Program Specific Learning Outcome

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Under Graduate

Phase I

PROGRAM SPECIFIC LEARNING OUTCOME – I MBBS (ANATOMY)

Sr.no	Learning outcome Knowledge	Assessment	Activity
1.	Describe the anatomy of female reproductive system, correlate the gross, microscopic and embryological aspects and their clinical significance Describe and discuss the	 Draw & label test Formative assessment on Google Classroom – scenario based MCQ Part completion test theory & practical's MCQ, BAQ, SAQ & LAQ Summative assessment 	 Lectures Early clinical exposure Demonstrations Self directed learning Seminar The Tubes
2.	structural & functional correlation of Microscopic anatomy of gastrointestinal tract.	 Draw & label test Formative assessment on Google Classroom scenario based MCQ Part completion test Weekly Spots MCQ, BAQ & SAQ Summative assessment 	 Lectures Briefing & demonstration on projecting microscope Weekly histology practicals Weekly histology quiz
3.	Describe the brachial plexus Formation, its branches and applied aspect. Describe the root value course & relations of nerves of upper limb and discuss the anatomical basis of nerve injuries.	 Formative assessment on Google Classroom Part completion test - – MCQ, BAQ, SAQ & LAQ OSPE Summative assessment 	 Lectures Team learning Problem based learning Briefing & demonstration Seminar Nerve injuries

4.	Describe the Morphology, Lymphatic drainage, Blood supply and applied anatomy of Mammary gland. Discuss the microscopic structure of lactating and nonlactating mammary gland.	 Formative assessment on Google Classroom Short answer question test Draw & label test Part completion test - – MCQ, BAQ, SAQ & LAQ OSPE Summative assessment 	 Lectures Problem based learning Early clinical exposure
5.	Describe the parts, attachments, ossification & applied aspect of bones of the Superior Extremity.	 Osteology test Part completion ostelogy viva OSPE Summative assessment 	 LCD Small group teaching & Demonstration Self directed learning

Sr.no	Learning outcome Knowledge	Assessment	Activity
6.	Describe the anatomy of Pluera, correlate the grossand embryological aspects and their clinical significance	 Draw & label test Formative assessment on Google Classroom MCQ, BAQ, SAQ OSPE Summative assessment 	 Lectures Early clinical exposure Problem based learning
7.	Describe and discuss theVeins of the inferior extremity . Discuss the varicose veins and its anatomical basis	 Formative assessment on Google Classroom BAQ , SAQ & LAQ OSPE Summative assessment 	 Lectures Early clinical exposure Problem based learning
8.	Describe & discuss the Anterior abdominal wall ,its layers , modifications & surgical anatomy. Describe the Inguinal canal and discuss the anatomical basis of inguinal hernia.	 Formative assessment on Google Classroom Part completion test OSPE Summative assessment 	 Lectures Problem based learning Early clinical exposure Dissection & demonstration

9.	Describe & discuss the development of Pharyngeal arches & face.Discuss the embryologicalbasis of developmental anomalies of face & pharyngeal arches.	 Formative assessment on Google Classroom Short answer question test Draw & label test MCQ, SAQ & BAQ 	 Lectures Problem based learning Embryology model discussion - SGT
10.	Describe & Discuss the gross features, Blood supply & embryology ofheart. Discuss the anatomical basis of cardiovascular disease.	 Formative assessment on Google Classroom Short answer question test Draw & label test MCQ, SAQ & BAQ 	 Lectures Problem based learning Early clinical exposure Dissection & demonstration Embryology model discussion - SGT
Sr.no	Learning outcome Skill	Assessment	Activity
1.	Describe the living anatomy of superior extremity & its clinical correlations.	VivaOSPE	 LCD Demo SGT SDL

PROGRAM SPECIFIC LEARNING OUTCOME – I MBBS (PHYSIOLOGY)

Sr.No	Learning Outcome	Learning Domain	Teaching Learning Methods	Assessment Methods
1	Describe the role various organs and organ systems in normal human body for maintaining homeostasis	Cognitive	Lectures, Small group discussions, Seminars.	Formative and Summative assessment. MCQ, BAQ, SAQ, LAQ & VIVA
2	Describe the pathophysiology of various diseases which occur due to failure of homeostatic mechanisms.	Cognitive	Lectures, Small group discussions, Seminars.	Formative and Summative assessment. MCQ, BAQ, SAQ, LAQ & VIVA
3	Explain the physiological basis of management of disease conditions which occurs due to failure of homeostatic mechanisms	Cognitive	Lectures, Small group discussions, Seminars.	Formative and Summative assessment. MCQ, BAQ, SAQ, LAQ & VIVA
4	Perform the various basic haematological investigations and interpret the normal findings	Cognitive & Psychomotor	DOAP, Small group discussions.	Practical examination, OSPE & VIVA
5	Perform and interpret the findings of clinical examination on normal human volunteers	Cognitive, Psychomotor & Communication skills	DOAP, Small group discussions.	Practical examination, OSPE & VIVA
6	Perform and interpret the findings of various investigations like, ECG, Spirometry, Stethograply. Ergography etc. on normal human volunteers.	Cognitive, Psychomotor & Communication skills	DOAP, Small group discussions	Practical examination, OSPE& VIVA
7	Interpret the findings of experiments on amphibian heart and nerve muscle using graphs and charts	Cognitive	Small group discussions	OSPE & VIVA
8	Perform the Basic Life Support effectively on manikin	Cognitive & Psychomotor skills	DOAP, Small group discussions	Practical examination, OSPE& VIVA

Learning Outcome Knowledge	Assessment	Activity
1. Explain the Biochemical basis of life	 Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ 	 Lectures Seminars Practicals Small group discussion
2. Describe the overview of different metabolism	 Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ Viva Log book 	LecturesPracticalsTutorials
3. Nutrition – Clinical significance	 Formative & Summative examination comprising of MCQ,BAQ,SAQ & LAQ Viva Practical examination OSPE 	 Small group learning & teaching Problem based discussion
 Understanding of molecular biology 	 Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ 	 Lectures Case based discussion Tutorials
5. Advance biochemistry and their role in diagnosis and management	 Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ OSPE 	 Lectures Seminars by students Case based discussion
Skills		
1. Biochemical lab investigation	Practical examinationLog book	 Small group learning and demonstration of procedure DOAP
 Collection & storage of different biological fluids. Exposure to biomedical waste & quality control in labs 	 Pre and post MCQ test OSPE	Case based discussion and interpretation of clinical scenario and lab tests
3. Qualitative and quantitative experiments	 Practical examination and viva 	• Demonstration of various tests and student performing

PROGRAM SPECIFIC LEARNING OUTCOME- I MBBS (BIOCHEMISTRY)

		under supervision
 Perform simple bedside tests on blood, urine and other biological fluid samples. 	 Practical examination Log book	• Small group learning on various biological samples.
5. Exposure to various instruments CCL	 Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ Viva 	 Lectures Integration with other departments

Phase II

PROGRAM SPECIFIC LEARNING OUTCOME- II MBBS (PHARMACOLOGY)

Learning Outcome Knowledge	Assessment	Activity
Describe Absorption, distribution, Metabolism, Excretion of drugs	 Formative & Summative examination, comprisingof MCQ,BAQ,SAQ & LAQ 	 Lectures Seminars Small group discussion
Describe principles of Pharmacovigilance &ADR reporting systems	 Formative & Summative examinationcomprising of MCQ,BAQ,SAQ & LAQ Viva Practical examination OSPE 	 Small group learning practical
Describe the mechanisms ofaction, types, doses, side effects, indications and contraindications of antihypertensive drugs and drugs used in shock	 Formative & Summative examination, comprisingof MCQ,BAQ,SAQ & LAQ 	 Lectures Case based discussion Tutorials
 4. Describe the mechanisms ofaction, types, doses, side effects, indications and contraindications of drugs used in hematological disorders like: 1. Drugs used in anemias 2. Colony stimulating factors 	 Formative & Summative examination, comprisingof MCQ,BAQ,SAQ & LAQ 	 Lectures Seminars by students Case based discussion
Describe the mechanism of action, types, doses, side effects, indications and contraindications of the drugs used in malaria, amebiasis and intestinal helminthiasis	Formative & Summative examination, comprisingof MCQ, BAQ, SAQ & LAQ	 Lectures Case based discussion Tutorials
Skills Demonstrate understanding of the use of various dosage forms (oral/local/parenteral: solid/liquid)	Skill assessment	 Small group learning DOAP session

Prepare oral rehydration solution from ORS packet andexplain its use.	Skill assessment	Small group learningDOAP session
Perform a critical evaluationof the drug promotional	• OSPE	Small group learning

Literature		
Communicate with the patientwith empathy and ethics on all aspects of drug use	Skill station	 Small group learning.
Administer drugs through various routes in a simulatedenvironment using mannequins	Skill assessment	DOAP session

Sr.No	Learning Outcome Knowledge	Assessment	Activity
1	Comprehend the Criminal Administration Justice System & Medical Jurisprudence.	Formative Assessment And Summative Assessment MCQ, SAQ, LAQ	- Lecture - Seminar - SDL
2	Know Medico Legal Duties of a Registered Medical Practitioner.	Formative Assessment And Summative Assessment MCQ, SAQ, LAQ	LectureSeminarTutorials
3	Be competent to examine and prepare report or certificate in medico legal cases/situations inaccordance with the law of Land.	Formative Assessment And Summative Assessment MCQ, SAQ, LAQ	 Lecture Seminar Case based scenario & Casualty posting
4	Acquaint with procedure of medico legal postmortem examination and interpret findings and results of other relevant investigations to logically conclude the cause, and relevant opinion	Formative Assessment And Summative Assessment MCQ, SAQ, LAQ	- Lecture - Seminar - Case based scenario
5	Inculcate principles of Bioethics medical ethics, etiquette, duties, rights, medical negligence and legal responsibilities of RMP, towards patient, profession, society, state and humanity.	Formative Assessment And Summative Assessment MCQ, SAQ, LAQ	 Lecture Seminar Case based scenario Role Play
6	To be conversant with provisions of MTP Act, 1971 with latest Amendments 2021,The POCSO Act, 2012, Amended Criminal Procedure Act with respect to Offences perpetrated on young girls, women with reference to harassment at work place.	Formative Assessment And Summative Assessment MCQ, SAQ, LAQ	 Lecture Seminar SDL Case based scenario Role Play

