NAME OF FACULTY : MR RAJESH KUMAR / MR. MANISH SARSWAT
DISCIPLINE : DMLT
SEMESTER : 4TH
SUBJECT : HISTOPATHOLOGY & CYTOLOGY II (121944)

WEEK	LECTURE DAY	THEORY TOPIC	PRACTICAL DAY	PRACTICAL TOPIC
1 st	1 st	Principles of light microscope Various parts of microscope	1 st	Demonstration of various parts of light microscope (Mechanical & Optical
	2 nd	Uses of microscope		
	3rd	Various parts of microscope		
2 nd	4 th	Various parts of microscope	2 nd	Demonstration of cryostat
	5 th	Polarizing microscopy		
	6 th	Dark field microscopy		
3 rd	7th	Phase contrast microscopy	3 rd	Processing of tissue for frozen section
	8th	Fluorescent microscopy		
	9th	Electron microscopy		
4th	10th	Special stains Principle, significance and interpretation	4 th	Staining and mounting of frozen section using H&E stain (rapid method)
	11th	PAS (Periodic Acid Schiff's Reagent)		
	12th	Silver impergnation stain – Reticulin fibre		
5th	13th	Ziehl Neelson's – for AFB and Leprae	5 th	Staining and mounting of frozen section using Oil Red "O".
	14th	Masson's trichrome stain		
	15th	Oil Red O – fat		
6th	16th	Gram's stain – Gram +ve and Gram –ve	6 th	Preparation of various mounting reagents for museum specimens
	17th	Test		
	18th	Process of decalcification		
7th	19th	Various types of decalcifying methods	7 th	USES of various mounting reagents for museum specimens

	20th	Their mechanism, advantage, disadvantage Decalcification		
	21st	applicationsof Decalcification		
8th	22nd	Assessment of decalcification	8 th	Demonstration and care of autopsy instruments
	23rd	Reception and processing of frozen tissue		
	24th	Freezing microtome and cryostat		
9th	25th	Advantages and dis-advantages of freezing microtome and cryostat	9 th	Demonstration of malignant cell
	26th	Working, care, maintenance of freezing microtome and cryostat		
	27th	Frozen section cutting		
10 th	28th	Staining Rapid H&E Fat stain	10 th	Preparation of dry smear
	29th	Mounting of frozen section		
	30th	Introduction to museum importance of museum		
11 th	31st	Reception, fixation and processing of various museum specimens Cataloguing of museum specimen	11 th	Preparation of WET smear
	32nd	Introduction to autopsy technique		
	33rd	Use of autopsy		
12 th	34th	Malignant Cell's Characteristics	12 th	Introduction of Pap smear
	35th	Differences from normal cell		
	36th	Importance of HCG 8.2. Use of Harmonal Assessment		
13 th	37th	Principle of FNAC Indications of FNAC	13 th	To perform Pap stain
	38th	Uses of FNAC		
	39th	Staining Techniques PAP Stain, MGG stain		
14 th	40th	CLASS TEST	14 th	CLASS TEST
	41st	H&E stain		
	42nd	Principle, Technique & Interpretation of PAS stain		

15 th	43rd	Zeihl Neelson's(ZN) Stain (AFB)	15 th	Fixation of smears and staining with MGG
	44th	CLASS TEST		
	45th	Automation in Cytology, Use of Cytospin		

NAME OF FACULTY : MR RAJESH KUMAR / MS. SMRITI JATANA
DISCIPLINE : DMLT
SEMESTER : 4TH
SUBJECT : MEDICAL LABORATORY MANAGEMENT (121946)

WEEK	LECTURE DAY	THEORY TOPIC
1 st	1 st	Introduction, Layout, Facility of clinical Laboratory Role of medical laboratory technology in total health care
	2 nd	Role of medical laboratory technology in total health care
	3rd	Principles of management
2 nd	4 th	Principles of management
	5 th	techniques of planning
	6 th	techniques of planning
3 rd	7th	physical facilities/equipments – layout and design
	8th	physical facilities/equipments – layout and design
	9th	Laboratory Organization and Layout Laboratory organization
4th	10th	Operation
	11th	Job description
	12th	Evaluation
5th	13th	Performance
	14th	Layout of clinical laboratories

	15th	Lay out of Blood Bank
6th	16th	Material Required Material management
	17th	Procurement
	18th	Financial resources, importing
7th	19th	Inventory, control and analysis
	20th	Inspection
	21st	Storage
8th	22nd	Quality Assurance Analytical control
	23rd	Internal quality assurance in clinical laboratories
	24th	External quality assurance in clinical laboratories
9th	25th	Precision
	26th	Accuracy
	27th	Standard deviation as per national standards
10 th	28th	CLASS TEST
	29th	Safety Precautions Safety measures in clinical laboratories microbiology
	30th	Safety measures in clinical laboratories biochemistry
11 th	31st	Safety measures in clinical laboratories histopathology and cytology
	32nd	Safety measures in clinical laboratories transfusion medicine
	33rd	Safety measures in clinical laboratories haematology
12 th	34th	Disposal of Biomedical waste
	35th	First Aid in Clinical Laboratory Acid burn/Alkali burn, Accidental trauma , Gas/Toxic inhalation, Spillage
	36th	Medical Ethics and Code of Conduct Ethics and code of conduct - legal aspects – confidentiality malpractice/ negligence
13 th	37th	legal implications, law suits

