

JANTA COLLEGE OF PHARMACY,BUTANA(SONEPAT)

LESSON PLAN

Name of the Faculty : Mrs. Parmila Devi
Discipline : DMLT
Semester : Fourth
Subject : Medical Laboratory Management
Lesson Plan Duration : 16 weeks(from 15February,2024 to 14 June,2024)(According to Syllabus Scheme)
Work load(Lecture/Practical)per week(in hours) : Lectures-03(hr)

Week	Theory		Practical	
	Lecture Day	Topic(including assignment/test)	Practical Day	Topic
1st	1st	Introduction and importance of Medical Laboratory Management	1st	
	2nd	Introduction and importance of Medical Laboratory Management		
	3rd	layout of clinical laboratory		
2nd	1st	layout of clinical laboratory	2nd	
	2nd	Facility in clinical Laboratory		
	3rd	Facility in clinical Laboratory		
3rd	1st	Role of Medical Laboratory in total health care	3rd	
	2nd	Role of Medical Laboratory in total health care		
	3rd	Role of Medical Laboratory in total health care		
4th	1st	Material management, procurement, financial resources	4th	
	2nd	Material management, procurement, financial resources		
	3rd	Material management, procurement, financial resources		
5th	1st	Importing, inventory, control and analysis, inspection, storage etc	5th	
	2nd	Importing, inventory, control and analysis, inspection, storage etc		
	3rd	Analytical control, Internal and external quality assurance in clinical laboratories		
6th	1st	Analytical control, Internal and external quality assurance in clinical laboratories	6th	
	2nd	Analytical control, Internal and external quality assurance in clinical laboratories		
	3rd	Precision, accuracy		
7th	1st	Standard deviation as per national standards	7th	
	2nd	Standard deviation as per national standards		
	3rd	Standard deviation as per national standards		
8th	1st	Standard deviation as per national standards	8th	
	2nd	Standard deviation as per national standards		
	3rd	Standard deviation as per national standards		
9th	1st	Safety measures in clinical laboratories (microbiology, haematology, biochemistry, etc	9th	
	2nd	Safety measures in clinical laboratories (microbiology, haematology, biochemistry, etc		
	3rd	Safety measures in clinical laboratories (microbiology, haematology, biochemistry, etc		
10th	1st	Disposal of Biomedical waste.	10th	
	2nd	Acid burn / Alkali burn		
	3rd	Acid burn / Alkali burn		
11th	1st	Accidental trauma	11th	
	2nd	Gas/Toxic inhalation		
	3rd	Gas/Toxic inhalation		
12th	1st	Spillage	12th	
	2nd	Laboratory Equipment - Care and Maintenance		
	3rd	Ethics and code of conduct- legal aspects - confidentiality malpractice/ negligence; legal implications		
13th	1st	Ethics and code of conduct- legal aspects - confidentiality malpractice/ negligence; legal implications	13th	
	2nd	Ethics and code of conduct- legal aspects - confidentiality malpractice/ negligence; legal implications		
	3rd	Law suits, consumer protection and insurance for professional health hazards		
14th	1st	Law suits, consumer protection and insurance for professional health hazards	14th	
	2nd	Law suits, consumer protection and insurance for professional health hazards		
	3rd	Preventive maintenance and care of various laboratory equipment		
15th	1st	Preventive maintenance and care of various laboratory equipment		
	2nd	Preventive maintenance and care of various laboratory equipment		
	3rd	Preventive maintenance and care of various laboratory equipment		
16th	1st	Storage and retrieval of laboratory data manually and with help of computers		
	2nd	Storage and retrieval of laboratory data manually and with help of computers		
	3rd	Laboratory Accreditation - Introduction		

JANTA COLLEGE OF PHARMACY,BUTANA(SONEPAT)

LESSON PLAN

Name of the Faculty : Mrs.Parmila Devi
Discipline : DMLT
Semester : Fourth
Subject : IMMUNOLOGY AND MYCOLOGY
Lesson Plan Duration : 16 weeks(from 15 February ,2024 to 14 June,2024)(According to Syllabus Scheme)
Work load(Lecture/Practical)per week(in hours) : Theory - 03(hr),Practicals-02(hr)