PROGRAM SPECIFIC LEARNING OUTCOME- II MBBS (FMT)

Skills:			
1	Grasp minutely facts and arrive at logical inferences so as to assist Investigating Officers.	Practical examination Assessment of skills like Age assessment, Injury Report, Weapon report	Small group discussion Actual observation of PM examination & Casualty posting
2	Diagnose and treat common emergencies in poisoning andmanage chronic toxicity.	Practical examination Eg: Alcohol Intoxication case	Case based discussion andinterpretation of toxicology test
3	Medico legal autopsy examination	Viva , SAQ, LAQ	Practical Observation of Medico Legal autopsy & Videos of autopsy
4	Observe the principles of Bio Ethics & Medical Ethics	Formative Assessment And Summative Assessment MCQ, SAQ, LAQ	SDL Small Group Discussion Role Plays
5	Proper collection, preservation ,labeling and sealing of trace elements, specimens collected atPM examination or examinationof victim or accused	Formative Assessment And Summative Assessment MCQ, SAQ, LAQ Viva	Actual demonstration of Packing, labeling, sealing of such material

PROGRAM SPECIFIC LEARNING OUTCOME- II MBBS (MICROBIOLOGY)

Learning Outcome Knowledge	Assessment	Activity
State the etiology, pathogenesis and methods of laboratory diagnosis and apply that knowledge in the diagnosis, treatment, prevention and control of communicable diseases caused by microorganisms.	 Formative & Summative examination, comprising of MCQs, BAQs, SAQs & LAQs Viva - QSPE 	 Lectures Seminars Practicals Small group discussion Seminars
Understand commensal, opportunistic and pathogenic organisms of human body and describe host parasite relationship.	 Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ Viva- QSPE 	 Lectures Small group discussion Seminars Tutorials
Know and describe the pathogenesisof diseases caused by microorganisms.	 Formative & Summative examination, comprising BAQ, SAQ & LAQ 	LecturesSeminars
State the sources and modes of transmission of pathogenic and opportunistic micro-organisms including knowledge of insect vectors & their role in transmissionof infectious diseases.	 Formative & Summative examination, comprising MCQ, BAQ, SAQ &LAQ 	 Lectures Small group discussion Tutorials
choose appropriate laboratory investigations required for clinical diagnosis	 Formative & Summative examination, comprising of MCQ, BAQ, SAQ & LAQ Viva Choose appropriateculture media/metrical for cultivation of micro organism 	 Practicals Small group discussion Tutorials

Skills		
Plan and interpret laboratory investigations for diagnosis of infectious diseases and correlatethe clinical manifestations with the etiological agent.	 Gram Staining ZN staining OSPE, Viva 	 Small group Teaching DOAP Practical demonstratio n
Identify common infectious agents with the help of laboratory procedure, acquire knowledge of antimicrobial agents, use of antimicrobial sensitivity tests to select suitableantimicrobial agents for treatment.	 Special staining Culture methods Biochemical reactions ABST- Viva 	 Small group learning Demonstration Case based discussion and interpretation of clinical scenario and lab tests
Perform simple laboratory tests,which help to arrive at rapid diagnosis. Be conversant with proper methods of	 Gram stain& ZN stain stool exam, KoH munt serological rapid tests Practical examinationand viva MCQ 	 Small group learning, teaching & demonstration Interpretation ofresult- DOAP Small group
collection, storage & transport of clinical materialfor microbiological investigations.	Viva	 Small group learning & demonstratio n
Understand the principles of immunology and its applicationin the diagnosis and preventionof infectious diseases includingimmunization schedule, acquireknowledge of the scope of immunotherapy and different vaccines available for the prevention of communicable diseases.	SAQS , MCQsViva	 Small group learning & demonstratio n
Understand methods of disinfection and sterilization and their application to controland prevent hospital and community acquired infections including universal biosafety precautions and waste disposal	 SAQS , MCQs Viva 	 Small group learning Laboratory CSSD and Hospital visits
Recommend laboratory investigations regarding bacteriological examination offood, water, milk and air.	• Viva	 Visit to Laboratory testing food, water,milk,

8. The student should be well equipped with the knowledge of prevalent communicable diseases of national importanceand of the newer emerging pathogens	• Viva	 Small group learning Seminars
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PROGRAM SPECIFIC LEARNING OUTCOME- II MBBS (PATHOLOGY)

Learning Outcome	Assessment	Activity
Knowledge		
Explain the Patho physiologicalprocesses which governs the maintenance of homeostasis, mechanism of their disturbancesand the morphological and clinical manifestation associated with it.	 Formative & Summative assessment,comprising of MCQ,BAQ,SAQ & LAQ 	 Lectures Seminars Practicals Small group discussion
Describe the mechanisms andpatterns of tissue response to injury to appreciate the Pathophysiology of disease processes and their clinical manifestations	 Formative & Summative assessment,comprising of MCQ,BAQ,SAQ & LAQ Viva 	LecturesPracticalsTutorials
Correlate the gross and microscopic alterations of different organ systems in common diseases to the extent needed to understand disease processes and their clinical significance	 Formative & Summative assessmentcomprising of MCQ,BAQ,SAQ & LAQ Viva Practical examination OSPE 	 Small group learning of specimens and histopatholog yslides Weekly prcaticals
Develop an understanding of neoplastic change in the body in order to appreciate need for earlydiagnosis and further management of neoplasia	 Formative & Summative assessment,comprising of MCQ,BAQ,SAQ & LAQ 	 Lectures Case based discussion Tutorials
Understand mechanisms of common haematological disorders and develop a logicalapproach in their diagnosis andmanagement.	 Formative & Summative assessment,comprising of MCQ,BAQ,SAQ & LAQ OSPE Hemogram interpretation Clinical tray viva 	 Lectures Seminars by students Case based discussion
Skills		
Demonstrate & perform various haematological & clinical pathological diagnostic laboratory tests	 Practical examination 	 Small group learning and demonstration ofprocedure DOAP

Interpret diagnostic laboratory tests and correlate with clinicaland morphological features of diseases	 Pre and post MCQ test OSPE 	 Case based discussion and interpretation ofclinical scenario and lab tests
Perform simple bedside tests on blood, urine and other biologicalfluid samples.	 Practical examination andviva 	 Demonstration ofvarious tests and student performing under supervision
Recognize morbid anatomicaland histopathological changesfor the diagnosis of common disorder.	 Gross specimen viva Histopathology slide diagnosis and viva 	 Small group learning on gross specimens and microscopy of common diseases.
Understand biochemical/physiological disturbances that occur as a result of disease in collaborationwith pre- clinical departments.	 Formative & Summative assessment, comprising of MCQ,BAQ,SAQ & LAQ Viva 	 Lectures Integration with other departments

Phase III Minor

PROGRAM SPECIFIC LEARNING OUTCOME III MBBS (COMMUNITY MEDICINE)

Learning Outcome	Assessment	Activity
Knowledge		
Define health; describe the conceptof holistic health including conceptof spiritual health and the relativeness & determinants ofhealth	Written/ Viva voce	Lecture, Small group discussion
Describe poverty and Social security measures and its relationship to health and disease	Written/ Viva voce	Lecture, Small group discussion
Describe concepts of safe and wholesome water, sanitary sourcesof water, water purification processes, water quality standards, concepts of water conservation and rainwater harvesting	Written/ Viva voce	Lecture, Small group discussion, DOAP session
Describe the common sources of various nutrients and special nutritional requirements according to age, sex activity, physiological conditions	Written/ Viva voce	Lecture, Small group discussion
Enumerate, describe and discuss the modes of transmission and measures for prevention and control of communicable and non- communicable diseases	Written/ Viva voce	Small group discussion, Lecture
Describe and discuss the epidemiological and control measures including the use of essential laboratory tests at the primary care level for non- Communicable diseases (diabetes,Hypertension, stroke, Obesity and cancer etc.)	Written/ Viva voce	Small group discussion, Lecture
Describe Universal Immunization Program; Integrated Management of Neonatal and Childhood Illness (MNCI) and other existing	Written/ Viva voce	Small group discussion, Lecture

Programs		
Enumerate and describe specific occupational health hazards, their risk factors and preventivemeasures	Written/ Viva voce	Small group discussion, Lecture
Skill		
Demonstrate Infection controlpractices and use of personal protective Equipment (PPE)	Skill assessment	DOAP session
Elicit document and present a medical history that helps delineatethe etiology of these diseases that includes the evolution and pattern of symptoms, risk factors, exposure through occupation and travel	Skill assessment	Bedside clinic, DOAP session

Visit a Child Developmentary unit	Log book Entry	Locturo Small group
and observe its functioning	Log book Entry	Lecture, Small group discussion
Describe and discuss the principlesand demonstrate the methods of collection, classification, analysis, interpretation and presentation of statistical data	Written/ Viva voce/ Skill assessment	Small group lecture, DOAP session