	38th	consumer protection and insurance for professional health hazards
	39th	Laboratory Equipment - Care and Maintenance
14 th	40th	Preventive maintenance
	41st	care of various laboratory equipment
	42nd	Role of Computer in Lab services
15 th	43rd	Storage and retrieval of laboratory data manually
	44th	Storage and retrieval of laboratory data with help of computers
	45th	Laboratory Accreditation – Introduction

NAME OF FACULTY : MISS. HIMANI AGARWAL / MR. RAMDHARI
DISCIPLINE : DMLT
SEMESTER : 4TH
SUBJECT : CLINICAL BIOCHEMISTRY-IV (121943)

WEEK	LECTURE DAY	THEORY TOPIC	PRACTICAL DAY	PRACTICAL TOPIC
1 st	1 st	Urine Analysis Normal composition of urine and Clinical importance of urine analysis	1 st	Quantitative Analysis of urine for sugar and proteins
	2 nd	Qualitative analysis of proteins and sugar		
	3rd	Qualitative analysis of bile salts and bile pigments		
2 nd	4 th	Qualitative analysis of of urobilinogen	2 nd	Qualitative Analysis of urine for sugar and proteins
	5 th	Qualitative analysis of of blood		
	6 th	Detailed discussion on glycosuria		
3 rd	7th	Detailed discussion on albminuria	3 rd	Detection of ketone bodies in urine
	8th	Ketone Bodies		
	9th	Urinary electrolyte estimation of sodium (Na)		
4th	10th	Urinary electrolyte estimation of Potassium (K)	4 th	Detection of haematuria
	11th	Urinary electrolyte estimation of Chloride (Cl)		
	12th	Stool Chemistry Physical Proprties and Chemical Composition of Stool		
5th	13th	Significance of presence of blood in Stool	5 th	Detection of bile pigments, bile salts
	14th	Significance of presence of excess fat in Stool		
	15th	Occult blood detection		
6th	16th	CLASS TEST	6 th	Detection of urobilinogen
	17th	Cereberospinal Fluid: Composition and Functions		
	18th	Determination of Proteins in CSF Reference Value and Clinical Significance		
7th	19th	Determination of Sugar in CSF Reference Value and Clinical Significance	7 th	Occult blood test for stool specimen

	20th	Determination of Chloride in CSF Reference Value and Clinical Significance		
	21st	Biological Fluids: Formation and Compositin of Peritoneal Fluid		
8th	22nd	Formation and Composition of Pleural Fluid	8 th	Estimation of glucose in CSF
	23rd	Formation and Composition of Synovial Fluid		
	24th	Formation and Composition of Ascites Fluid		
9th	25th	Clinical Importance of Biological Fluids.	9 th	Estimation of total proteins in CSF
	26th	Electrophoresis: Principle and Procedure of Paper Electrophoresis		
	27th	Principle and Procedure of Gel Electrophoresis		
10 th	28th	Elution Method	10 th	Estimation of globulins in CSF
	29th	Clinical Importance of Electrophoresis		
	30th	Chromatography: Theory of Chromatography		
11 th	31st	Separation between Stationary and Mobile Phase	11 th	Estimation of chloride in CSF
	32nd	Principle and procedure of Paper chromatography		
	33rd	Importance of chromatography		
12 th	34th	Automation in Biochemistry: Classification of Auto analysers	12 th	Titration for acidity determination
	35th	Demonstration of Semi Auto Analyser		
	36th	Demonstration of Fully Auto Analyser		
13 th	37th	Thyroid function tests ELISA	13 th	Qualitative analysis of gastric juice
	38th	Estimation and Clinical Importance of T3		
	39th	Estimation and Clinical Importance of T4		
14 th	40th	Estimation and Clinical Importance of TSH	14 th	Demonstration of electrophoresis (Paper electrophoresis)
	41st	Introduction to Tumor markers		
	42nd	Tumor markers		

15 th	43rd	Tumor markers	15 th	Demonstration of chromatography (Paper chromatography)
	44th	Discussion of Important Questions		
	45th	CLASS TEST		

NAME OF FACULTY : MISS. HIMANI AGARWAL / MR. KRISHAN KUMAR
DISCIPLINE : DMLT
SEMESTER : 2nd
SUBJECT : CLINICAL BIOCHEMISTRY-II (121925)

WEEK	LECTURE DAY	THEORY TOPIC	PRACTICAL DAY	PRACTICAL TOPIC
1 st	1 st	Blood glucose sugar estimation,screening test and glucose tolerance test (GTT) Metabolism of Glucose	1 st	Preparation of reagents (stock and working)
	2 nd	Metabolism of Glucose		
	3rd	Principle and Procedure of estimation of Glucose		
2 nd	4 th	Reference values and Clinical Significance	2 nd	Demonstration of Estimation of blood glucose/sugar (Folin-Wu method)
	5 th	Renal Threshold		
	6 th	Importance of ST/GTT		
3 rd	7th	Pocedure of ST/GTT	3 rd	Performance of Estimation of blood glucose/sugar (Folin-Wu method)
	8th	Clinical Importance of Blood Sugar, ST/GTT		
	9th	Blood urea Formation of Urea		
4th	10th	Excretion of Urea	4 th	Demonstration of Estimation of blood glucose/sugar (O-toluidine method)
	11th	Principle and procedures of different methods of urea estimation		
	12th	Principle and procedures of different methods of urea estimation		

