypoglycemic agents	
13.	01.02.2023	Sex hormones	
Tutorial-5	01.02.2023	-	
14.	02.02.2023	Oral contraceptives	
15.	03.02.2023	Oxytocin, Other stimulants and relaxants	
Unit-8: Pharmacology of Autocoids and their Antagonists			06 Hours
16.	08.02.2023	Histamines	
Tutorial-6	08.02.2023	-	
17.	09.02.2023	Antihistaminics	
18.	10.02.2023	Antihistaminics	
19.	15.02.2023	5-Hydroxytryptamine	
Tutorial-7	15.02.2023	-	
20.	16.02.2023	5-Hydroxytryptamine's antagonists	

21.	17.02.2023	5-Hydroxytryptamine's antagonists
22.	22.02.2023	Lipid derived autocooids
Tutorial-8	22.02.2023	Monthly test
23.	23.02.2023	Platelet activating factor
Activity-1	01.03.2023	Seminar/Group Discussion/ Class test
Tutorial-9	01.03.2023	-
Activity-2	02.03.2023	Seminar/Group Discussion/ Class test
Activity-3	03.03.2023	Seminar/Group Discussion/ Class test
Activity-4	08.03.2023	Seminar/Group Discussion/ Class test
Tutorial-10	08.03.2023	Monthly test
Activity-5	09.03.2023	Seminar/Group Discussion/ Class test
Activity-6	10.03.2023	Seminar/Group Discussion/ Class test

Text books

- Tripathi, K. D. Essentials of medical pharmacology. 6th edition, 2008. Publisher: Jaypee, Delhi.
- Satoskar, R.S. and Bhadarkar, S.D. Pharmacology and pharmacotherapeutics. 20th edition, 2008. Publisher: Popular, Mumbai.
- Rang, H.P. & Dale, M.M. Pharmacology. 5h edition, 2003. Publisher: Churchill Living stone.

Reference books

- Goodman Gilman, A., Rall, T.W., Nies, A.I.S. and Taylor, P. Goodman and Gilman's The pharmacological basis of therapeutics. 11th edition, 2006. Publisher McGraw Hill, Pergamon Press.
- Craig, C.R. & Stitzel, R.E. Modern Pharmacology. 5th edition, 1997. Publisher: Little Brown Co.
- Katzung, B.G. Basic and clinical pharmacology. 9th edition, 2004. Publisher: Prentice Hall, Int.
- Shargel and Leon. Applied Biopharmaceutics and Pharmacokinetics. Latest edition 2002. Publisher: Prentice Hall, London.

LECTURE PLAN – Theory

SUBJECT : COMMUNITY PHARMACY (Theory)
FACULTY : Dr ANEENA SURESH
DESIGNATION : Assistant Professor, Department of Pharmacy Practice
CONTACT DETAILS : E- Mail: aneena@jssuni.edu.in Mobile: 6380894043

Sessional	Number of Hours of Didactic Lecture	No of Hours of other Pedagogy	Total Number of Lecture Hours	Tutorial Classes
I	19	4	23	11
II	13	2	15	07
III	18	3	21	11
Total Number of Hours	50	9	59	29

I SESSIONAL (19 Lectures + 04 Activities)

Lecture No.	Date	Lecture Details	Hours
Unit-1: Scope of community Pharmacy			02
	30.06.2022	Orientation to the subject	
6.	01.07.2022	Definition and scope of Community Pharmacy	
Tutorial-1	07.07.2022	-	
7.	07.07.2022	Roles and responsibilities of community pharmacist	04
Unit-2: Community pharmacy management			
Tutorial-2	08.07.2022	-	
11.	08.07.2022	Selection of site, space layout, and design	

12.	14.07.2022	Staff, materials – coding, stocking	
Tutorial-3	15.07.2022	-	
13.	15.07.2022	Legal requirements, maintenance of various registers	
14.	21.07.2022	Use of computers: business and healthcare softwares	
Unit-3: Prescriptions			02
Tutorial-4	22.07.2022	-	
6.	22.07.2022	Parts of prescription and it's legality	
7.	28.07.2022	Identification of medication related problems like drug interactions.	
Unit-4: Inventory control in community pharmacy			02
Tutorial-5	29.07.2022	Monthly Test	
6.	29.07.2022	Definition, various methods of inventory control	
7.	04.08.2022	ABC, VED, EOQ, Lead Time and safety stock	
Unit-5: Pharmaceutical Care			01
Tutorial-6	05.08.2022	-	
1.	05.08.2022	Definition and principles of pharmaceutical care	
Unit 6: Patient Counselling			03
1.	11.08.2022	Definition, outcomes and various stages	
Tutorial-7	12.08.2022	-	
2.	12.08.2022	Barriers and strategies to overcome barriers	
3.	18.08.2022	Patient information leaflets – content, design, layouts and advisory labels.	
Unit 7: Patient Medication Adherence			02
1.	25.08.2022	Definition, factors affecting medication adherence	
Tutorial-8	26.08.2022	Monthly Test	
2.	26.08.2022	Role of pharmacist in improving medication adherence	
Unit-8: Health screening services			03
1.	01.09.2022	Definition, importance, methods for screening blood pressure	
Tutorial-9	02.09.2022	-	