Learning Outcome	Assessment	Activity
Knowledge		
 Explain various methods of recording visual acuity and assessment of central vision withpin hole 	OSCE OSPE	 tutorial small group teaching demonstration Seminars
2. Describe the procedure of estimation of Intra Ocular pressure by digital tonometry	OSCEOSPE	 small group teaching demonstration Tutorials
3. How to instill eye medication	OSPE	bed side teachingdemonstration
 Understanding various types ofcolor blindness and assessment of color vision on Ichihara's chart 	OSCEOSPE	small group teachingdemonstrationTutorials
 5. Assessing anterior chamber depth on torch light examination in order to diagnose angle closureglaucoma 	OSPEOSCE	LectureDemonstrationSmall group teaching
Skills 1. Measurement of IOP by digital tonometry	Practical examination	 Small group learning demonstration of procedure DOAP
2. Sac Syringing	Practical Examination	Small group learningdemonstration of procedure
3. Confrontation field testing and its importance	Practical Examination	 Small group learning demonstration of procedure
4. Pupillary reaction elicitation and clinical correlation	Practical Examination	Small group learningdemonstration of procedure
Ocular motility testing in all positions of gaze	Practical Examination	Small group learningdemonstration of procedure

PROGRAM SPECIFIC LEARNING OUTCOME- III/I MBBS (Ophthalmology)

Learning Outcome	Assessment	Activity
Knowledge		
1. Elicit document and present a correct history, demonstrate, anddescribe the clinical features, choose the correct investigations, and describe the principles of management of diseases of the external Ear	 Formative & Summative examination comprising of MCQ, BAQ, SAQ & LAQ Viva voce DOAP session, 	 Lecture, Small group discussion, DOAP session, Bedside clinic
2. Elicit document and present a correct history, demonstrate, anddescribe the clinical features, choose the correct investigations and describe the principles ofmanagement of ASOM	 Formative & Summative examination comprising of MCQ, BAQ, SAQ & LAQ Viva voce 	 Lecture, Small group discussion, DOAP session, Bedside clinic
 Describe the clinical features, investigations, and principles of management of Meniere's Disease 	 Formative & Summative examination comprising of MCQ,BAQ,SAQ & LAQ Viva voce 	 Lecture, Small group discussion, Demonstration
 Describe the clinical features, investigations, and principles of management of trauma to the face & neck 	 Formative & Summative examination comprising of MCQ, BAQ, SAQ & LAQ Viva voce 	 Lectures Case based discussion Tutorials
 Observe and describe the indications for and steps involved in a tonsillectomy / adenoidectomy 	 Formative & Summative examination comprising of MCQ,BAQ,SAQ & LAQ Viva voce 	 DOAP session Video demonstration Direct observation Discussion on a mannequin
Skills		
 Enumerate the indications and interpret the results of an audiogram 	Practical examinationSkill assessment	 Lecture, Small group discussion, Demonstration DAOP Bedside Clinic
 Demonstrate the correct techniquefor syringing wax from the ear in a simulated environment 	 Practical examination Skill assessment 	 Lecture, Small group discussion, Demonstration DAOP Bedside Clinic
 Observe and describe the indications for and steps involvedin the performance of diagnostic nasal Endoscopy 	 Formative & Summative examination comprising of MCQ,BAQ,SAQ & LAQ Viva voce 	 Lecture, Small group discussion, Demonstration DAOP

PROGRAM SPECIFIC LEARNING OUTCOME- III MBBS (E.N.T)

4. Observe and describe the indications for and steps involvedin the performance of Otomicroscopic examination in a simulated environment	 Formative & Summative examination comprising of MCQ,BAQ,SAQ & LAQ Viva voce 	 Lecture, Small group discussion, Demonstration DAOP Bedside Clinic
 Demonstrate the correct techniqueof examination of the nose & paranasal sinuses including the use of nasal speculum 	Skill assessment/ OSCE	DAOPBedside Clinic

Phase III Major

PROGRAM SPECIFIC LEARNING OUTCOME- III / I MBBS (Gen. Medicine)

Learning Outcome	Assessment	Activity
Knowledge		
1. Explain pathophysiology ofacute coronary syndrome and the management of acute coronary syndrome.	 Formative & Summative assessment, comprising of MCQ,,SAQ& LAQ OSCE 	 Lectures Seminars Demonstration inclinics Small group discussion
2. Explain pathophysiology of the movement disorders and the management of Parkinson's disease.	 Formative & Summative assessment, comprising of MCQ,SAQ &LAQ OSCE Viva 	 Formative & Summative assessment, comprising of MCQ,SAQ &LAQ OSCE Viva
Approach to case of chronic liver disease with ascites. Diagnosticand therapeutic interventions	 Formative & Summative assessmentcomprising of MCQ,BAQ,SAQ & LAQ Clinics Viva OSCE 	 Lectures Case based discussion Demonstration of the Ascitic tapping
Diabetes Mellitus management and complications. Useof various insulin combinations 5. ECG interpretation	 Formative & Summative assessment, comprising of MCQ, SAQ& LAQ. OSCE Formative & Summative assessment, comprising of MCQ,SAQ & LAQ 	 Lectures Case based discussion Demonstration of insulin syringes and pen Lectures Case based discussion
	Viva	
Skills 1. Pleural tapping	Clinics	 Small group learning and demonstration of procedure DOAP
2. Lumbar puncture	Clinics in casualty and ICU	 Small group learning and demonstration of procedure

bedside tests onblood, urine andother biological fluid samples.		demonstration of procedure
4. Ascitic tapping.	Clinics	Small group learning and demonstration of procedure

Learning outcome	Assessment	Activity
Cognitive domain;		
Knowledge		
1. Explain the components of the Universal immunization Program and Vaccine description with regard to classification of vaccines, strain used, dose, route, schedule, risks, benefits and side effects, indications andcontraindications	 Formative & Summative examination, comprising of MCQs,BAQs, SAQs & LAQs. Viva Voce. 	 Lectures Tutorials Seminars Practicals Small group discussion
2. Discuss the etiology, clinical presentation andmanagement of Acute Lymphoblastic Leukemia in children.	 Formative & Summative examination, comprising of SAQs & LAQs. 	LecturesSeminarsBedside Clinics
3. Discuss the epidemiology, clinical features, types and complications of Tuberculosis in Children and Adolescents	 Formative & Summative examination, comprising of MCQs,SAQs& LAQs. Viva Voce.OSCE 	 Lectures Seminars Bedside Clinics Small group discussion
4. Describe the etio- pathogenesis , WHO classification , clinical features, complications and management of SevereAcute Malnourishment(SAM) and Moderate Acute Malnutrition (MAM)	 Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ. Viva and OSCE 	 Lectures Seminars Practicals Bedside Clinic Small group discussion
5.Discuss the etio pathogenesis, classification, clinical presentation and management of Diarrhealdiseases in children	 Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ Viva OSCE 	 Lectures Seminars Practicals Small group discussion Bedside Clinics

PROGRAM SPECIFIC LEARNING OUTCOME- UG(MBBS - PAEDIATRICS)

SKILLS		
Examine Normal Neonatephysical and Neuromuscular criteria,and demonstrate Neonatal Reflexes.	 Bedside Practical examination. OSCE 	 Small group learning and demonstration of Clinical Methods. DOAP
Examine a Case of PEM,and assess signs of Kwashiokor and Marasmus.	 Bedside Practical examination OSCE 	 Case based discussion and interpretation ofclinical signs.
Describe various routes of administration of Vaccines and Perform IM Injection .	 Practical examination andviva. 	 Demonstration ofvarious techniques and performing under supervision.
Describe methods of Neonatal Resuscitation,and PerformAmbu Bag &mask Ventilation on Mannequin.	 Viva and Practical Examination. 	 Small group learning , Use of Mannequinand Resuscitation Equipments.
Discuss Causes of Hepatosplenomegaly, and demonstrate methods of Palpation of Liver, and Spleen.	SAQs & LAQs.Viva	 Bedside demonstration ofthe techniques involved. Integration with other departments

PROGRAM SPECIFIC LEARNING OUTCOME- II MBBS (SURGERY)

Learning Outcome	Assessment	Activity
Knowledge		
 Explain the Patho physiological processes which governs the maintenance of homeostasis, mechanism of their disturbances and the morphological and clinical manifestation associated with these disturbances which present as common surgical problems in outpatients. 	 Formative & Summative assessment,comprising of MCQ,BAQ,SAQ & LAQ 	 Lectures Seminars Practicals Small group discussion
2. Describe the mechanisms and patterns of tissue response to injury to appreciate the Pathophysiology of disease processes and their various clinicalmanifestations in patients attending surgical opd as well as indoor admitted patients and plan their management.	 Formative & Summative assessment, comprising of MCQ, BAQ, SAQ & LAQ Viva 	 Lectures Practicals Tutorials
 3. Correlate the clinical symptoms and signs due to alterations of different organ systems in common diseases to the extent needed to understand disease processes and their clinical significance, so as to effectively design a plan of management for such commonly presenting casescenarios. 	 Formative & Summative assessment comprising of MCQ,BAQ,SAQ & LAQ Viva Practical examination OSPE OSCE 	 Small group learning of specimens and Radiological plates. Weekly tutorials. Clinical postings.
 4. Develop an understanding of the clinical presentation of neoplastic change in the body in order to appreciate need for early diagnosisand further management of common neoplasia cases. 5. Understand mechanisms of common surgical disorders and develop a logical approach in theirdiagnosis and management. 	 Formative & Summative assessment, comprising of MCQ, BAQ, SAQ & LAQ Formative & Summative assessment, comprising of MCQ, BAQ, SAQ & LAQ OSEE 	 Lectures Clinical postings. Case based discussio n Tutorials Lectures Seminars bystudents Case based
	OSPEOSCEClinical viva	based discussio n