5th	13th	Reference values and Clinical Importance of Blood Urea estimation	5 th	Performance of Estimation of blood glucose/sugar (O-toluidine method)
	14th	Serum Creatnine: Introduction		
	15th	Principle and procedure of various estimation methods of Creatinine		
6th	16th	Principle and procedure of various estimation methods of Creatinine	6 th	Demonstration of Estimation of blood glucose/sugar (GOD-POD Enzymatic Method)
	17th	Reference values and Clinical importance of Creatinine estimation		
	18th	Serum proteins: Introduction		
7th	19th	Different methods of estimation including principles and procedures	7 th	Performance of Estimation of blood glucose/sugar (GOD-POD Enzymatic Method)
	20th	Different methods of estimation including principles and procedures		
	21st	Reference Values and Clinical Importance of Serum Proteins		
8th	22nd	CLASS TEST	8 th	Performance of ST/GTT
	23rd	Electrolytes and trace elements: Introduction		
	24th	Principles and procedures of estimation of Na		
9th	25th	Reference Values and Clinical Importance of Na	9 th	Serum urea estimation
	26th	Principles and procedures of estimation of K		
	27th	Reference Values and Clinical Importance of K		
10 th	28th	Principles and procedures of estimation of Cl	10 th	Serum creatnine estimation
	29th	Reference Values and Clinical Importance of Cl		
	30th	Uric Acid: Introduction		
11 th	31st	Principles and procedures of various estimation methods	11 th	Serum uric acid estimation
	32nd	Principles and procedures of various estimation methods		
	33rd	Reference values and Clinical Importance of Uric Acid estimation		
12 th	34th	CLASS TEST	12 th	Plasma and serum protein estimation
	35th	Quality Assurance in Biochemistry as per National Standards		

		Introduction of Quality Control		
	36th	Internal quality assurance		
13 th	37th	Internal quality assurance	13 th	Estimation of electrolyte levels of Na+ by colorimetric method
	38th	External quality assurance		
	39th	External quality assurance		
14 th	40th	Discussion of Important Questions Unit 1	14 th	Estimation of electrolyte levels of K+ by colorimetric method
	41st	Discussion of Important Questions Unit 2		
	42nd	Discussion of Important Questions Unit 3		
15 th	43rd	Discussion of Important Questions Unit 4	15 th	Estimation of electrolyte levels of Cl- by colorimetric method
	44th	Discussion of Important Questions Unit 5		
	45th	Discussion of Important Questions Unit 6		

NAME OF FACULTY : MR. MANOJ / MR. SANJAY
DISCIPLINE : DMLT
SEMESTER : 4TH
SUBJECT : CLINICAL MICROBIOLOGY-IV (121941)

WEEK	LECTURE DAY	THEORY TOPIC	PRACTICAL DAY	PRACTICAL TOPIC
1 st	1 st	Mycology Characteristics of medically important fungi	1 st	Preparation of different culture media used in mycology Sabouraud's dextrose agar with and without antibiotics
	2 nd	classification of medically important fungi		
	3rd	classification of medically important fungi		
2 nd	4 th	Fungal Culture media SDA (Sabouraud's dextrose agar) with and without antibiotics	2 nd	Corn meal agar
	5 th	CMA (Corn meal aga		
	6 th	BHI (Brain Heart Infusion)		
3 rd	7th	Collection and processing of sample for fungal infection in Skin KOH preparation, LCB (Lactophenol cotton blue), India ink	3 rd	BHI (Brain, Heart Infusion)
	8th	Collection and processing of sample for fungal infection in Nail KOH preparation, LCB (Lactophenol cotton blue), India ink		
	9th	Collection and processing of sample for fungal infection in Hair KOH preparation, LCB (Lactophenol cotton blue), India ink		
4th	10th	Fungal Cultivation Medicaly important fungi - Candida	4 th	Demonstration of wet mount techniques – KOH and LCB
	11th	Medicaly important fungi - Dermatophytes		
	12th	Laboratory Contaminants – Penicillium		
5th	13th	Laboratory Contaminants – Rhizopus	5 th	To study characteristics of common laboratory fungal contaminants
	14th	Laboratory Contaminants – Mucor		
	15th	Laboratory Contaminants – Aspergillus		
6th	16th	CLASS TEST	6 th	Collection and processing of samples for diagnosis of fungal infections in skin
	17th	Antigens Definition		
	18th	Types of Antigens		