2.	02.09.2022	Blood sugar and cholesterol testing	
3.	15.09.2022	Lung function test	
Tutorial-10	16.09.2022	-	
Activity1	16.09.2022	Mind Mapping on Selected Topic(s)	
Activity2	22.09.2022	MCQ Test (Unit 1,2 & 3)	
Tutorial-11	23.09.2022	Monthly Test	
Activity3	23.09.2022	MCQ Test (Unit 4 & 5)	
Activity4	29.09.2022	MCQ Test (Unit 6)	

II SESSIONAL (13 Lectures + 02 Activities)

Lecture No.	Date	Lecture Details	Hours
Unit-9: OTC medication			01
Tutorial-1	30.09.2022	-	
6.	30.09.2022	Introduction, definition, sale and OTC medication list	
Unit-10: Health Education			12
4.	06.10.2022	Hepatitis	
Tutorial-2	07.10.2022	-	
5.	07.10.2022	Typhoid	
6.	13.10.2022	Tuberculosis	
Tutorial-3	14.10.2022	-	
7.	14.10.2022	Gonorrhoea	

8.	20.10.2022	Syphilis	
Tutorial-4	21.10.2022	-	
9.	21.10.2022	AIDS	
10.	27.10.2022	AIDS (contd..)	
Tutorial-5	28.10.2022	Monthly Test	
11.	28.10.2022	Amoebiasis	
12.	03.11.2022	Malaria	
Tutorial-6	04.11.2022	-	
13.	04.11.2022	Leprosy	
11.	10.11.2022	Balanced diet	
Tutorial-7	11.11.2022	-	
12.	11.11.2022	Treatment and prevention of deficiency disorders	
Activity-1	17.11.2022	MCQ Test (Unit 7 & 8)	
Activity-2	24.11.2022	MCQ Test (Unit 8)	

III SESSIONAL (18 Lectures + 03 Activities)

Lecture No.	Date	Lecture Details	Hours
Unit 10: Health Education			

Tutorial-1	25.11.2022	-	01
1.	25.11.2022	Family planning – Role of pharmacist	
Unit 11: Responding to symptoms of minor ailments, relevant Pathophysiology and common drug therapy			07
11.	01.12.2022	Pain	
Tutorial-2	02.12.2022	-	
12.	02.12.2022	Nausea, Vomiting and Dyspepsia	
13.	15.12.2022	Ophthalmic symptoms	
Tutorial-3	16.12.2022	-	
14.	16.12.2022	Pyrexia	
15.	22.12.2022	Constipation	
Tutorial-4	23.12.2022	Monthly Test	
16.	23.12.2022	Diarrhea	
17.	19.01.2022	Worm infestations	
Unit 12: Essential Drug Concept and Rational drug therapy Role Of Community Pharmacists			03
Tutorial-5	20.01.2023	-	
1.	20.01.2023	Essential drug concept and role of community pharmacists	
Tutorial-6	27.01.2023	-	
2.	27.01.2023	Rational drug therapy and role of community pharmacists	
3.	02.02.2023	Rational drug therapy and role of community pharmacists (contd..)	
Unit 13: Code Of Ethics For Community Pharmacists			
Tutorial-7	03.02.2023	-	01
1.	03.02.2023	Code of ethics for community pharmacists	
Unit 10: Health Education			06
1.	09.02.2023	WHO definition of health and health promotion, Prescribing guidelines for pediatrics	

Tutorial-8	10.02.2023	-
2.	10.02.2023	Prescribing guidelines for pediatrics (contd..)
3.	16.02.2023	Prescribing guidelines for geriatrics
Tutorial-9	17.02.2023	Monthly Test
4.	17.02.2023	Prescribing guidelines for geriatrics
5.	23.02.2023	Prescribing guidelines for pregnant women
6.	02.03.2023	Prescribing guidelines for lactating women
Tutorial-10	03.03.2023	-
Activity 1	03.03.2023	MCQ Test (Unit 10 & 11)
Activity 2	09.03.2023	MCQ test (Unit 12,13 & 14)
Tutorial-11	10.03.2023	-
Activity 3	10.03.2023	MCQ test (Unit 15)

Text Books:

1. Health Education and Community Pharmacy by N.S.Parmar.
2. WHO consultative group report.
3. Drug store & Business management by Mohammed Ali & Jyoti.