Skills		
 Demonstrate & perform various clinical assessments of organ systems in common surgical patients. 	Practical examinationOSCEOSPE	 Small group learning and demonstration ofprocedure DOAP
 Elicit a complete patient history develop the ability to correlate with clinical and morphological features of common surgical diseases 	 Pre and post MCQ test OSPE	 Case based discussion and interpretation of clinical scenario.
 Perform simple bedside tests on in ward patients to elicit specific signs of common surgical diseases. 	 Practical examination andviva 	 Demonstration ofvarious tests and student performing under supervision
4. Recognize morbid anatomical and radiological changes for the diagnosis of common surgical disorders	 Gross specimen viva Radiological diagnosis and viva 	 Small group learning on grossspecimens and radiological interpretations ofcommon surgical diseases.
5. Understand clinical and physical disturbances that occur as a resultof disease in collaboration with pre-clinical departments.	 Formative & Summative assessment, comprising ofMCQ,BAQ,SAQ & LAQ Viva 	 Lectures Integration with other departments

PROGRAM SPECIFIC LEARNING OUTCOME (MBBS OBSTETRICS&GYNAECOLOGY)

LEARNING OUTCOME		ASSESSMENT	ACTIVITY
KNOWLEDGE	SLO		
Anatomy of the female reproductive tract,	Describe the anatomy of female reproductive tract Describe relationship of pelvic organs to one another Describe the blood supply, nerve supply, and lymphaticdrainage of female genital organs Describe the development offemale reproductive tract Applied anatomy	LAQ, SAQ,MCQs	Lecture, Integration with anatomy
Physiology of menstruation	Describe physiology of menstruation and its neuroendocrine controlthrough HPO axis.	LAQ, SAQ,MCQs	Lecture Integration with physiology
Physiology of gametogenesis, Ovulation, conception, implantation, & reproductive endocrinology	Describe spermatogenesis, oogenesis, fertilization, implantation and early decidual changes	LAQ,SAQ,MCQs	Lecture Integration with physiology
Early development of embryo and fetus, developmentof Placenta, amniotic fluid, cord		LAQ,SAQ,MCQs	Lecture Integratio nwith Anatomy
Embryology and developmental defects of femalegenital tract	List investigation for diagnosis of Mullerian duct anomalies Clinical significance of Mullerian duct anomalies	LAQ,SAQ,MCQs	Lecture Integratio nwith Anatomy

Diagnosis of pregnancy	Describe clinical features of pregnancy correctly Discuss d/d of suprapubic lump in women Describe chemical tests of pregnancy	LAQ,SAQ,MCQs,VIVA, Practical exam	Case based discussion
SKILL			
Antenatal Care, detailed history,and Obstetric examination	Define antenatal care Enumerate aims and objectivesof ANC care Categorise a patient into highrisk/low risk according to history	Practical examination	Small group learning and demonstrati on of procedure DOAP Case based discussion

Psychomotor Domain		
 Able to perform routine examination in the opd and IPD. Conduct normal deliveries Assist in Major and minor Obgy procedures confidently and correctly 	 Practical and viva Day to day assessmen t 	• Skill Labs

PROGRAM SPECIFIC LEARNING OUTCOME- III/I MBBS (Ophthalmology)

Learning Outcome	Assessment	Activity
Knowledge		
1. Explain various methods of recording visual acuity and	• OSCE	tutorialsmall group teaching
assessment of central visionwith pin hole	• OSPE	demonstrationSeminars
 Describe the procedure of estimation of Intra Ocular pressure by digital tonometry 	OSCEOSPE	 small group teaching demonstration Tutorials
3. How to instill eye medication	OSPE	bed side teachingdemonstration
 Understanding various types of color blindness and assessment of color vision on Ichihara's chart 	OSCEOSPE	 small group teaching demonstration Tutorials
5. Assessing anterior chamberdepth on torch light examination in order to diagnose angle closure glaucoma	OSPEOSCE	LectureDemonstrationSmall group teaching
Skills		
 Measurement of IOP by digital tonometry 	 Practical examinatio n 	 Small group learning demonstration ofprocedure DOAP
2. Sac Syringing	 Practical Examination 	 Small group learning demonstration ofprocedure
 Confrontation field testing and its importance 	 Practical Examination 	 Small group learning demonstration ofprocedure
4. Pupillary reaction elicitation and clinical correlation	 Practical Examination 	 Small group learning demonstration ofprocedure
5. Ocular motility testing in all positions of gaze	 Practical Examination 	 Small group learning demonstration ofprocedure

Learning Outcome	Assessment	Activity
Knowledge		
 Understanding the correctmethod of performing indirect 	OSCEOSPE	 small group teaching demonstration Seminar
ophthalmoscopy		
2. Describe the importance andmethod of eye irrigation in cases of chemical injury	OSPEOSCE	 bed side teaching Case based discussion Tutorials
3. Understanding of various layers of retina on OCT and interpretation of various retinal diseases	• OSPE	LectureTutorialSeminar
 4. Interpretation of visual fielddefects in Glaucoma in perimetry and its clinical correlation 	OSCEOSPE	 Small group teaching Seminar lecture
5. Assist/observe therapeuticprocedures such as subconjunctival injection in post cataract surgerypatient Skills	• OSPE	 Small group teaching demonstration seminar
1.Permorming corneo scleral tunnelin goats eye	Practical examination	 Small group learning demonstration ofprocedure
2. Fluorescein staining in cases of corneal ulcer	 Practical examination and viva 	 Demonstration ofstaining method students performingunder supervision
3. Demonstrate correct procedure in step wise fashion to removecorneal foreign body	Practical Examination	 Small group learning demonstration ofprocedure
 Procedure of epilation in cases oftrichiasis 	Practical Examination	Small group learningdemonstration of

PROGRAM SPECIFIC LEARNING OUTCOME- Post Graduation –MS (Ophthalmology)

		procedure
5. Correct method of performing B- scan	 Practical Examination 	 Small group learning demonstration ofProcedure students performingunder supervision

Learning Outcome	Assessment	Activity
Knowledge		
1. Explain the Biochemical basis of life	 Formative & Summative examination, comprising of SAQ & LAQ 	 Lectures Seminars Practicals Small group discussion
 Describe the overview of different metabolism 	 Formative & Summative examination, comprising of SAQ & LAQ Viva 	 Lectures Practicals Tutorials Microteaching
3. Nutrition – Clinical significance	 Formative & Summative examination comprising of SAQ & LAQ Viva Practical examination 	 Small group learning & teaching Case based discussion Microteaching Seminar
4. Understanding of molecular biology	 Formative & Summative examination, comprising of SAQ &LAQ 	 Lectures Case based discussion Tutorials Seminar
 Advance biochemistry and their role in diagnosis and management 	 Formative & Summative examination, comprising of SAQ & LAQ 	 Lectures Seminars by students Case based discussion Microteaching
Skills 1. Demonstrate & perform various biochemical diagnostic laboratory tests	Practical examinationLog book	 Small group learning and demonstration ofprocedure
2. Interpret molecular diagnostic technique	VivaMicroteaching	 Case based discussion and interpretation of clinical scenario and lab tests

PROGRAM SPECIFIC LEARNING OUTCOME- MD (BIOCHEMISTRY)

3. Perform special tests on blood, urine and other biological fluid samples.	 Practical examination and viva 	 Demonstration of various tests and student performing under supervision
 4. Collection & storage of different biological fluids. Exposure to biomedical waste & quality control in labs 	VivaLog book	 Small group learning Microteaching
5. Exposure to various instruments CCL. Exposure to CCL procedures & hand on training with various equipments.	 Formative & Summative examination, comprising of SAQ & LAQ Viva 	 Lectures Integration with other departments like Microbiology, Pathology, Medicine & Surgery
6. Analyze, discuss research work	 Thesis Oral presentation in conference Log book 	WorkshopsHands on training

Learning outcome	Assessment	Activity
Cognitive domain		
 Detailed history taking with relevant examination and management plan 	 Viva voce 	 Ward work and casepresentation
2. Clinic pathologic and radiological co relation and treatment plan.	 Clinical chart interpretatio n Viva Log book 	 Case based discussion Ward visits Discussion of cases with Lab department and Radiology dept
3. Analysing complicated cases and cases having multiple organ involvement . Management includingmedical as well as surgical treatment	 Clinical case examination Viva voce Log book 	 Interdepartment alcase presentation Morbidity and mortality meets. Microteaching
 Cases requiring the super specialty in depth knowledge and complicated cases. 	 Clinical case examination Viva voce Log book 	 Departmenta Imeetings Case presentation Seminars logbook
5. Should be able to teach Medicine to undergraduates, nurses and paramedical staff	 Microteaching 	 Practical teaching toundergraduate MBBS students
6. Plan, execute, analyse and present research work.	 Thesis Oral paper presentation inconferences Log book 	 Workshop onresearch methodology Attending national conferences Platform and posterpresentation
7. Make and record observations systematically and maintain accurate patientrecords. deductive reasoning and drawing inferences from clinical and lab data	 Formative assessment by observation inday to day working 	 Posting rotationunder various teachers.