7th	19th	Properties of Antigens	7 th	Collection and processing of samples for diagnosis of fungal infections in Hair
	20th	Antibodies Definition		
	21st	Types of Antibodies		
8th	22nd	Properties of Antibodies	8 th	Collection and processing of samples for diagnosis of fungal infections in Nail Scraping
	23rd	Antigen – Antibody Reactions Principle of agglutination reaction		
	24th	Applications of agglutination reaction		
9th	25th	Principle of precipitation reaction	9 th	To perform serological tests Widal test (Both slide and tube method)
	26th	Applications of precipitation reaction		
	27th	Principle of flocculation reaction		
10 th	28th	Applications of flocculation reaction	10 th	ASO titre
	29th	Serological tests Principle and technique of Widal - Tube method		
	30th	Interpretation of Widal - Tube method		
11 th	31st	Principle and technique of Widal - Titre slide method	11 th	CRP
	32nd	Interpretation of Widal - Titre slide method		
	33rd	Principle and technique of Anti streptolysin O		
12 th	34th	Interpretation of Anti streptolysin O	12 th	Rheumatoid factor
	35th	Principle and technique of C-reactive protein		
	36th	Interpretation of C-reactive protein		
13 th	37th	Principle and technique of VDRL/RPR	13 th	VDRL Test
	38th	Interpretation of VDRL/RPR		
	39th	Principle and technique of Rheumatoid factor (RF)		
14 th	40th	Interpretation of Rheumatoid factor (RF)	14 th	HIV Screening

	41st	Principle and technique of Direct ELISA		
	42nd	Applications of Direct ELISA		
15 th	43rd	Principle and technique of Indirect ELISA	15 th	HBsAg Screening
	44th	Applications of Indirect ELISA		
	45th	Discussion of Important Questions		

NAME OF FACULTY : MR. MANOJ / MR.RAJESH GODARA
DISCIPLINE : DMLT
SEMESTER : 2nd
SUBJECT : CLINICAL MICROBIOLOGY-II (121923)

WEEK	LECTURE DAY	THEORY TOPIC	PRACTICAL DAY	PRACTICAL TOPIC
1 st	1 st	Bacteriology General characteristics of bacteria - morphology, staining	1 st	Collection, transportation and processing including culture of Urine Sample
	2 nd	General characteristics of bacteria - culture, biochemical		
	3rd	Characteristics of Staphylococi		
2 nd	4 th	Distribution of Staphylococi	2 nd	Collection, transportation and processing including culture of Stool Sample
	5 th	Characteristics of Streptococci		
	6 th	Distribution of Streptococci		
3 rd	7th	Characteristics of pneumococci	3 rd	Collection, transportation and processing including culture of Sputum Sample
	8th	Distribution of pneumococci		
	9th	Characteristics of Enterobacteriacae - (E coli)		
4th	10th	Distribution of Enterobacteriacae - (E coli)	4 th	Collection, transportation and processing including culture of Throat swabs Sample
	11th	Characteristics of Enterobacteriacae - (Salmonella)		

	12th	Distribution of Enterobacteriacae - (Salmonella)		
5th	13th	Characteristics ofEnterobacteriacae - (Shigella)	5 th	Collection, transportation and processing including culture of Pus and Pus swab Sample
	14th	Distribution ofEnterobacteriacae - (Shigella)		
	15th	Characteristics of Pseudomonas		
6th	16th	Distribution of Pseudomonas	6 th	Collection, transportation and processing including culture of Pus and Pus swab Sample
	17th	Characteristics of Proteus		
	18th	Distribution of Proteus		
7th	19th	Characteristics of Vibrio Cholerae	7 th	Collection, transportation and processing including culture of Blood Sample
	20th	Distribution of Vibrio Cholerae		
	21st	Characteristics of Neisseria		
8th	22nd	Distribution of Neisseria	8 th	Collection, transportation and processing including culture of Skin Sample
	23rd	Characteristics of Treponema Pallidium		
	24th	Distribution of Treponema Pallidium		
9th	25th	Characteristics of Mycobacterium tuberculosis	9 th	Collection, transportation and processing including culture of Eye and Ear swab Sample
	26th	Distribution of Mycobacterium tuberculosis		
	27th	Bacterial pathogenicity Introduction of pathogenicity & infection		
10 th	28th	Sources of infection	10 th	Collection, transportation and processing including culture of Eye and Ear swab Sample
	29th	Mode of spread of infection		
	30th	Mode of spread of infection		
11 th	31st	Types of infection	11 th	Collection, transportation and processing including culture of CSF Sample
	32nd	Types of infection		
	33rd	CLASS TEST		

12 th	34th	Nosocomial Infection Introduction	12 th	Collection, transportation and processing including culture of CSF Sample
	35th	Common types of nosocomial infection		
	36th	Common source of nosocomial infection		
13 th	37th	Control of nosocomial infections	13 th	Identification of known bacterial cultures of common pathogens
	38th	Laboratory diagnosis of infectious diseases Respiratory tract infections (Throat Swab and Sputum sample)		
	39th	Respiratory tract infections (Throat Swab and Sputum sample)		
14 th	40th	Wound infections	14 th	Identification of known bacterial cultures of common pathogens
	41st	Urinary tract infections		
	42nd	Enteric fever		
15 th	43rd	Intestinal infection	15 th	Identification of known bacterial cultures of common pathogens
	44th	Discussion of Important Questions		
	45th	CLASS TEST		

NAME OF FACULTY : Mr. SUDHANSHU PANDEY / MR. RAJESH GODARA
DISCIPLINE : DMLT
SEMESTER : 4TH
SUBJECT : HAEMATOLOGY - IV (121942)

