

Department of Biochemistry

Name of Block	Block 1
Name of Elective	Phlebotomy & Sample Processing
Location of hospital laboratory research facility	Central lab, Biochemistry laboratory
Name of internal preceptor(s)	Dr. KrishnaGopal Dr. Divya Shukla
Name of external preceptor(if any)	N/A
Learning objectives of the elective	<ol style="list-style-type: none"> 1. To demonstrate various techniques of sample collection. 2. To store & preserve different samples using various preservatives. 3. To demonstrate sample processing using fully/semi auto analyzers available in the lab.
Number of students that can be accommodated in this elective	06
Prerequisites for the elective	Good lab practice
Learning resources for students	<ol style="list-style-type: none"> 1 Practical biochemistry textbook DM Vasudevan. 2 TEITZ Textbook of clinical biochemistry.
List of activities in which the student will participate	<ol style="list-style-type: none"> 1. Work with technician in sample collection & to observe & make a note of various sample collection techniques performed. 2. Work with observer/technician to understand various reagents/anticoagulants/preservatives used in sample storage. 3. To observe sample processing methods & how to operate various analyzers in lab.
Portfolio entries required	Notes prepared during posting
Logbook entry required	Satisfactory completion of posting
Assessment	Attendance Log book entry Group discussion
Other comments	

Department of Biochemistry
LLRM Medical College, Meerut
MBBS Students Elective Topic

Name of Block	Block 1
Name of Elective	Quality Control Assurance
Location of hospital labor research facility	Central lab, Biochemistry laboratory
Name of internal preceptor(s)	Dr. Himani Dr. Devanshi Singh
Name of external preceptor(if any)	N/A
Learning objectives of the elective	<ol style="list-style-type: none"> 1.To monitor laboratory output & performance. 2.Ensure quality of reagents, sufficient supplies, and maintenance of equipment 3.To learn how to develop standard operating procedures (SOP). 4.To observe how to run controls & standards on various analyzers available in lab. 5.Maintain appropriate records and establish a document control system
Number of students that can be accommodated in this elective	06
Prerequisites for the elective	Good lab practice
Learning resources for students	<ol style="list-style-type: none"> 1 Practical biochemistry textbook DM Vasudevan. 2 TEITZ Textbook of clinical biochemistry.
List of activities in which the student will participate	<ol style="list-style-type: none"> 1.Work with technician & observe how to run controls & how to deal with errors if any observed. 2.Work with observer/technician to observe that each & every equipment or analysers used in lab are working properly. 3.To ensure proper turnaround time(TAT) of sample processing is being maintained in lab.
Portfolio entries required	notes prepared during posting
Logbook entry required	Satisfactory completion of posting
Assessment	Attendance Log book entry Group discussion
Other comments	

Department of Anatomy, LLRM Medical College, Meerut

Name of Block	Block 1
Name of Elective	Comparison of CT/MRI Radiographic images of brain & spinal cord with cross section of cadaveric neuroanatomy
Location of hospital lab or research facility	Neuroradiological lab of anatomy department
Name of internal preceptor(s)	Dr. Priti sinha, Dr Mukesh Bansal, Dr. Dolly
Name of external preceptor if applicable	N/a
Learning objectives of elective	Study & identification of cross sections of cadaveric brain & spinal cord Radiographic study of MRI & CT-SCAN brain & spinal cord Comparison of cadaveric neuro anatomy with CT/MRI Radiographic images of brain & spinal cord
Number of students that can be accommodated in this elective	6
Prerequisites for elective	Knowledge of neuroanatomy & basic principles of CT & MRI
List of activities of student participation	1.Work with supervisor and making observation and identification of CT & MRI of brain & spinal cord 2.Differentiation between Cadaveric neuroanatomy and radiographic images of CT & MRI. 3.Cross sectional Study of anatomy of brain & spinal cord
Learning Resources	(Neuroanatomy)-Carpenter Snell's Clinical Neuroanatomy Radiography and Radio physics with Radiological techniques (CT & MRI, X-Ray) Dr. S K Bhargva. Cross Sectional Anatomy (CT MRI) Dr. S K Bhargva. Grainger & Allison's Diagnostic Radiology
Portfolio entries required	Cross Sectional Anatomy notes Radiological images (CT & MRI of brain & spinal cord notes)
Log book entry required	Satisfactory completion of posting with a "meet expectation '(M)'grade"
Assessment	Posting Attendance Successful completion of research objectives and log book entry