PROGRAM SPECIFIC LEARNING OUTCOME- PG(MD Medicine)

Affective Domain		
1. Develop communication skills to word reports and professional opinion as well as to interact with patients, relatives, peers and paramedical staff, and for effective teaching.	 Formative assessment by observation inday to day working 	 Intra departmental postings in various sections. Interaction with patients and relatives
Psychomotor Domain		
1. Able to do basic ward procedures like pleural andascetic tapping liver and kidney biopsy.	 Skill assessment in ward procedures 	 Daily ward procedure s
2. Able to do ICU procedures like intubation and central line insertion planning the critical care of the patients.	 Skill assessment in ICU procedures Viva voce 	 Daily ICU procedure s

Learning outcome	Assessment	Activity
Cognitive domain		
 Diagnose routine and complex clinical problems on the basis of histopathology (surgical pathology) and cytopathology specimens, blood and bone marrow examination and varioustests of Laboratory Medicine (clinical pathology, clinical biochemistry) as well as Blood Banking (Transfusion Medicine). 	 Interpretation ofreports Slide seminars- Hematology, histopathology ,cytology 	 Intra departmental postings- hematology,clinical pathology, histopathology and cytopathology. Microteaching
 Interpret and correlate clinical and laboratory data so that clinical manifestations of diseasescan be explained. 	 Clinical chart interpretatio n Viva Log book 	 Case based discussion Ward visit for patientexamination
3. Advise on the appropriate specimens and tests necessary toarrive at a diagnosis in a problematic case.	Clinical case examination	 Intra departmental postings- hematology,clinical pathology, histopathology and cytopathology. Microteaching
 4. Correlate clinical and laboratory findings with pathology findings at autopsy, identify miscorrelations and the causes of death due to diseases (apart frompurely metabolic causes) 	 Practical examination ofautopsy – casebased Log book 	 Autopsy specimen grossing and microscopy Interdepartmental CPCs Conference participation
 5. Should be able to teach Pathology to undergraduates, postgraduates, nurses and paramedical staff including laboratory personnel. 	Microteaching	 Practical teaching to undergraduate MBBS students Theory and practicals for PG DMLT students
6. Plan, execute, analyse and present research work.	 Thesis Oral paper presentation inconferences Log book 	 Workshop on researchmethodology

PROGRAM SPECIFIC LEARNING OUTCOME- PG (MD PATHOLOGY)

7. Make and record observations systematically and maintain accurate records of tests and theirresults for reasonable periods of time. Identify problems in the laboratory, offer solutions thereof and maintain a high order of quality control	 Formative assessment by observation inday to day working 	 Intra departmental postings in various sections- hematology,clinical pathology, histopathology and cytopathology.
Affective Domain		
 Develop communication skills to word reports and professional opinion as well as to interact with patients, relatives, peers and paramedical staff, and for effective teaching. Psychomotor Domain 	 Formative assessment by observation in day to day working 	 Intra departmental postings in various sections. Interaction with patients and relatives
 Able to perform routine tests in a Pathology Laboratory including grossing of specimens, processing, cutting of paraffin and frozen sections, making smears, and staining. 	 Practical and viva on histotechique s Day to day assessment of grossing of specimens 	 Histopathology posting Daily grossing Special staining
2. Able to collect specimens by routinely performing non- invasive out-patient procedures such as venipuncture, finger- prick, fine needle aspiration of superficial lumps and bone-	 Formative assessment while doing procedure. Viva 	 Performing venepunctur e Performing bone marrow aspiration and biopsy procedure and

marrow aspirates, and provide appropriate help to colleagues performing an invasive procedure such as a biopsy or an imaging guided biopsy		FNAC
3. Perform an autopsy, dissect various organ complexes and display the gross findings	 Practical examination Viva 	 Autopsy specimen discussion Autopsy workshop participation
4. Should be familiar with the function, handling and routine care of equipments in the laboratory.	 Formative assessment by observation in day to day working 	 Intra departmental postings in various sections

PROGRAM SPECIFIC LEARNING OUTCOME- PG (MD PARMACOLOGY)

Learning outcome	Assessment	Activit y
Cognitive domain		
 Explain pharmacodynamics and pharmacokinetics of drugs 	Seminars	Calculation of dose,Microteaching
 Acquire knowledge on pharmacovigilance 	ADR reportingLog book	 Case based discussion Ward visit for ADR reporting
 Apply and integrate knowledge of pathophysiology of diseases and its modulation by drugs 	Seminars	Microteaching
 Acquire knowledge on essential medicines 	 Preparation of essential drug list for various diseases 	WHO essential drug list
 Acquire knowledge on rational useof drugs and prescription auditing. 	 Microteaching 	 Practical teaching to undergraduate MBBSstudents
 Plan, execute, analyse and presentresearch work. 	 Thesis Oral paper presentation in conferences Log book 	 Workshop on research methodology
• Acquire knowledge on the legal and ethical issues involved in drug development and research.	Seminar	Protocol writing
Affective Domain		
 Effectively explain to patients, the effects and side effects of drugs, including the need for medication adherence 	 Formative assessment 	 Interaction with patientsand relatives
Psychomotor Domain		
 Able to predict efficacy and adverse effects associated with use of drugs, along with causality assessment 	 Practical and viva 	ADR forms collection
2. Perform major in vivo and in vitro animal experiments	 Formative assessment while doing procedure. Viva 	 Performing animal experiments

3. Demonstrate presentation skills at academic meetings, publications and writing research projects for funding agencies.	 Research work presentation 	 Planning and executingthe research project
4. Demonstrate skills for	 Formative 	 Teaching M.B.B.S.
prescription writing	assessment	students

PROGRAM SPECIFIC LEARNING OUTCOME- PG (DERMATOLOGY)

Learning Outcome	Assessment	Actvity
Knowledge		
1.Basic sciences- Explain structure functions & development of human skin includingits microscopic & ultra- microscopic structures.	 Formative examination conducted at theend of 1 yr. Summative examinatio n MCQ,SAQ,LAQ 	 Seminar Small group discussion
2. Describe epidemiology, pathogenesis, clinical features, investigations & management of all infectious diseases i.e. bacterial, fungal, viral & parasitic infestations.	 Formative examination conducted at theend of 1 yr. Summative examinatio n MCQ,SAQ,LAQ Viva Spotters Case presentations 	 Case presentation in grand rounds & OPD Direct management, investigations of patients under supervision & independently. Integrated teaching lectures with community medicine & microbiology
3. Describe epidemiology, pathogenesis, clinical features, investigations & management of inflammatory skin disorders like psoriasis, vesicobullous disorders.	 Formative examination conducted at theend of 1 yr. Summative examinatio n MCQ,SAQ,LAQ Long & short case presentations during formative & summative exams 	 Case presentation in grand rounds & OPD Direct management, investigations of patients under supervision & independently.
4. Describe epidemiology, pathogenesis, clinical features, investigations & management of contact allergic & irritant dermatitis,photo dermatitis, occupational dermatitis & dermatitis due to other physical factors.	 Formative examination conducted at theend of 2years Summative examinatio n MCQ,SAQ,LAQ Spotters 	 Small group discussions Case presentations Investigation & management of patientsunder supervision & independently. Seminars

	MCQ,SAQ,LAQSpotters	 Integrated teaching lectures with surgery
6. Describe various disorders	• Formativo	surgery department
6. Describe various disorders associated with systemic diseases –renal cardiovascular ,pulmonary system & rheumatology, vasculitis, collagen vascular disorders.	 Formative examination conducted at theend of 2years Summative examinatio n MCQ,SAQ,LAQ Spotters Case presentation(Lon g case & short case) 	 Integrated case presentation, group discussion & lectures with rheumatology &internal medicine departments.
7. Describe epidemiology, pathogenesis, clinical features, investigations & management ofLeprosy & Sexually transmitteddiseases.	 Formative examination conducted at theend of 1 yr. Summative examinatio n MCQ,SAQ,LAQ Viva Spotters Case presentations 	 Case presentation in grand rounds & OPD Direct management, investigations of patients under supervision & independently. Integrated teaching lectures with community medicine & microbiology
8. Describe various topical & systemic drug therapy including recent advances.	 Formative examination conducted at theend of 1 yr. Summative examinatio n MCQ,SAQ,LAQ Table viva 	 Seminar Tutorials Lectures Small group discussions Integrated group discussions with pharmacology department

1. To be able to perform & order various bed side tests like KOH staining, Giemsa staining & acid-fast staining, Woods lamp, culture, routinelab investigations & skin biopsy.	 Practical examinatio n 	 Perform all proceduresunder supervision & then independently on patients
2. To be able to order & interpret laboratory test to reach the diagnosis.	 OSPE Pre & post MCQ test 	 Case based discussion & interpretation in OPD & grand rounds
3. To be able to take incisions, sutures, do peels, acne surgery,vitiligo surgery,radiofrequency,cryotherapy & electrocautery .	 Practical examinatio n Table viva during summative exam OSPE during formative exam 	 Perform all procedures under supervision & then independently on patients at the end of 3rd year

PROGRAM SPECIFIC LEARNING OUTCOME- PG (MS- OBSTETRICS&GYNAECOLOGY)

Learning outcome	Assessment	Activity
Cognitive domain		
 Develop competence in the medical history taking and physical examination of women and incorporate ethical, social, and diversity perspectives to provide culturally competent health care 	Ward workLog book	• Ward rounds.
2. Demonstrate knowledge of preconception care including the impact of genetics, medical conditions and environmental factors on maternal health and fetaldevelopment.	 Clinical case interpretatio n Viva Log book 	 Case based discussion OPD/Ward rounds for patient examination
3. Explain the normal physiologic changes of pregnancy including interpretation of common diagnostic studies.	Clinical case examination	 Intra departmental postings Microteaching
 Describe common problems in obstetrics 	 Practical examinatio n Log book 	 Conference participation Short case presentation
5. Demonstrate knowledge of intrapartum care. 8. Demonstrateknowledge of postpartum care of the mother and newborn.	 Management ofLabour room IPD Patient 	 Practical teaching to undergraduate MBBS students
 6. Describe menstrual cycle physiology, discuss puberty and menopause and explain normal andabnormal bleeding. Demonstrate knowledge of common benigngynaecological conditions. 	 Formative assessment by observation in dayto day working 	 Practical teaching to undergraduate MBBS students
7. Plan, execute, analyse and present research work.	 Thesis Oral paper presentation inconferences Log book 	 Workshop on researchmethodology
8. Demonstrate knowledge of perioperative care and familiaritywith gynecological procedures.	 Formative assessment by observation in dayto day working 	 Ward rounds
 Describe gynecological malignancies including risk factors, signs and symptoms and initial evaluation. 	 Formative assessment by observation in dayto day working 	Case presentation