WEEK	LECTURE DAY	THEORY	PRACTICAL DAY	PRACTICAL
		TOPIC		TOPIC
1 st	1 st	Introduction to normal haemostasis Theories of blood coagulation	1 st	Demonstration of Determination of bleeding time by Ivy's and Dukes method
	2 nd	Platelets and their role in haemostasis including count		
	3rd	Bleeding disorders and related diseases		
2 nd	4 th	Bleeding disorders and related diseases	2 nd	Performance of Determination of bleeding time by Ivy's and Dukes method
	5 th	Principles and methods of prothrombin time		
	6 th	Clinical importance and reference values of prothrombin time		
3 rd	7th	Principles and methods of prothrombin time index (PTI)	3 rd	Demonstration of Determination of clotting time by Lee and White method
	8th	Clinical importance and reference values of prothrombin time index (PTI)		
	9th	Principles and methods of APTT		
4th	10th	Clinical importance and reference values of APTT	4 th	Performance of Determination of clotting time by Lee and White method
	11th	Principles and methods of Thrombin Time (TT)		
	12th	Clinical importance and reference values of Thrombin Time (TT)		
5th	13th	Principles and methods of bleeding time (BT)	5 th	Determination of prothrombin time, index
	14th	Clinical importance and reference values of bleeding time (BT)		
	15th	Principles and methods of Hess test		
6th	16th	Clinical importance and reference values of Hess test	6 th	Determination of INR (International Normalised Ratio)
	17th	Principles and methods of clotting time (CT)		
	18th	Clinical importance and reference values of clotting time (CT)		
7th	19th	Principles and methods of clot retraction test (CRT)	7 th	Demonstration of Determination of Activated Partial thrombo plastin time (APTT)
	20th	Clinical importance and reference values of clot retraction test (CRT)		

	21st	Bone – marrow Composition of bone-marrow		
8th	22nd	Function of Bone Marrow	8 th	Performance of Determination of Activated Partial thrombo plastin time (APTT)
	23rd	Aspiration of bone-marrow by various methods		
	24th	Aspiration of bone-marrow by various methods		
9th	25th	Preparation, staining and examination of bone-marrow smears for myclogram including M.E. Ratio	9 th	Demonstration of Hess test
	26th	Iron staining (Perls' reaction)		
	27th	Significance of bone-marrow examination		
10 th	28th	Leukemia Introduction	10 th	Demonstration of Clot retraction test
	29th	Definition of leukemias		
	30th	(FAB) Classification		
11 th	31st	(FAB) Classification	11 th	Performance of Clot retraction test
	32nd	Laboratory diagnosis of various leukemias		
	33rd	Laboratory diagnosis of various leukemias		
12 th	34th	Laboratory diagnosis of various leukemias	12 th	Demonstration of LE Cell
	35th	CLASS TEST		
	36th	Laboratory diagnosis of various leukemias		
13 th	37th	LE Cell phenomenon Phenomenon of LE cell	13 th	Cell counts of biological fluids
	38th	Its differentiation from tart cell		
	39th	Demonstration of LE cell by various methods		
14 th	40th	Clinical significance	14 th	Cell counts of biological fluids
	41st	Semen Analysis in detail		
	42nd	Semen Analysis in detail		
15 th	43rd	Cell counts of various biological fluids	15 th	Semen analysis

	44th	Cell counts of various biological fluids		
	45th	Discussion of Important Questions		

NAME OF FACULTY : Mr. SUDHANSHU PANDEY / MS. SMRITI JATANA
DISCIPLINE : DMLT
SEMESTER : 2nd
SUBJECT : HAEMATOLOGY - II (121924)

WEEK	LECTURE DAY	THEORY TOPIC	PRACTICAL DAY	PRACTICAL TOPIC
1 st	1 st	Haemoglobinometery Introduction and Functions of Haemoglobin	1 st	Preparation of peripheral blood film.
	2 nd	Formation of haemoglobin		
	3rd	Formation of haemoglobin		
2 nd	4 th	Degradation of haemoglobin	2 nd	Preparation and standardization of leishman stain
	5 th	Degradation of haemoglobin		
	6 th	Types of haemoglobin		
3 rd	7th	Types of haemoglobin	3 rd	Preparation and standardization of giemsa stain
	8th	Various methods of estimation with specific reference to cyanmethaemoglobin method		
	9th	Various methods of estimation with specific reference to cyanmethaemoglobin method		
4th	10th	Various methods of estimation with specific reference to cyanmethaemoglobin method	4 th	Preparation of thick and thin blood smear
	11th	Haemocytometery Introduction		
	12th	Various counting chambers		
5th	13th	Methods of counting of RBC	5 th	Haemoglobin Estimation by Sahli's method
	14th	Methods of counting of RBC		
	15th	Calculation and reference values of RBC		