Reference books:

1. Handbook of pharmacy – health care.Edt. Robin J Harman. The Pharmaceutical press.
2. Comprehensive Pharmacy Review – Edt. Leon Shargel. Lippincott Williams &
3. Wilkins.

LECTURE PLAN – Theory

NAME OF THE SUBJECT	Pharmacotherapeutics- I (Theory)
NAME OF THE FACULTY	Dr. M. Deepalakshmi M.Pharm., Ph.D
DESIGNATION,	Asst. Professor, Department of Pharmacy Practice
CONTACT DETAILS	E. Mail:deepapharmacy@jssuni.edu.in Mobile: 9994974663

Sessional	Number of Hours of Didactic Lecture	No. of Hours of other Activities	Total Number of Lecture Hours	Tutorial Classes
I	25	02	27	09
II	25	08	33	10
III	25	02	27	09
Total Number of Hours	75	12	87	28

I SESSIONAL : 25 Lectures + 2 Activities

Lecture No.	Date	Lecture Details	Hours
	29.06.2022	Orientation to the subject	
Tutorial 1	29.06.2022	-	
Unit-1: Cardiovascular system			25
15.	30.06.2022	Etiology& Classification of hypertension	
16.	01.07.2022	Pathophysiology of hypertension	
17.	06.07.2022	Pathophysiology of hypertension	
Tutorial 2	06.07.2022	-	
18.	07.07.2022	Management of hypertension	
19.	08.07.2022	Management of hypertension	
Activity 1	13.07.2022	Kahoot	
Tutorial 3	13.07.2022	-	
20.	14.07.2022	Management of hypertension cont	
21.	15.07.2022	Etiology& Classification of heart failure	
22.	20.07.2022	Pathophysiology of heart failure	

Tutorial 4	20.07.2022	Unit Test
23.	21.07.2022	Management of heart failure
24.	22.07.2022	Types, Regulation of coronary blood flow
25.	27.07.2022	Pathophysiology of angina pectoris
Tutorial 5	27.07.2022	-
26.	28.07.2022	Management of angina pectoris
27.	29.07.2022	Pathophysiology of Myocardial infarction
28.	03.08.2022	Management of Myocardial infarction
Tutorial 6	03.08.2022	-
Activity 2	04.08.2022	Kahoot
29.	05.08.2022	Lipoprotein metabolism & pathophysiology of Hyperlipidaemias
30.	10.08.2022	Mechanism of Atherosclerosis
Tutorial 7	10.08.2022	-
31.	11.08.2022	Mechanism of Atherosclerosis
32.	12.08.2022	Treatment of Hyperlipidaemias
33.	17.08.2022	Introduction of Electrophysiology and cellular physiology
Tutorial 8	17.08.2022	Unit Test
34.	18.08.2022	Normal and Abnormal Conduction Pathophysiology
35.	24.08.2022	Classification of Arrhythmias
Tutorial 9	24.08.2022	-
36.	25.08.2022	Vaughan Williams classification of anti-arrhythmic drugs
37.	26.08.2022	Vaughan Williams classification of anti-arrhythmic drugs
38.	01.09.2022	Management of Arrhythmias
39.	02.09.2022	Management of Arrhythmias

II SESSIONAL : 25 Lectures + 8 Activities

Lecture No.	Date	Lecture Details	Hours
Unit-2: Respiratory system			
16.	14.09.2022	Pulmonary function test	07
Tutorial 1	14.09.2022	-	
17.	15.09.2022	Introduction and Pathophysiology of Asthma	

18.	16.09.2022	Management of Asthma	
19.	21.09.2022	Introduction to Chronic obstructive airways disease	
Tutorial 2	21.09.2022	Unit Test	
20.	22.09.2022	Pathophysiology of COPD	
21.	23.09.2022	Management of COPD	
22.	28.09.2022	Drug induced pulmonary diseases	
Tutorial 3	28.09.2022	-	
Unit-3: Endocrine system			16
1.	29.09.2022	Introduction and types of Diabetes	
2.	30.09.2022	Introduction and types of Diabetes	
3.	05.10.2022	Pathophysiology of diabetes	
4.	06.10.2022	Management of diabetes	
5.	07.10.2022	Management of diabetes	
Activity 1	12.10.2022	Kahoot	
Tutorial 4	12.10.2022	-	
6.	13.10.2022	Pathophysiology of Hypothyroidism	
7.	14.10.2022	Management of Hypothyroidism	
8.	19.10.2022	Pathophysiology of Hyperthyroidism	
Tutorial 5	19.10.2022	Unit Test	
9.	20.10.2022	Management of Hyperthyroidism	
10.	21.10.2022	Oral contraceptives	
Activity 2	26.10.2022	Kahoot	
Tutorial 6	26.10.2022	-	
11.	27.10.2022	Hormone replacement therapy	
12.	28.10.2022	Hormone replacement therapy	
13.	02.11.2022	Introduction of Osteoporosis	
Tutorial 7	02.11.2022	-	
14.	03.11.2022	Types of Osteoporosis	
Activity 3	04.11.2022	Kahoot	
15.	09.11.2022	Pathophysiology of Osteoporosis	
Tutorial 8	09.11.2022	-	