Week	Theory		Practical	
	Lecture Day	Topic(including assignment/test)	Practical Day	Topic
1st	1st	Mycology Characteristics and classification of medically important fungi	1st	To prepare the sabouraud dextrose agar with and without antibiotics for the use microbiology lab
	2nd	Characteristics and classification of medically important fungi		
	3rd	Characteristics and classification of medically important fungi		
2nd	1st	Characteristics and classification of medically important fungi	2nd	To prepare the corn meal agar the use of microbiology lab
	2nd	Characteristics and classification of medically important fungi		
	3rd	Collection and processing of sample for fungal infection in Skin, Nail and Hair		
	1st	KOH Preparation	3rd	BHI (Brain, Heart Infusion)
	2nd	LCB (Lactophenol cotton blue) India Ink		
	3rd	India Ink		
4th	1st	Fungal Culture media	4th	To perform wet mount technique KOH and LCB.
	2nd	SDA with and without antibiotics		
	3rd	SDA with and without antibiotics		
5th	1st	CMA (Corn Meal agar) and BHI (Brain Heart Infusion)	5th	To study characteristics of common laboratory fungal contaminants.
	2nd	CMA (Corn Meal agar) and BHI (Brain Heart Infusion)		
	3rd	Fungal Cultivation		
6th	1st	Medically important fungi - Candida , Dermatophytes	6th	Collection and processing of sample for diagnosis of fungal infection in skin, hair, nail scraping
	2nd	Medically important fungi - Candida , Dermatophytes		
	3rd	Medically important fungi - Candida , Dermatophytes		
7th	1st	Medically important fungi - Candida , Dermatophytes	7th	To perform Widal test by slide and tube method
	2nd	Laboratory Contaminants - Penicillium, Rhizopus, Mucor, Aspergillus		
	3rd	Laboratory Contaminants - Penicillium, Rhizopus, Mucor, Aspergillus		
8th	1st	Laboratory Contaminants - Penicillium, Rhizopus, Mucor, Aspergillus	8th	To perform Widal test by slide and tube method
	2nd	Laboratory Contaminants - Penicillium, Rhizopus, Mucor, Aspergillus		
	3rd	Laboratory Contaminants - Penicillium, Rhizopus, Mucor, Aspergillus		
9th	1st	Antigen - Antibody Reactions	9th	To perform ASO titre test.
	2nd	Principle and applications of agglutination		
	3rd	Principle and applications of agglutination		
10th	1st	Principle and applications of agglutination	10th	To perform CRP test.
	2nd	Principle and applications of agglutination		
	3rd	Principle and applications of agglutination		
11th	1st	Precipitation and flocculation reactions	11th	To perform Rheumatoid factor test.
	2nd	Precipitation and flocculation reactions		
	3rd	Precipitation and flocculation reactions		
12th	1st	Precipitation and flocculation reactions	12th	To perform VDRL Test.
	2nd	Principle, techniques and interperatoin of widal - tube method/ slide method		
	3rd	Principle, techniques and interperatoin of widal - tube method/ slide method		
13th	1st	Principle, techniques and interperatoin of widal - tube method/ slide method	13th	To perform HIV Screening test
	2nd	Anti streptolysin O		
	3rd	Anti streptolysin O		
14th	1st	C- reactive protein	14th	To perform HBSAg Screening test.
	2nd	C- reactive protein		
	3rd	VDRL/ RPR		
15th	1st	VDRL/ RPR	15th	
	2nd	Rheumatoid factor (Rf)		
	3rd	Principle , techniques and application of ELISA (direct and indirect)		
16th	1st	Principle , techniques and application of ELISA (direct and indirect)	16th	
	2nd	Principle , techniques and application of ELISA (direct and indirect)		
	3rd	Principle , techniques and application of ELISA (direct and indirect)		

JANTA COLLEGE OF PHARMACY,BUTANA(SONEPAT)

LESSON PLAN

Name of the Faculty : Mr.Amit Kumar
Discipline : DMLT
Semester : Fourth
Subject : IMMUNOPATHOLOGY AND CYTOLOGY
Lesson Plan Duration : 16 weeks(from 15 February,2024 to 14 June,2024)(According to Syllabus Scheme)
Work load(Lecture/Practical)per week(in hours) : Lectures-03(hr),Practicals-04(hr)