6th	16th	Methods of coun ng of WBC	6 th	Haemoglobin Estimation by Oxy-Haemoglobin method
	17th	Methods of coun ng of WBC		
	18th	Calculation and reference values of WBC		
7th	19th	Methods of counting of Platelets	7 th	Haemoglobin Estimation by Cyanmethaemoglobin method
	20th	Methods of counting of Platelets		
	21st	Calculation and reference values of Platelets		
8th	22nd	Errors involved in haemocytometery	8 th	Counting of RBC
	23rd	Errors involved in haemocytometery		
	24th	Means to minimize errors		
9th	25th	CLASS TEST	9 th	Counting of WBC
	26th	Differential leucocyte counting (DLC) Introduction		
	27th	Preparation and staining of blood film		
10 th	28th	Performance of DLC	10 th	Platelet counting
	29th	Normal values and significance of DLC		
	30th	Blood cell morphology in health and disease (Peripheral blood film)		
11 th	31st	Quality Assurance Introduction	11 th	Absolute eosinophil counting
	32nd	Quality Assurance in haematology such as accuracy		
	33rd	Quality Assurance in haematology such as accuracy		
12 th	34th	Quality Assurance in haematology such as precision	12 th	Study of morphology of normal RBC and WBC with the help of stained slide
	35th	Quality Assurance in haematology such as precision		
	36th	Automation in haematology Introduction		
13 th	37th	Various types of Blood cell counter	13 th	To study abnormal morphology of RBC with the help of stained slide
	38th	Various types of Blood cell counter		

	39th	Principle and operation of the automated blood cell counters		
14 th	40th	Principle and operation of the automated blood cell counters	14 th	To study abnormal morphology of WBC with the help of stained slide
	41st	Discussion of Important Questions Unit 1		
	42nd	Discussion of Important Questions Unit 2		
15 th	43rd	Discussion of Important Questions Unit 3	15 th	To study abnormal morphology of platelet with the help of stained slide
	44th	Discussion of Important Questions Unit 4		
	45th	Discussion of Important Questions Unit 5		

NAME OF FACULTY : MISS. ARTI
DISCIPLINE : DMLT
SEMESTER : 4TH
SUBJECT : EMPLOYABILITY SKILLS-II

WEEK	PRACTICAL DAY	PRACTICAL TOPIC
1 st	1 st	Oral Practice Mock interview
2 nd	2 nd	Mock interview
3 rd	3 rd	Preparing for meeting
4th	4 th	Preparing for meeting
5th	5 th	Group discussion
6th	6 th	Group discussion
7th	7 th	Seminar presentation
8th	8 th	Seminar presentation
9th	9 th	Making a presentation Elements of good presentation
10 th	10 th	Elements of good presentation
11 th	11 th	Structure and tools of presentation
12 th	12 th	Structure and tools of presentation
13 th	13 th	Paper reading
14 th	14 th	Power point presentation
15 th	15 th	Power point presentation

NAME OF FACULTY : MISS. ARTI
DISCIPLINE : DMLT
SEMESTER : 2nd
SUBJECT : ENGLISH LANGUAGE (170021)

WEEK	LECTURE DAY	THEORY TOPIC	PRACTICAL DAY	PRACTICAL TOPIC
1 st	1 st	Grammar and Usage Prepositions	1 st	Listening Comprehension
	2 nd	Prepositions		
	3rd	Pronouns		
2 nd	4 th	Pronouns	2 nd	Locating Main Ideas in a Listening Excerpt , Note-taking
	5 th	Determiners		
	6 th	Determiners		
3 rd	7th	Conjunctions	3 rd	Developing Oral Communication Skills
	8th	Conjunctions		
	9th	Question and Question Tag		
4th	10th	Question and Question Tag	4 th	Offering-Responding to Offers
	11th	Simple Present Tense		
	12th	Simple Present Tense		
5th	13th	Simple Past Tense	5 th	Requesting-Responding to Requests , Congratulating
	14th	Simple Past Tense		
	15th	Practice Sheet		
6th	16th	Reading Skills Unseen comprehension passage 1	6 th	Expressing Sympathy and Condolences , Expressing Disappointments
	17th	Questions Practice of Passage 1		
	18th	Unseen comprehension passage 2		
7th	19th	Questions Practice of Passage 2	7 th	Asking Questions-Polite Responses

	20th	Unseen comprehension passage 3		
	21st	Questions Practice of Passage 3		
8th	22nd	Unseen comprehension passage 4	8 th	Apologizing, Forgiving
	23rd	Questions Practice of Passage 4		
	24th	Unseen comprehension passage 5		
9th	25th	Questions Practice of Passage 5	9 th	Complaining
	26th	Unseen comprehension passage 6		
	27th	Questions Practice of Passage 6		
10 th	28th	Unseen comprehension passage 7	10 th	Persuading
	29th	Questions Practice of Passage 7		
	30th	Writing Skills Writing Notice		
11 th	31st	Writing Notice	11 th	Warning
	32nd	Writing Circular		
	33rd	Writing Circular		
12 th	34th	Writing a Memo	12 th	Asking for and Giving Information
	35th	Writing a Memo		
	36th	Agenda for a Meeting		
13 th	37th	Agenda for a Meeting	13 th	Giving Instructions
	38th	Minutes of the Meeting		
	39th	Minutes of the Meeting		
14 th	40th	Telephonic Messages	14 th	Getting and Giving Permission
	41st	Telephonic Messages		
	42nd	Paragraph writing: Simple and Current Topics should be covered		