16.	10.11.2022	Management of Osteoporosis	
Activity 4	11.11.2022	Kahoot	
Unit-4: General prescribing guidelines			02
1.	16.11.2022	Introduction, Differences between Benign and Malignant Tumors Histological Diagnosis of Malignancy	
Tutorial 9	16.11.2022	-	
2.	17.11.2022	Invasions and Metastasis, Patterns of Spread, Disturbances of Growth of Cells	
Activity 5	18.11.2022	Kahoot	
Activity 6	23.11.2022	Group Discussion	
Tutorial 10	23.11.2022	Unit Test	
Activity 7	24.11.2022	Group Discussion	
Activity 8	25.11.2022	Group Discussion	

III SESSIONAL : 25 Lectures + 2 Activities

Lecture No.	Date	Lecture Details	Hours
Unit-4: General prescribing guidelines			07
5.	14.12.2022	General prescribing guidelines for Pediatrics	
Tutorial 1	14.12.2022	-	
6.	15.12.2022	General prescribing guidelines for Geriatrics	
7.	16.12.2022	General prescribing guidelines for Geriatrics	
8.	21.12.2022	General prescribing guidelines for Geriatrics	
Tutorial 2	21.12.2022	Unit Test	
9.	22.12.2022	General prescribing guidelines for Pregnancy and lactation	
10.	23.12.2022	General prescribing guidelines for Pregnancy and lactation	
11.	19.01.2023	General prescribing guidelines for Pregnancy and lactation	
Unit-5: Ophthalmology			
1.	20.01.2023	Introduction and Glaucoma	
2.	25.01.2023	Pathophysiology of Glaucoma	
Tutorial 3	25.01.2023	-	
3.	27.01.2023	Pathophysiology of Glaucoma	
4.	01.02.2023	Management of Glaucoma	

Tutorial 4	01.02.2023	Unit Test	
5.	02.02.2023	Management of Glaucoma...	
6.	03.02.2023	Management of Glaucoma	
7.	08.02.2023	Viral Conjunctivitis	
Tutorial 5	08.02.2023	-	
8.	09.02.2023	Viral Conjunctivitis	
9.	10.02.2023	Bacterial conjunctivitis	
Activity 1	15.02.2023	Group Discussion	
Tutorial 6	15.02.2023	-	
Unit-6: Introduction to rational drug use			
1.	16.02.2023	Introduction to Rational drug use	
2.	17.02.2023	Essential drug concept	
3.	22.02.2023	Essential drug concept	
Tutorial 7	22.02.2023	-	
4.	23.02.2023	Rational use of Antibiotics	
5.	01.03.2023	Rational use of Antibiotics	
Tutorial 8	01.03.2023	Unit Test	
6.	02.03.2023	Rational use of Injections	
7.	03.03.2023	Rational use of OTC Drugs	
8.	08.03.2023	Rational use of OTC Drugs...	
Tutorial 9	08.03.2023	-	
9.	09.03.2023	Consequences of irrational drug use	
Activity 2	10.03.2023	Group Discussion	

09

TEXT BOOKS

1. Clinical Pharmacy and Therapeutics – Walker and Whittlesea, Churchill Livingstone publication
2. Pharmacotherapy: A Pathophysiology approach - Joseph T. Dipiro et al. Appleton & Lange
3. Pharmacotherapy: Principles and Practice- Chisholm- Burn Wells Schwinghammer Malone and Joseph P Dipiro. McGraw Hill Publications.

REFERENCE BOOKS

1. Pathologic basis of disease: Robbins SL, W.B. Saunders publication
2. Pathology and therapeutics for Pharmacists: A Basis for Clinical Pharmacy Practice - Green and Harris, Chapman and Hall publication
3. Clinical Pharmacy and Therapeutics - Eric T. Herfindal, Williams and Wilkins Publication
4. Applied Therapeutics: The clinical Use of Drugs. Lloyd Young and Koda-Kimble MA, Williams and Wilkins Publication
5. Avery's Drug Treatment, 4th Edn, 1997, Adis International Limited.
6. Relevant review articles from recent medical and pharmaceutical literature.

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