Department of Anatomy, LLRM Medical College, Meerut

Name of Block	Block 1
Name of Elective	Deep dissections on Cadaver
Location of hospital Lab or research facility	Dissection Hall , Department of Anatomy
Name of internal preceptor(s)	Dr Antima Gupta, Dr. Ketu Chauhan
Name of external preceptor if applicable	N/A
Learning objectives of elective	1. To know basic dissection technique. 2. Do proper deep dissection. 3. Observe findings of deep dissection.
Number of students that can be accommodated in this elective	6
Prerequisites for elective	Knowledge of Subject of Anatomy
List of activities of student participation	1. Work with supervisor in making observations and identification. 2. Work with preceptor for deep dissection
Learning Resources	Cunningham's dissector of anatomy vol I, II, III
Portfolio entries required	Proper notes of dissection Photography of the dissection for academic purpose.
Log book entry required	Satisfactory completion of posting with a "meets expectation '(M)' grade"
Assessment	Attendance Successful completion of research objectives and log book entry
Other comments	

LLRM MEDICAL COLLEGE MEERUT
DEPARTMENT OF PHYSIOLOGY

ELECTIVE 01

NAME OF BLOCK	BLOCK 1
NAME OF ELECTIVE	Effect of Isometric and Isotonic exercise on Blood Pressure.
LOCATION OF HOSPITAL/RESEARCH FACILITY	Research Laboratory, Department of Physiology, LLRM Medical College
NAME OF INTERNAL PRECEPTOR	Dr Priti Rathi Dr Megha Kulshreshtha Dr Alka Srivastava
NAME OF EXTERNAL PRECEPTOR	N/A
LEARNING OBJECTIVES	<ol style="list-style-type: none"> 1.To define Isotonic and Isometric exercise. 2.To differentiate the physiological changes occurring during isometric and isotonic exercises. 3. To perform Hand grip test using Hand grip dynamometer (Isometric exercise) and spot jogging (Isotonic exercise) with correct technique. 4. To record Systolic and Diastolic Blood Pressure while performing the exercise. 5.To interpret the results of the tests performed. 6.To compare the findings obtained during isometric and isotonic exercise.
NUMBER OF STUDENTS IN ELECTIVES	06
PREREQUISITES	<ol style="list-style-type: none"> 1.Basic knowledge of physiological cardiovascular changes during exercise. 2.Good Clinical Human Physiology Lab Skills.
LIST OF ACTIVITIES IN WHICH THE STUDENT WILL PARTICIPATE	<ol style="list-style-type: none"> 1.Observe and assist in Lab sessions. 2.Work with Preceptor/ Technician to understand the functioning of equipment. 3.Perform Isometric and Isotonic exercise. 4.Day wise Record of all activities in Log book. 5. To list the benefits of isotonic and isometric exercise in day-to-day life. 6. Analyse the data and write an abstract on the work done at the end of the session.
LEARNING RESOURCES FOR STUDENTS	<ol style="list-style-type: none"> 1. Review of Physiology by Ganong 2. Text book of Physiology by Guyton and Hall. 3. Textbook of Clinical disorders of Automatic Nervous System.