15 th	43rd	Paragraph writing: Simple and Current Topics should be covered	15 th	Asking For and Giving Opinions
	44th	Discussion of important Questions		
	45th	Discussion of important Questions		

NAME OF FACULTY : Miss. DIKSHA / MR. KRISHAN KUMAR
DISCIPLINE : DMLT
SEMESTER : 4TH
SUBJECT : ENVIRONMENTAL EDUCATION (121945)

WEEK	LECTURE DAY	THEORY TOPIC
1 st	1 st	Definition and Scope of Environmental Education
	2 nd	Importance of Environmental Education
	3rd	Basics of ecology and biodiversity
2 nd	4 th	Basics of eco system
	5 th	Basics of sustainable development
	6 th	Sources of pollution - natural , manmade
3 rd	7th	Causes, effects and control measures of pollution air
	8th	Causes, effects and control measures of pollution water
	9th	Causes, effects and control measures of pollution noise
4th	10th	Causes, effects and control measures of pollution soil
	11th	Causes, effects and control measures of pollution radioactive
	12th	Causes, effects and control measures of pollution nuclear
5th	13th	Their units of measurement
	14th	Solid waste management Causes, effects and control measures of urban waste
	15th	Causes, effects and control measures of urban waste
6th	16th	Causes, effects and control measures of industrial waste
	17th	Causes, effects and control measures of industrial waste
	18th	Mining and deforestation Causes
7th	19th	Effects
	20th	Control measures

	21st	Environmental Legislation Water (prevention and control of pollution) Act 1974
8th	22nd	Water (prevention and control of pollution) Act 1974
	23rd	Air (Prevention and Control of Pollution) Act 1981
	24th	Air (Prevention and Control of Pollution) Act 1981
9th	25th	Environmental Protection Act 1986
	26th	Environmental Protection Act 1986
	27th	Role and Function of State Pollution Control Board
10 th	28th	Role and Function of State Pollution Control Board
	29th	Environmental Impact Assessment (EIA)
	30th	Environmental Impact Assessment (EIA)
11 th	31st	Role of Non-conventional Energy Resources Solar Energy
	32nd	Wind Energy
	33rd	Bio Energy
12 th	34th	Hydro Energy
	35th	Current Issues in Environmental Pollution Global Warming
	36th	Green House Effect
13 th	37th	Depletion of Ozone Layer
	38th	Recycling of Material
	39th	Environmental Ethics
14 th	40th	Rain Water Harvesting
	41st	Maintenance of Groundwater
	42nd	Acid Rain
15 th	43rd	Carbon Credits

	44th	Discussion of Important Questions
	45th	CLASS TEST

NAME OF FACULTY : MR. RAJESH
DISCIPLINE : DMLT
SEMESTER : 2nd
SUBJECT : ORGANIC CHEMISTRY (121926)

WEEK	LECTURE DAY	THEORY TOPIC	PRACTICAL DAY	PRACTICAL TOPIC
1 st	1 st	Organic chemistry Introduction and importance of organic compounds	1 st	Iodometric titrations
	2 nd	Comparison of organic and inorganic compounds Properties of carbon and Hydrogen		
	3rd	IUPAC Nomenclature of organic compounds Hydrocarbons		
2 nd	4 th	Alcohols and Ethers	2 nd	Iodometric titrations
	5 th	Aldehydes and Ketones		
	6 th	Carboxylic Acids		
3 rd	7th	Hydrocarbons Preparation, properties and uses of saturated hydrocarbons	3 rd	Oxidation reduction titrations
	8th	Preparation, properties and uses of saturated hydrocarbons		
	9th	Preparation, properties and uses of unsaturated hydrocarbons		
4th	10th	Preparation, properties and uses of unsaturated hydrocarbons	4 th	Acid-base titrations
	11th	Sources of hydrocarbons		
	12th	Preparation, properties and uses of Halogen derivatives of hydrocarbons		
5th	13th	Preparation, properties and uses of Halogen derivatives of hydrocarbons	5 th	Acid-base titrations
	14th	Alcohols and ethers General introduction, classification of Methyl alcohol, Ethyl alcohol		
	15th	preparation , properties and uses of Methyl alcohol, Ethyl alcohol		
6th	16th	General introduction, classification of Glycerol and Diethyl ether	6 th	Demonstration of Estimation of carbohydrates by benedicts methods
	17th	preparation , properties and uses of Glycerol and Diethyl ether		
	18th	CLASS TEST		
7th	19th	Aldehydes and ketones	7 th	Performance of Estimation of carbohydrates by benedicts methods