Week	Theory		Practical	
	Lecture Day	Topic(including assignment/test)	Practical Day	Topic
1st	1st	PAS (Periodic Acid Schiff's Reagent) (1st Unit)	1st	Demonstration of cryostat.
	2nd	PAS (Periodic Acid Schiff's Reagent)		
	3rd	Silver impregnation stain – Reticulin fibre		
	4th	Silver impregnation stain – Reticulin fibre		
2nd	1st	Silver impregnation stain – Reticulin fibre	2nd	Processing of tissue for frozen section.
	2nd	Ziehl Neelson's – for AFB and Leprae		
	3rd	Ziehl Neelson's – for AFB and Leprae		
	4th	Ziehl Neelson's – for AFB and Leprae		
3rd	1st	Masson's trichrome stain	3rd	Staining and mounting of frozen section using H&E stain.
	2nd	Masson's trichrome stain		
	3rd	Oil Red O – fat		
	4th	Oil Red O – fat		
4th	1st	Gram's stain – Gram +ve and Gram –ve	4th	Staining and mounting of frozen section using H&E stain (rapid method).
	2nd	Gram's stain – Gram +ve and Gram –ve		
	3rd	Gram's stain – Gram +ve and Gram –ve		
	4th	Gram's stain – Gram +ve and Gram –ve		
5th	1st	Process of decalcification	5th	To stain paraffin embedded section for the demonstration of reticulin fibers by Silver impregnation stain.
	2nd	Various types of decalcifying methods		
	3rd	Various types of decalcifying methods		
	4th	Their mechanism, advantage, disadvantage		
6th	1st	applications	6th	To stain paraffin embedded section using Oil Red "O" stain.
	2nd	Assessment of decalcification		
	3rd	Reception and processing of frozen tissue (2nd Unit)		
	4th	Reception and processing of frozen tissue		
7th	1st	Freezing microtome and cryostat	7th	Preparation of Kaiserling's solution I and II for museum specimens.
	2nd	Freezing microtome and cryostat		
	3rd	Advant. & dis-advan. of freezing microtome and cryostat		
	4th	Advant. & dis-advan. of freezing microtome and cryostat		
8th	1st	Working, care, maint. of freezing microtome and cryostat	8th	Preparation of various mounting reagents for museum specimens
	2nd	Working, care, maint. of freezing microtome and cryostat		
	3rd	Frozen section cutting		
	4th	Staining- Rapid H&E		
9th	1st	Staining- Rapid H&E	9th	Processing and Labeling of various museum specimens
	2nd	Fat stain & Mounting of frozen section		
	3rd	Museum Techniques (3rd Unit)		
	4th	Introduction to museum		
10th	1st	emphasis on importance of museum	10th	Preparation of dry smear and wet smear
	2nd	emphasis on importance of museum		
	3rd	Procedure of FNAC		
	4th	indications of FNAC		
11th	1st	Uses of FNAC	11th	To perform PAP stain
	2nd	Reception		
	3rd	fixation		
	4th	processing of various museum specimens		
12th	1st	Cataloguing of museum specimen	12th	Fixation of smears and staining with MGG
	2nd	Introduction to autopsy technique		
	3rd	autopsy area, instruments, Use of autopsy		
	4th	Care and maintenance of autopsy area, autopsy instruments		
13th	1st	Principle of FNAC (4th Unit)	13th	To perform Harmonal Assessment
	2nd	Procedure of FNAC		
	3rd	indications of FNAC		
	4th	Uses of FNAC		
14th	1st	Cytological Special Stains (5th Unit)	14th	To perform PAS staining method of cytological sample.
	2nd	Cytological Special Stains		
	3rd	PAS (Periodic Acid Schiffs reagent Stain)		
	4th	PAS (Periodic Acid Schiffs reagent Stain)		
15th	1st	Ziehl Neelson's(ZN) Stain (AFB)	15th	To perform ZN staining method of cytological sample.
	2nd	Ziehl Neelson's(ZN) Stain (AFB)		
	3rd	Advancements in Cytology		
	4th	Automation in cytology		
16th	1st	Use of Cytospin	16th	To perform ZN staining method of cytological sample.
	2nd	Use of Cytospin		
	3rd	Importance of HCG		
	4th	Use of Harmonal Assessment (Pregnancy Test)		