Affective Domain		
 Develop communication skills to interact with patients, relatives, peers and paramedical staff. 	 Formative assessment by observation in dayto day working 	 Intra departmental postingsin various sections. Interaction with patientsand relatives
Psychomotor Domain		
 Able to perform routine examination in the opd and IPD. Conduct normal and complicatedlabour. Major and minor Obgy procedures confidently andcorrectly 	 Practical and viva Day to day assessmen t 	• Skill Labs

Learning outcome	Assessment	Activity
Cognitive domain/ Knowledge		
 Diagnosis of infectious diseases and its applicationin the treatment preventionand control of communicable diseases caused by micro- organisms 	 DOAP Interpretation of reports Slide seminars 	 Intra departmental postings- Bacteriology Virology Parasitology Mycology Immunology Mycobacteriology
 Explain the principles of immunological phenomenon. 	 Formative and Summative assessment 	Micro teachingSeminars
3) Practice Laboratory medicine for diagnosis of infectious diseases in hospital & community	Clinical case examination	 Intra departmental laboratory postings
 4) Interpret and correlate clinical and laboratory dataso that clinical manifestations of diseases can be explained. 	 Clinical chart interpretation Viva Log book 	 Case based discussion Ward visit for patientexamination
5) Advise on the appropriate specimens and tests necessary to arrive at a diagnosis in a problematic case.	Clinical case examination	 Intra departmental postings- hematology,clinical pathology, histopathology and cytopathology. Microteaching
6) Prevention and control of communicable diseases in community	Log bookViva	Health SurveysRole Play
7) Principal of Prevention and control of health careassociated infections and rational antibiotic policy	 Formative & summative assessment Viva 	 Hospital Visit Case based discussion
8) Recent advances in medical Microbiology	Formative & summative assessment	SeminarVisit to other institute
9) Should be able to teach Microbiology to undergraduates, postgraduates, nurses and paramedical staff including laboratory personnel.	 Microteaching 	 Practical teaching to undergraduate MBBS students Theory and practicalsfor PG DMLT students

PROGRAM SPECIFIC LEARNING OUTCOME- POST GRADUATE(MD MICROBIOLOGY)

10) Plan, execute, analyse andpresent research work.	 Thesis Oral paper presentation inconferences Log book 	 Workshop on researchmethodology
11) Make and record observations systematically and maintain accurate records of tests and their results forreasonable periods of time.Identify problems in the laboratory, offer solutions thereof and maintain a high order of quality control.	 Formative assessment by observation in day to dayworking 	 Intra departmental postings in various sections
Affective Domain 1) Develop communication skills to word reports and professional opinion as well as to interact with patients, relatives, peers and paramedical staff, and for effective teaching.	 Formative assessment by observation in day to day working 	 Intra departmental postings in various sections. Interaction with patients and relatives
Psychomotor Domain 1) Able to perform routine tests to arrive at the etiological diagnosis of infectious diseases causes by micro-organisms 2) Operation of routine	 Day to day assessment ofpractical and viva Log book Day to day formative 	 Intra departmental postings at bacteriology, Virology, Serology, mycology, Prasitology, Mycobacteriology laborataries Intra
and Sophisticated instruments in laboratory	 Day to day formative assessment. Practical and Viva 	departmental postings

MIMER Medical College, Talegaon Dabhade

Department of Community Medicine

PROGRAM SPECIFIC LEARNING OUTCOME- POST GRADUATE

(MD Community Medicine)

Learning outcome	Assessment	Activity
Cognitive domain		
 Describe conceptual (and applied) understanding of public health community Medicine clinical and disease – oriented approach preventive approach & health promotion, disease control & promotion. 	 Lecture, Practicals, seminars 	 Visit to public health importance,Micro teaching, Health education
 Apply the principles of epidemiology, health research and Bio- statistics, application of qualitative researchmethods. 	 Interpretation ofreports Research projects 	 Visit to Urban & rural health centre
 Knowledge about communicable andnon- communicable diseases, their epidemiology. 	 Clinical case examination 	 Inter departmental medicine, pediatric, OBGY
4. To describe the concept of environmental healthand its various health issues.	 Entomology practical Log book 	 Slide examination and models

5. Should be able to teach	Microteaching	Practical
Community Medicine		teachingto
to undergraduates,		undergraduate
postgraduates, nurses		MBBS students
and paramedical staff		 Theory and
including laboratory		practicals for PG
personnel.		DMLT students

 51 6. Plan, execute, analyse and present research work. 7. Make and record 	 Thesis Oral paper presentation inconferences Log book Formative 	 Workshop onresearch methodology Intra
observations systematically and maintain accurate records of tests and their results for reasonable periods of time.	assessment by observation in dayto day working	departmental postings in various sections Urban and Rural areas
Affective Domain		
1. Develop communication skills to word reports and professional opinion aswell as to interact withpatients, relatives, peers and paramedical staff, and for effectiveteaching.	 Formative assessment by observation in dayto day working 	 Intra departmental postings in various centers. Interaction withpatients and relatives
Psychomotor Domain		
Able to carry out researchand report writing	Research projects in urban and ruralarea	Posting in UHTC and RHTC, PHC,
 Able to perform routine tests in a Publichealth Laboratory. 	 Practical and viva on chlorination ,insecticides, nutrition specimens, Biomedical waste managemen t 	 Microbiology and pathology posting Collection of specimens andstaining

2. Able to collect water specimens, Plan a diet ,Detect adulteration of foods and study of entomology specimens	 Formative assessment whiledoing procedure. Viva Practical 	 Collection specimen s micro teaching
3. Perform data collection, carry out	• Research phojects	P P
Aessharund be familiar with	Formative	• Intra
epidemiology public health legislations, occupational health	 assessment by observation in dayto day working Seminar , Micro teaching 	departmental postings in various centers, visits to public health importance

Learning outcome	Assessment	Activity
Cognitive domain		
 Diagnose routine and complex clinical problems on the basis f presenting clinical symptoms andelicit various relevant clinical signs in OPD patients. 	 Interpretation ofreports Interpretation ofClinical Signs Arriving at a clinical diagnosis Mapping a Management Plan 	 Intra departmental PostGraduate Teaching including Seminars and Case Presentations. Microteaching. Inter departmental Clinico Pathological and Clinico Radiological correlation meetings.
 Interpret and correlate clinical and laboratory data so that clinical manifestations of diseases can be explained. 	 Clinical chart interpretatio n Viva Log book 	 Daily Ward Rounds Grand Round once aweek Case based discussions
3. Advise on the appropriate laboratory and radiological tests necessary to arrive at a diagnosisin a problematic case.	 Clinical case examination Practical exams 	 Intra departmental PostGraduate Teaching including Seminars and Case Presentations. Microteaching Inter departmental Clinico Pathological and Clinico Radiological correlation meetings.
4. Correlate clinical and laboratory findings with pathology findings at autopsy, identify miscorrelations and the causes ofdeath due to diseases (apart frompurely metabolic causes)	 Practical examinatio n Surgical Pathology Specimen viva Log book 	 Interdepartmental CPC Conference participatio n
5. Should be able to teach Surgery to undergraduates.	 Microteaching Log book 	 Practical procedures teaching to undergraduate MBBS students Conduct Clinical Tutorials Participate in Case Based Scenarios for Undergraduate students.
 Plan, execute, analyse and present research work. 	 Thesis Oral paper presentation in 	Workshop on researchmethodology

SURGERY)

7. Make and record observations systematically and maintain accurate records of patients preoperatively with the intentionof posting them for definitive surgical procedures	conferences Case Reports Log book Formative assessment by observation in dayto day working	 Inter departmental postings in various related departments likeAnesthesia, Orthopaedics, Obstetrics and Radiology.
Affective Domain 1. Develop communication skills to word reports and professional opinion as well as to interact with patients, relatives, peers and paramedical staff, and foreffective teaching.	 Formative assessment by observation in dayto day working 	 Intra departmental postings within various specialities. Interaction with patientsand relatives
Psychomotor Domain 1. Able to perform routine clinical tests in OPD and Ward setting.	 Practical and viva Day to day assessment of grossing of specimens 	 Intra departmental PostGraduate Teaching including Seminars and Case Presentations. Microteaching
2. Able to perform common interventions in emergent andelective patients.	 Formative assessment whiledoing procedure. Viva 	 Performing CPR biopsy procedures andFNAC Management of patientin Shock
 Able to perform common surgical procedures considered as the main stay of surgical technique in Minor OT independently and in Major OT under supervised guidance. 	 Practical examinatio n Viva 	 Pre and post operativediscussions Microteaching
4. Should be familiar with the function, handling and routine care of equipments in the ward,ICU and Operation Theatre.	 Formative assessment by observation in day to day working 	 Intra departmental postings in various sections

MIMER MEDICAL COLLEGE & DR. B. S. T. R. HSOPITAL, TALEGAONDABHADE

DEPARTMENT OF ORTHOPAEDICS

PROGRAM SPECIFIC LEARNING OUTCOME-POST GRADUATE(MS ORTHOPAEDICS)