		General introduction and classification of Methanal and ethanal		
	20th	properties and uses of Methanal and ethanal		
	21st	Amines: a) Structure of amines groups (primary, secondary and tertiary)		
8th	22nd	b) Important methods, preparation and properties of Amines	8 th	Revision of Estimation of carbohydrates by benedicts methods
	23rd	b) Important methods, preparation and properties of Amines		
	24th	Carboxylic Acids General Introduction of Methanoic acid and Ethanoic acid		
9th	25th	classification of Methanoic acid and Ethanoic acid	9 th	Demonstration of Estimation of proteins by acitic acid & Salphosalicylic acid test
	26th	preparation of Methanoic acid and Ethanoic acid		
	27th	properties of Methanoic acid and Ethanoic acid		
10 th	28th	uses of Methanoic acid and Ethanoic acid	10 th	Performance of Estimation of proteins by acitic acid & Salphosalicylic acid test
	29th	Carbohydrates Definition , Composition, sources its importance		
	30th	Classification of Carbohydrates		
11 th	31st	Estimation of Carbohydrates	11 th	Revision of Estimation of proteins by acitic acid & Salphosalicylic acid test
	32nd	Important monosaccharides		
	33rd	Important disaccharides		
12 th	34th	Important polysaccharides	12 th	Demonstration of Estimation of lipids by direct method
	35th	Lipids Definition , Classification		
	36th	Introduction to fatty acids		
13 th	37th	Introduction to phospholipids	13 th	Performance of Estimation of lipids by direct method
	38th	Introduction to triglycerides,Cholesterol		
	39th	Clinical importance of lipids		
14 th	40th	Proteins Definition, Classification , Compositon , molecular weight and hydrolysis	14 th	Revision of Estimation of lipids by direct method
	41st	Name of various amino acids , Structure of proteins		

	42nd	properties of proteins and Clinical importance of proteins		
15 th	43rd	Enzymes Definition , Classification , Chemical nature of enzymes	15 th	Identification of Carbohydrate, Protein or Lipid in an unknown given sample
	44th	Properties of Enzymes , Factors affecting enzyme activity		
	45th	Clinical Importance of Enzymes		

NAME OF FACULTY : MR. MANOJ / MR. RAMDHARI
DISCIPLINE : DMLT
SEMESTER : 2nd
SUBJECT : ANATOMY AND PHYSIOLOGY - II (121922)

WEEK	LECTURE DAY	THEORY TOPIC	PRACTICAL DAY	PRACTICAL TOPIC
1 st	1 st	Nervous system Central nervous system (brain and spinal cord)	1 st	Study of various parts of nervous system - brain demonstration from mode
	2 nd	Central nervous system (brain and spinal cord)		
	3rd	Peripheral nervous system (cranial and spinal nerves)		
2 nd	4 th	Peripheral nervous system (cranial and spinal nerves)	2 nd	Study of various parts of nervous system - spinal cord demonstration from model
	5 th	The sense organs structure and functions of eye		
	6 th	structure and functions of ear		
3 rd	7th	structure and functions of tongue	3 rd	Study of structure of eye- demonstration from model
	8th	structure and functions of nose		
	9th	Muscular system Brief description of skeletal muscles		
4th	10th	Brief description of smooth muscles	4 th	Study of structure of ear - demonstration from model
	11th	Brief description of cardiac muscles		
	12th	Muscle fatigue		
5th	13th	Circulatory system Composition and functions of blood	5 th	Study of structural differences between skeletal, smooth and cardiac muscles (permanent mounts) through demonstration
	14th	Composition and functions of blood		
	15th	Anatomy and physiology of Heart		
6th	16th	Anatomy and physiology of Heart	6 th	Study of structural differences between skeletal, smooth and cardiac muscles (permanent mounts) through demonstration
	17th	Circulation of blood, Cardiac Cycle and Conducting System of Heart		
	18th	Circulation of blood, Cardiac Cycle and Conducting System of Heart		

7th	19th	The blood pressure	7 th	Study of structural differences between skeletal, smooth and cardiac muscles (permanent mounts) through demonstration
	20th	Arteries and viens- differences		
	21st	Lymph and lymphatic system		
8th	22nd	Lymph and lymphatic system	8 th	Study of various parts of circulatory system through demonstration
	23rd	Endocrine system Description of each endocrine gland its secretions and their effect on the body		
	24th	Description of each endocrine gland its secretions and their effect on the body		
9th	25th	Description of each endocrine gland its secretions and their effect on the body	9 th	Study of various parts of circulatory system through demonstration
	26th	Description of each endocrine gland its secretions and their effect on the body		
	27th	Description of each endocrine gland its secretions and their effect on the body		
10 th	28th	Description of each endocrine gland its secretions and their effect on the body	10 th	Examination of stained blood film for blood cells
	29th	Description of each endocrine gland its secretions and their effect on the body		
	30th	Description of each endocrine gland its secretions and their effect on the body		
11 th	31st	Reproductive System Male reproductive system	11 th	Estimation of blood pressure
	32nd	Male reproductive system		
	33rd	Female reproductive system		
12 th	34th	Female reproductive system	12 th	Study of various parts of reproductive system - male demonstration from models and charts)
	35th	The ovarian cycle and ovulation		
	36th	The ovarian cycle and ovulation		
13 th	37th	Fertilization	13 th	Study of various parts of reproductive system - male demonstration from models and charts)
	38th	Fertilization		
	39th	CLASS TEST		
14 th	40th	Discussion of important Questions of Unit 1	14 th	Study of various parts of reproductive system - Female demonstration from models and charts)

	41st	Discussion of Important Questions of Unit 2		
	42nd	Discussion of Important Questions of Unit 3		
15 th	43rd	Discussion of Important Questions of Unit 4	15 th	Study of various parts of reproductive system - Female demonstration from models and charts)
	44th	Discussion of Important Questions of Unit 5		
	45th	CLASS TEST		