JANTA COLLEGE OF PHARMACY,BUTANA(SONEPAT)

LESSON PLAN

Name of the Faculty : Mrs.Poonam Rani

Discipline : DMLT

Semester : Fourth

Subject : Cl. Haematology - II

Lesson Plan Duration : 16 weeks(from 15 February,2024 to 14 June,2024)(According to Syllabus Scheme)

Work load(Lecture/Practical)per week(in hours) : Lectures-03(hr),Practicals-04(hr)

Week	Theory		Practical	
	Lecture Day	Topic(including assignment/test)	Practical Day	Topic
		Introduction of normal haemostasis		
1st	1st	Theories of blood coagulation	1st	Determination of bleeding time by dukes method
	2nd	Theories of blood coagulation		
	3rd	Theories of blood coagulation		
2nd	1st	Theories of blood coagulation	2nd	Determination of bleeding time by Ivy's method
	2nd	Platelets and their role in haemostasis including count		
	3rd	Platelets and their role in haemostasis including count		
3rd	1st	Platelets and their role in haemostasis including count	3rd	Determination of Clotting time by LEE and white method
	2nd	Platelets and their role in haemostasis including count		
	3rd	Bleeding disorders and related diseases		
4th	1st	Bleeding disorders and related diseases	4th	Determination of Hess test
	2nd	Bleeding disorders and related diseases		
	3rd	Bleeding disorders and related diseases		
5th	1st	Principle, procedure clinical importance,reference value of Thrombin time	5th	Performance of Clot retraction test
	2nd	Principle, procedure clinical importance,reference value of APTT		
	3rd	Principle, procedure clinical importance,reference value of PTI		
6th	1st	Principle, procedure clinical importance,reference value of Bleeding time	6th	Demonstration of Bone marrow Aspiration.
	2nd	Principle, procedure clinical importance,reference value of Bleeding time		
	3rd	Principle, procedure clinical importance,reference value of Bleeding time		
7th	1st	Principle, procedure clinical importance,reference value of Clotting time	7th	Demonstration of Preparation, staining and examination of bone-marrow smears
	2nd	Principle, procedure clinical importance,reference value of Clotting time		
	3rd	Principle, procedure clinical importance,reference value of CRT		
8th	1st	Principle, procedure clinical importance,reference value of Hess test	7th	Demonstration of Preparation, staining and examination of bone-marrow smears
		Bone - Marrow		
	2nd	Composition and function of bone- marrow		
9th	3rd	Aspiration of bone- marrow by various methods	7th	Demonstration of Preparation, staining and examination of bone-marrow smears
	1st	preparation, staining and examination of bone-marrow smears for myclogram including M.E. Ratio		
	2nd	Iron staining (Perls' reaction)		
	3rd	Significance of bone- marrow examination		

		Leukemia		
10th	1st	Definition of leukemias	8th	Demonstration of Preparation, staining and examination of bone-marrow smears
	2nd	Definition of leukemias		
	3rd	Definition of leukemias		
11th	1st	(FAB) Classification	9th	Demonstration of Laboratory diagnosis of various leukemias
	2nd	(FAB) Classification		
	3rd	(FAB) Classification		
12th	1st	(FAB) Classification	10th	Demonstration of LE Cell
	2nd	(FAB) Classification		
	3rd	Laboratory diagnosis of various leukemias		
13th	1st	Laboratory diagnosis of various leukemias	11th	Cell counts of biological fluids.
		LE Cell phenomenon		
	2nd	Phenomenon of LE cell, its differentiation from tart cell		
14th		Demonstration of LE cell by various methods	12th	Semen analysis
	1st	Clinical significance		
		Semen Analysis in detail		
15th	2nd	Semen Analysis in detail		
	3rd	Semen Analysis in detail		
		Cell counts of various biological fluids		
16th	1st	Cell counts of various biological fluids		
	2nd	Cell counts of various biological fluids		
	3rd	Cell counts of various biological fluids		