Learning outcome	Assessment	Activity
Cognitive domain (Knowledge)		
1. Describe the principles of injury, its mechanism and mode, its clinical presentation plan and interpret the appropriate investigations, an institutethe management of musculoskeletally injured injured patient.		Lecture Small group discussion Bedside clinic
 Identify and describe the surface anatomy and relationships within of the various bones, joints, ligaments, major arteries, veir and nerves of the musculoskeletal system of the spine, upper limb, lower limb and the pelvis, chest, abdomen and head & neck. 		Lecture Small group discussion Bedside clinic
3. Define and describe pathophysiology of shock (ciroulatory failure)	Written/viva voce/ OSCE/MCQ	Lecture Small group discussion Bedside clinic
4. Describe the principles and stages of bone and soft tissue healing.	Written/viva	Lecture Small group discussion Bedside clinic
5. Enumerate, classify and describe the various bony/ so tissue injuries affecting the axial and appendicular skeletal system in adults and	Written/viva ft voce/ OSCE/MCQ	Lecture Small group discussion Bedside clinic

children		
 Describe the principles of internal and external fixation for stabilization of bone and joint injuries. 	Written/vi va voce/ OSCE/MC Q	Lecture Small group discussion Bedside clinic
 Describe the mechanism of homeostasis, fibrinolysis and methods to control haemorrhage. 	Written/vi va voce/ OSCE/MC Q	Lecture Small group discussion Bedside clinic
8. Describe the pharmacokinetics and dynamics of drug metabolism and excretion of analgesics, anti inflammatory, antibiotics, disease modifying agents and chemotherapeutic agents.	Written/vi va voce/ OSCE/MC Q	Lecture Small group discussion Bedside clinic
 9. Describe the clinical presentation and plan and interpret investigations, institute management and prevention of the followingdiseases conditions a. Nutritional deficiency diseases affecting the bonesand joints b. Deposition arthropathies c. Endocrine abnormalities of the musculoskeletal system d. Metabolic abnormalities of the musculoskeletal system e. Congenital anomalies of the musculoskeletal system f. Developmental skeletal disorder of the musculoskeletal system. 	Written/vi va voce/ OSCE/MC Q	Lecture Small group discussion Bedside clinic
10. Describe the pathogenesis, clinical features plan and interpret investigations and institute management in	Written/vi va voce/ OSCE/MC Q	Lecture Small group discussion Bedside clinic

adults and children in a) Tubercular infections of		
bone and joints		
(musculoskeletal system)		
b) Pyogenic infections of		
musculoskeletal system		
c) Mycotic infections of		
musculoskeletal system		
D) Autoimmune disorders of		
the musculoskeletal system		
e) Rheumatoid arthropathy,		
Ankylosing spondylitis,		
seronegative arthropathy		
f) Osteoarthrosis and		
spondylosis		
11.Describe the pathogenesis,	Written/viva	Lecture
clinical presentation, plan	voce/	Small group discussion
and interpret investigations	OSCE/MCQ	Bedside clinic
and institute appropriate		
treatment in the following		
conditions;		
a) Post polio residual paralysis		
b) Cerebral palsy		
c) Muscular dystrophies and		
myopathies		
d) Nerve injuriese) Entrapment neuropathies		
12. Identify the diagnosis and	Written/viva	Lecture
describe management of	voce/	Small group discussion
musculoskeletal	OSCE/MCQ	Bedside clinic
manifestation of AIDS and		
HIV infection.		
13. Describe the	Written/viva	Lecture
aetiopathogenensis, identify,	voce/	Small group discussion
plan and interpret	OSCE/MCQ	Bedside clinic
investigation and institute the		
management of		
osteonecrosis of bones		
14. Describe the	Written/viva voce/	Lecture
aetiopathogenesis, clinical	OSCE/MCQ	Small group discussion

presentation, Identification, Plan investigation and institute treatment for oncologic problems of musculoskeletal system both benign and maliganancies,primary and secondary		Bedside clinic
15. Understand the basis , principles of biomaterials and orthopaedic	Written/viva voce/OSCE/MCQ	Lecture Small group discussion Bedside clinic
metallurgy 16. Describe the principles of normal and abnormal gait and understand the biomedical principles of posture and replacementsurgeries.	Written/viva voce/OSCE/MCQ	Lecture Small group discussion Bedside clinic
Affective domain Should be able to function as a part of a term, develop an attitude of cooperation with colleagues, and interactwith the patient and the clinician or other colleaguesto provide the best possible diagnosis or opinion 		Interdepartmental postings in various units and sections such as OT/ ward/ IPD interactions with patients and relatives
2. Always adopt ethical principles and maintain proper etiquette in dealings with patients, relatives and other health personnel and torespec the rights of the patient including the right to information and second opinion.	dayworking/ mini CEX	Interdepartmental postings in various units and sections such as OT/ ward/ IPD interactions with patients and relatives

3. Develop communication	Formative assessment by	Inter departmental
skills to ward reports and	observation in by day to	postings in various units
professional opinion as wellas	dayworking/ mini CEX	and sections such as OT/
to interact with patients,		ward/ IPD interactions
relatives, peers and		with patients and
paramedical staff, and for		relatives

effective teaching		
Psychomotor Domain		
1. Elicit a clinical history froma patient, do a physical examination, document in a case record, order appropriate investigations and make a clinical diagnosis	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
 Apply all types of POP casts/ slabs, splints and tractions as per need 	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
3. Perform split thickness skin grafting	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
4. Take an informed consentfor standard orthopaedic procedures	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
5. Perform closed/ open biopsies for lesions of bone,joints and soft tissues	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
Perform split thickness skin grafting and local flaps	OSCE with simulation based assessment, viva	Case discussion,lecture,

7. Perform on bone	Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book OSCE with simulation based	 small group discussion, skill lab sessions
models, internal fixation with k- wires, screws, plates. Dynamic hip/ condylar screws/ nailing.	assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
8. Perform sequestrectomy andsaucerisation	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
9. Perform Arthrotomy of joints like hip/ shoulder,ankle, elbow	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
10. Perform repair of openhand injuries including tendon repair	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
11. Perform arthodesis ofsmall joints	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions

12. Perform diagnostic arthroscopy on models andtheir patients	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
13. Perform carpal tunnel/tarsal tunnel release	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
14. Apply Ilizarov external fixator	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
15. Perform soft tissue releasesin contractures, tendon lengthening and correction ofdeformities	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
16. Perform amputations atdifferent levels.	OSCE with simulation based assessment, viva Formative assessment by observation in day to day working/ end of final posting examination theory and practical / OSPE/ log book	 Case discussion, lecture, small group discussion, skill lab sessions
17. Perform corrective surgeries for CTEV, DDH, perthes/ skeletal dysplasia.	OSCE with simulation based assessment, viva Formative assessment byobservation in day to day working/ end of final posting	 Case discussion, lecture, small group discussion,

25. Assist in open reduction	Viva, formative assessment by	Case discussion in
prosthesis replacement.		
excision and custom		
including radical	end of each semester	lab sessions.
musculoskeletaltumor	Practical examination atthe	group discussion and skill
malignant	working/ MiniCEX/ log book/	assisted lecture, small
operations on benign and	observation in day to day	operation theater, video
24. Assist in surgical	Viva, formative assessment by	Case discussion in
<u> </u>	atthe end of each semester	lab sessions.
	book/ Practical examination	group discussion and skill
	working/ MiniCEX/ log	assisted lecture, small
osteotomies.	observation in day to day	operation theater, video
23. Assist in corrective	Viva, formative assessment by	Case discussion in
	atthe end of each semester	lab sessions.
elbow.	book/ Practical examination	group discussion and skill
like hip, knee, shoulder,	working/ MiniCEX/ log	assisted lecture, small
Arthrodesis of major joints	observation in day to day	operation theater, video
22. Assist/ perform	Viva, formative assessment by	Case discussion in
	atthe end of each semester	lab sessions.
-	book/ Practical examination	group discussion and skill
joints	working/ MiniCEX/ log	assisted lecture, small
arthroscopy of various	observation in day to day	operation theater, video
21. Assist in operative	Viva, formative assessment by	Case discussion in
	the end of each semester	lab sessions.
	Practical examination at	group discussion and skill
spinalstabilizations	working/ MiniCEX/ log book/	assisted lecture, small
decompressions and	observation in day to day	operation theater, video
20. Assist in spinal	Viva, formative assessment by	Case discussion in
	the end of each semester	lab sessions.
	Practical examination at	group discussion and skill
shoulder and the ankle.	working/ MiniCEX/ log book/	assisted lecture, small
surgeries of hip, knee,	observation in day to day	operation theater, video
19. Assist in Arthroplasty	Viva, formative assessment by	Case discussion in
	the end of each semester	lab sessions.
	Practical examination at	group discussion and skill
polytraumapatient	working/ MiniCEX/ log book/	assisted lecture, small
management of	byobservation in day to day	operation theater, video
18. Assist in the surgical	Viva, formative assessment	Case discussion in
	practical / OSPE/ log book	

and internal fixations of complex fractures of Acetabular, pelvis, IPSI lateral floating knee/ elbow injuries, shoulder girdle andhandobservation in day to day working/ MiniCEX/ log book/ Practical examination at the end of each semesteroperation theater, video assisted lecture, small group discussion and skill lab sessions.26. Assist in spinal deformity correctionsViva, formative assessment by observation in day to day working/ MiniCEX/ log book/ Practical examination at the end of each semesterCase discussion in operation theater, video assisted lecture, small group discussion and skill lab sessions.27. Independently perform closed/ open reduction and internal fixation with DCP, LCP intramedullary nailing, LRSViva, formative assessment by observation in day to day working/ MiniCEX/ log book/ Practical examination at the end of each semesterCase discussion in operation theater, video assisted lecture, small group discussion and skill lab sessions.28. Assist in limb lengthening proceduresViva, formative assessment by observation in day to day working/ MiniCEX/ log book/ Practical examination at the end of each semesterCase discussion in operation theater, video assisted lecture, small group discussion and skill lab sessions.28. Assist in limb lengthening proceduresViva, formative assessment by observation in day to day working/ MiniCEX/ log book/ Practical examination atthe end of each semesterCase discussion in dosesion in day to day operation theater, video assisted lecture, small group discussion and skill lab sessions.28. Assist in limb lengthening proceduresViva, formative assessment by observatio
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book/ Practical examination group discussion and skill atthe end of each semester lab sessions.
atthe end of each semester lab sessions.
20 Assist in Devision
29. Assist in Revision Viva, formative assessment by Case discussion in
surgeries observation in day to day operation theater, video
working/ MiniCEX/ log assisted lecture, small
book/ Practical examination group discussion and skill
atthe end of each semester lab sessions.
30. Provide pre and post Viva, formative assessment by Case discussion in
OPcare observation in day to day operation theater, video
working/ MiniCEX/ log book/ assisted lecture, small
Practical examination at group discussion and skill
the end of each semester lab sessions.
31. Perform all clinical skills Viva, formative assessment by Case discussion in
as related to the specialty observation in day to day operation theater, video
working/ MiniCEX/ log book/ assisted lecture, small
Practical examination at group discussion and skill
the end of each semester lab sessions.