JANTA COLLEGE OF PHARMACY,BUTANA(SONEPAT)

LESSON PLAN

Name of the Faculty	: Mrs. Reena
Discipline	: DMLT
Semester	: Fourth
Subject	: ENTREPRENEURSHIP DEVELOPMENT AND MANAGEMENT
Lesson Plan Duration	: 16 weeks(from 15 February,2024 to 14 June,2024)(According to Syllabus Scheme)

Work load(Lecture/Practical)per week(in hours) : Lectures-03(hr)

Week	Theory		Practical
	Lecture Day	Topic(Including assignment/test)	Practical Day
1st	1st	Entrepreneurship: Concept and definitions, classification (1st unit)	
	2nd	types of entrepreneurs, entrepreneurial competencies	
	3rd	Traits / Qualities of entrepreneurs, manager v/s entrepreneur, role of Entrepreneur	
2nd	1st	barriers in entrepreneurship, Sole proprietorship and partnership forms of business organisations	
	2nd	small business vs startup, critical components for establishing a start-up	
	3rd	Leadership: Definition and Need	
3rd	1st	Manager Vs leader, Types of leadership	
	2nd	Definition of MSME (micro, small and medium enterprises) (2nd unit)	
	3rd	significant provisions of MSME Act, importance of feasibility studies	
4th	1st	technical, marketing and finance related problems faced by new enterprises	
	2nd	major labor issues in MSMEs and its related laws	
	3rd	Obtaining financial assistance through various government schemes	
5th	1st	Prime Minister Employment Generation Program (PMEGP) Pradhan Mantri Mudra Yagna (PMMY)	
	2nd	Make in India, Start up India,Stand up India	
	3rd	National Urban Livelihood Mission (NULM); Schemes of assistance by entrepreneurial support agencies at National	
6th	1st	State, District level: NSIC, NRDC, DC:MSME	
	2nd	SIDBI, NABARD, Commercial Banks, SFC's TCO, KVIB, DIC	
	3rd	Technology Business Incubator (TBI) and Science and Technology Entrepreneur Parks (STEP)	
7th	1st	NATURE AND FUNCTIONS OF MANAGEMENT (3rd unit)	
	2nd	Definition, Nature of Management, Management as a Process, Management as Science and Art	
	3rd	Management Functions, Management and Administration, Managerial Skills	
8th	1st	Levels of Management; Leadership	
	2nd	PLANNING AND DECISION MAKING	
	3rd	Planning and Forecasting - Meaning and definition	
9th	1st	Features, Steps in Planning Process, Approaches, Principles, Importance	
	2nd	Advantages and Disadvantages of Planning, Types of Plans	
	3rd	Types of Planning, Management by Objective. Decision Making-Meaning, Characteristics	
10th	1st	ORGANISING AND ORGANISATION STRUCTURE (4th unit)	
	2nd	Organising Process - Meaning and Definition, Characteristics Process	
	3rd	Need and Importance, Principles, Span of Management	
11th	1st	Organisational Chart - Types, Contents, Uses	
	2nd	Limitations, Factors Affecting Organisational Chart	
	3rd	STAFFING: Meaning, Nature, Importance, Staffing process. Manpower Planning	
12th	1st	Recruitment, Selection, Orientation and Placement, Training, Remuneration	
	2nd	CONTROLLING AND CO-ORDINATION Controlling - Meaning, Features	
	3rd	Importance, Control Process, Characteristics of an effective control system	
13th	1st	Types of Control. Co-ordination - characteristics, essentials	
	2nd	Market Survey and Opportunity Identification (5th unit)	
	3rd	Scanning of business environment	
14th	1st	Assessment of demand and supply in potential areas of growth	
	2nd	Project report Preparation	
	3rd	Detailed project report including technical	
15th	1st	Detailed project report including technical	
	2nd	economic and market feasibility	
	3rd	economic and market feasibility	
16th	1st	Common errors in project report preparations	
	2nd	Exercises on preparation of project report	
	3rd	Exercises on preparation of project report	

JANTA COLLEGE OF PHARMACY, BUTANA (SONEPAT)

LESSON PLAN

Name of the Faculty : Mrs. Namarta Devi

Discipline : DMLT

Semester : 4th Sem (2nd year)

Subject : ENGLISH AND COMMUNICATION SKILLS - II

Lesson Plan Duration : 16 weeks (from 15 February, 2024 to 14 June, 2024) (According to Syllabus Scheme)

Work load (Lecture/Practical) per week (in hours) : Practicals-02 (hr)

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/test)	Practical Day	Topic
1st	1st	All The World's A Stage – W. Shakespeare (1st unit)	1st	Reading Practice of the above lessons in the Lab Activity classes.
	2nd	All The World's A Stage – W. Shakespeare		
	3rd	Life Sketch of Dr. Abdul Kalam		
2nd	1st	The Portrait of a Lady - Khushwant Singh	2nd	Comprehension exercises of unseen passages along with the given lessons
	2nd	The Portrait of a Lady - Khushwant Singh		
	3rd	The Doctor's Word by R K Narayan		
3rd	1st	Speech by Dr Kiran Bedi at IIM Indore 2007 Leadership Concepts	3rd	Vocabulary enrichment and grammar exercises based on the above selective readings
	2nd	Speech by Dr Kiran Bedi at IIM Indore 2007 Leadership Concepts		
	3rd	The Bet - by Anton Chekov		
4th	1st	The Bet - by Anton Chekov	4th	Situational Conversation: Requesting and responding to requests; Expressing sympathy and condolence.
	2nd	Effective Communication Skills (2nd unit)		
	3rd	Modern means of Communication (Video Conferencing, e-mail, Teleconferencing)		
5th	1st	Modern means of Communication (Video Conferencing, e-mail, Teleconferencing)	5th	Warning; Asking and giving information
	2nd	Effective Communication Skills: 7 C's of Communication		
	3rd	Effective Communication Skills: 7 C's of Communication		
6th	1st	Non-verbal Communication – Significance, Types	6th	Getting and giving permission
	2nd	Techniques for Effective Communication		
	3rd	Barriers and Effectiveness in Listening Skills		
7th	1st	Barriers and Effectiveness in Listening Skills	7th	Asking for and giving opinions
	2nd	Barriers and Effectiveness in Speaking Skills		
	3rd	Barriers and Effectiveness in Speaking Skills		
8th	1st	Professional Writing (3rd unit)	8th	A small formal and informal speech
	2nd	Correspondence: Enquiry letters, placing orders, complaint letters		
	3rd	Report Writing		

9th	1st	Memos	9th	Seminar & Debate
	2nd	Circulars		
	3rd	Press Release		
10th	1st	Inspection Notes and tips for Note-taking	10th	Unseen Comprehension Passages and vocabulary enhancement
	2nd	Corrigendum writing		
	3rd	Cover Letter		
11th	1st	Drawing inferences	11th	Interview Skills: Preparing for the Interview and guidelines for success in the Interview and significance of acceptable body-language during the Interview.
	2nd	Grammar and Vocabulary (4th unit)		
	3rd	Prepositions		
12th	1st	Conjunctions	12th	Written and Oral Drills will be undertaken in the class to facilitate a holistic linguistic competency among learners
	2nd	Punctuation		
	3rd	Idioms and Phrases		
13th	1st	Pairs of words (Words commonly misused and confused)	13th	Participation in a GD, Functional and Non-functional roles in GD, Case studies and Role plays.
	2nd	Translation of Administrative and Technical Terms in Hindi or Mother tongue		
	3rd	Employability Skills (5th unit)		
14th	1st	Presentation Skills: How to prepare and deliver a good presentation	14th	Presentations, using audio-visual aids (including power-point).
	2nd	Telephone Etiquettes		
	3rd	Importance of developing employable and soft skills		
15th	1st	Importance of developing employable and soft skills	15th	Telephonic interviews, face to face interviews
	2nd	Resume Writing: Definition, Kinds of Resume		
	3rd	Difference between Bio-data and Curriculum Vitae		
16th	1st	Preparing a Resume for Job/ Internship	16th	Presentations as Mode of Communication: Persuasive Presentations using multi-media aids.
	2nd	Group discussions: Concept and fundamentals of GD		
	3rd	learning Group Dynamics, Case Studies and Role Plays		