PGDMLT

PROGRAM SPECIFIC LEARNING OUTCOME- DMLT (BIOCHEMISTRY)

Learning Outcome	Assessment	Activity
Knowledge		
 Explain the basis and rational of biochemical tests 	Formative & Summative examination, comprising ofSAQ & LAQ	 Lectures Practicals Small group discussion
2. Understand the mechanism and overview of different metabolism	 Formative & Summative examination, comprising ofSAQ & LAQ Viva 	LecturesPracticalsTutorials
 Use of commonly use equipments/ techniques in biochemistry lab 	 Formative & Summative examination comprising ofSAQ & LAQ Viva Practical examination OSPE 	Small group learning
 Understand principles of special techniques and develop a logicalapproach in their diagnosis and management. 	Formative & Summative examination, comprising ofSAQ & LAQ	LecturesTutorials
 Exposure to CCL procedures & hand on training with various equipment. 	 Formative & Summative examination, comprising of SAQ & LAQ 	LecturesDemonstrations
Skills		
 Perform various biochemical diagnostic laboratory tests 	Practical examination	 Small group learning Demonstration ofprocedure
2. Demonstrations and standardizationof various estimations	• Viva	Interpretation of lab test
 Perform simple bedside tests on blood, urine and other biologicalfluid samples. 	Practical examination and viva	• Demonstration of varioustests and student performing under supervision
 Collection & storage of different biological fluids. Exposure to biomedical waste & quality control in labs disorder. 	Practical examination and viva	Small group learning
5. Understand biochemical/physiological disturbances that occur as a result ofdisease in collaboration with pre- clinical departments.	 Formative & Summative examination, comprising ofSAQ & LAQ Viva 	 Lectures Integration with otherdepartments

Learning outcome	Assessment	Activity
 Able to describe principles of technical procedures of diagnostic hematological, cytological, histopathological and blood banking tests 	 Formative & Summative assessment (BAQ , SAQ & LAQ) Practical examination Viva 	 Lectures Demonstration of procedures in practical
 2. Perform tests on blood, urine, stool and body fluids and their interpretation 3. Perform histo techniques Tissue processing, section cutting, routineand special stains 	 Formative & Summative assessment (BAQ, SAQ & LAQ) Practical examination Viva Practical examination Viva Formative & Summative assessment (BAQ, SAQ & LAQ) 	 Lectures Demonstration of procedures in practical(DOAP) Lectures Demonstration of procedures in practical(DOAP)
4. Perform blood banking tests – blood group, cross-matching, Coombs test	 Practical examination Viva Formative & Summative assessment (BAQ , SAQ & LAQ) 	 Lectures, Posting in Blood Bank Demonstration of procedures in practical(DOAP)
5. Understand and explain about factors in causationof hematological disorders	 Formative & Summative examination (BAQ,SAQ & LAQ) 	Lectures
 Able to identify vitalorgans on gross and microscopic examination. 	Practical examinationViva	Small group teaching during practical
7. Able to tell about working, maintenanceand use of the instruments in hematology and histopathology	 Practical examination Viva Formative & Summative assessment(BAQ,SAQ & LAQ) 	 Intradepartmental posting in hematology, histopathology, clinical pathology, cytology and blood bank
8. Able to understand laboratory management,receiving and recordingof specimens and maintaining of records	 Formative & Summative assessment(BAQ,SAQ & LAQ) Practical examination Viva 	 Intradepartmental posting in hematology, histopathology, clinical pathology, cytology and blood bank

PROGRAM SPECIFIC LEARNING OUTCOME - PG DMLT (PATHOLOGY)

PROGRAM SPECIFIC LEARNING OUTCOME - PG DMLT (MICROBIOLOGY)

Learning outcome	Assess ment	Activity
 Able to describe principles of technical proceduresof diagnostic Bacteriology, Mycology, Parasitology, Immunology& Virology 	 Formative & Summative assessment (BAQ, SAQ &LAQ) Practical examination Viva 	 Lectures Demonstration of procedures in practical
2. Perform tests on various clinical specimens such as urine, pus, blood, sputum, stool, serum, body fluids and theirinterpretation	 Formative & Summative assessment (BAQ, SAQ &LAQ) Practical examination Viva 	 Lectures Demonstration of procedures in practical DOAP
3. Able to prepare routinely required culture media e.g. BA MAC, CH, MH,NA,& also special media	 Practical examination Viva 	 Lab Posting DOAP
 4. Able to perform culture techniques, biochemicals and ABST 	Practical examinationViva	Lab PostingDOAP

 5. Able to tell about working, maintenance and use of the microscope andinstruments used in Bacteriology, Virology, Mycology, Immunology. Parasitology and Mycology Lab 	 Practical examination Viva Formative and Summative assessment (BAQ,SAQ & LAQ) 	 Intradepartme ntal posting in Bacteriology, Virology, Mycology, Immunology. Parasitology and Mycology
6. Able to understand laboratory management, receiving and recording of specimens and maintaining ofrecords	 Practical examination Viva Formative and Summative assessment (BAQ,SAQ & LAQ) 	Intradepartme ntal posting in Bacteriology, Virology, Mycology, Immunology. Parasitology and Mycology

CCMP

PROGRAM SPECIFIC LEARNING OUTCOME- CCMP

Dept. of Pharmacology

Learning Outcome	Assessment	Activity
Knowledge		
Describe Absorption, distribution, Metabolism,Excretion of drugs	 Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ 	 Lectures Seminars Small group discussion
Describe principles of Pharmacovigilance &ADRreporting systems	 Formative & Summative examinationcomprising of MCQ,BAQ,SAQ & LAQ Viva Practical examination OSPE 	 Small group learning practical
Describe the mechanisms of action, types, doses, side effects, indications and contraindicationsof antihypertensive drugs and drugs used in shock	• Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ	 Lectures Case based discussion Tutorials
 4. Describe the mechanisms of action, types, doses, side effects, indications and contraindications of drugs used in hematological disorders like: Drugs used in anemias Colony stimulating factors 	• Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ	 Lectures Seminars by students Case based discussion
Describe the mechanism of action ,types, doses, side effects, indications and contraindications of the drugs used in malaria, amebiasis and intestinal helminthiasis	6. Formative & Summative examination, comprising of MCQ,BAQ,SAQ & LAQ	 Lectures Case based discussionTutorials
Skills Demonstrate understanding of the use of various dosage forms (oral/local/ parenteral: solid/liquid)	Skill assessment	 Small group learning DOAP session
solid/liquid) Prepare oral rehydration solution from ORS packet and explain itsuse.	Skill assessment	 Small group learning DOAP session
Perform a critical evaluation ofthe drug promotional literature	OSPE	Small group learning

Communicate with the patient with empathy and ethics on allaspects of drug use	Skill station	Small group learning.
 Administer drugs through various routes in a simulated environment using mannequins 	Skill assessment	DOAP session

Medical Graduate Attributes

MIMER MEDICAL COLLEGE, TALEGAON (D)

Learning outcome and graduate attributes

At the end of the MBBS program, student shall be able to

- 1. Diagnose common clinical conditions in medical practice
- 2. Rational use of diagnostic tools
- 3. Prescribe drugs rationally
- 4. Use blood and blood products judiciously
- 5. Manage all types of emergencies at primary level

6 .Render services to chronically sick and disabled (both physical & mental)

- 7. Able to communicate effectively to the patients and relatives
- 8. Maintain professional secrecy wherever needed
- 9. Acquire knowledge about the various national health schemes and program
- 10. Find out health needs of the society.
- 11. Develop leadership qualities to function effectively as a leader of Health care system

Graduate Attributes to be nurtured during the course

- 1. Academic excellence
- 2. Good Clinical skills and expertise
- 3. Analytical skills and clinical competencies
- 4. Presence of mind and proper decision making
- 5. Research attributes
- 6. Community service
- 7. Leadership qualities
- 8. High regards and respect for human rights and ethics
- 9. Realization of social responsibilities
- 10.Cultural humility and inclusivity

Assessment methods:

The interns are expected to maintain the log book during their tenure. Based on the record of the work, students are graded with the score from 0-5 on fivepoint Likertscale.

(0-poor, 1- below average, 2-fair, 3-average, 4-above average, 5-excellent)

A Score of less than 3 in any of above items will represent unsatisfactory completion of the tenureStudents will get scoring under following headings;

1. Proficiency of knowledge required for each case

3. Responsibility, punctuality, work up of case, involvement in treatment, followup reports

4. Capacity to work in a team (Behavior with colleagues, nursing staff and relationship withparamedical staff).

5. Initiative, participation in discussions, research aptitude

For Post Graduate

The competency in skills expected to attain

A) Competency for performance of self-performance,

B) Competency of having observed,

C). Competency in having assisted the procedure

D) Competency in performing the procedures independently

Post graduate students have to appear for end of tenure examination where they are assessed fortheir knowledge (theory and practical)