JANTA COLLEGE OF PHARMACY, BUTANA (SONEPAT) 021

LESSON PLAN

Name of the Faculty	: Mrs. Poonam Rani
Discipline	: DMLT
Semester	: Fourth
Subject	: ANALYTICAL CLINICAL BIOCHEMISTRY
Lesson Plan Duration	: 16 weeks (from 15 February, 2024 to 14 June, 2024) (According to Syllabus Scheme)
Work load (Lecture/Practical) per week (in hours)	: Lectures-03(hr), Practicals-02(hr)

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/test)	Practical Day	Topic
		Urine Analysis (1st unit)		
1st	1st	Normal composition of urine	1st	Analysis of urine for glucose
	2nd	Clinical importance of urine analysis		
	3rd	Qualitative analysis of proteins		
2nd	1st	Qualitative analysis of Sugar	2nd	Analysis of urine for bilirubin.
	2nd	Qualitative analysis of bile salts, bile pigments		
	3rd	Qualitative analysis of urobilinogen		
3rd	1st	Qualitative analysis of blood	3rd	Analysis of urine for proteins.
	2nd	Detailed discussion on glycosuria and albuminuria		
	3rd	Detailed discussion on glycosuria and albuminuria		
4th	1st	Ketone bodies	4th	Detection of ketone bodies in urine.
	2nd	Qualitative analysis of Sugar		
	3rd	Qualitative analysis of Sugar		
5th	1st	Urea clearance Test	5th	Detection of urinary creatinine.
	2nd	Urea clearance Test		
	3rd	Creatinine clearance test		
6th	1st	Creatinine clearance test	6th	Urea clearance test.
	2nd	Clinical significance of Renal Function Test (RFT)		
	3rd	Stool Chemistry (3rd unit)		
7th	1st	Physical characteristics and chemical composition of stool	7th	Creatinine clearance test.
	2nd	Physical characteristics and chemical composition of stool		
	3rd	Physical characteristics and chemical composition of stool		
8th	1st	Significance of presence of blood and excess fat in stool	8th	Occult blood test for stool specimen
	2nd	Significance of presence of blood and excess fat in stool		
	3rd	Occult blood detection		
9th	1st	Electrophoresis and Chromatography (4th unit)	9th	Occult blood test for stool specimen
	2nd	Theory		
	3rd	Principle and procedure of paper electrophoresis		

10th	1st	Principle and procedure of Gel electrophoresis	10th	Fecal fat test
	2nd	Clinical significance / applications of Electrophoresis		
	3rd	Types of Electrophoresis		
		Chromatography		
11th	1st	Theory of Chromatography	11th	Fecal fat test
	2nd	Separation between stationary and mobile phases		
	3rd	Principle and procedure of paper chromatography		
		Importance of Chromatography		
12th	1st	Clinical significance / applications of Chromatography	12th	Demonstration of electrophoresis.
	2nd	Thyroid function tests and Automation in Biochemistry (5th unit)		
	3rd	Automation in Biochemistry		
13th	1st	Definition and introduction of auto analyzers in clinical biochemistry	13th	Demonstration of electrophoresis.
	2nd	Definition and introduction of auto analyzers in clinical biochemistry		
	3rd	Classification and types of Auto analyzers		
14th	1st	Classification and types of Auto analyzers	14th	Demonstration of chromatography.
	2nd	Thyroid function tests		
	3rd	Clinical importance of T3,T4 and TSH		
15th	1st	Clinical Significance of T3, T4 and TSH	15th	Anti-Thyroid Peroxidase (TPO) Test
	2nd	Anti-Thyroid Peroxidase (TPO) Test		
	3rd	Anti-Thyroid Peroxidase (TPO) Test		
16th	1st	Free Thyroid Profile Tests (Free T3, T4 and TSH Test)	16th	Thyroid Profile Tests
	2nd	Free Thyroid Profile Tests (Free T3, T4 and TSH Test)		
	3rd	Free Thyroid Profile Tests (Free T3, T4 and TSH Test)		