	4. BORON textbook of Human Physiology 5. Principles of Internal Medicine by Harrison.
PORTFOLIOS ENTRY REQUIRED	1.Documentation of Project work. 2. Study notes on related topic. 3.Photography while performing the Lab techniques for documentation.
LOGBOOK ENTRY REQUIRED	Satisfactory completion of posting undersigned by preceptor with a "Meets expectation (M)" grade
ASSESSMENT	Attendance, Formative record of activities in log book, Abstract Presentation of work done.
OTHER COMMENTS	NIL

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LRM MEDICAL COLLEGE MEERUT
DEPARTMENT OF PHYSIOLOGY

ELECTIVE FOR MBBS 2

NAME OF BLOCK	BLOCK 1
NAME OF ELECTIVE	Analysis of Body fat in young individuals using body fat analyser (Charder bio elective impedance machine).
LOCATION OF HOSPITAL/RESEARCH FACILITY	Research Laboratory, Department of Physiology, LLRM Medical College
NAME OF INTERNAL PRECEPTOR	Dr Lalita Chaudhary Dr Anshu Tandon Dr Pratibha Rani
NAME OF EXTERNAL PRECEPTOR	N/A
LEARNING OBJECTIVES	<ol style="list-style-type: none"> 1. To know the normal body composition. 2. To perform Body Composition Analysis using correct protocol. 3. To compare the various parameters of body composition. 4. To calculate BMI using correct formula. 5. To categorized the subject on the obesity scale.
NUMBER OF STUDENTS IN ELECTIVES	06
PREREQUISITES	<ol style="list-style-type: none"> 1. Basic knowledge of body composition and factors altering body composition. 2. Good Clinical Human Physiology Lab Skills.
LIST OF ACTIVITIES IN WHICH THE STUDENT WILL PARTICIPATE	<ol style="list-style-type: none"> 1. Observe and assist in Lab sessions. 2. Work with Preceptor/ Technician to understand the functioning of equipment. 3. To Perform body composition analysis. 4. Day wise Record of all activities in Log book. 5. To study the variation in body composition under different clinical situation(eg oedema). 6. Analyse the data and write an abstract on the work done at the end of the session.
LEARNING RESOURCES FOR STUDENTS	<ol style="list-style-type: none"> 1. Review of Physiology by Ganong 2. Concepts of altered health states (pathophysiology) by Carol Mattson Porth & Glenn Matfin. 3. Principles of Internal Medicine by Harrison.
PORTFOLIOS ENTRY REQUIRED	<ol style="list-style-type: none"> 1. Documentation of Project work. 2. Study notes on related topic. 3. Photography while performing the Lab techniques for documentation.

LOGBOOK ENTRY REQUIRED	Satisfactory completion of posting undersigned by preceptor with a "Meets expectation (M)" grade
ASSESSMENT	Attendance, formative record of activities in log book and Abstract presentation of work done.
OTHER COMMENTS	NIL

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LLRM MEDICAL COLLEGE MEERUT
DEPARTMENT OF PHARMACOLOGY
BLOCK 1

NAME OF BLOCK	Block 1
NAME OF ELECTIVE	Antibiotic Stewardship Programme
LOCATION OF HOSPITAL/RESEARCH FACILITY	SVBP Hospital & Dept. of Pharmacology, LLRM Medical College, Meerut
NAME OF INTERNAL PRECEPTOR	Dr. Raj Kumar Goel, Dr. Shalini Gupta
NAME OF EXTERNAL PRECEPTOR	--
LEARNING OBJECTIVES	<ol style="list-style-type: none"> 1. To classify various class of Antimicrobials. 2. To list AMAs for specific infections. 3. To prescribe AMAs in specific conditions, such as Renal/Hepatic disease, Geriatric patients, Pediatric patients, Pregnant women and Lactating mothers. 4. To evaluate rationality of poly-antimicrobial use as per WHO AWaRe classification.
NUMBER OF STUDENTS IN THE ELECTIVE	06
PREREQUISITES	<ol style="list-style-type: none"> 1. Thorough knowledge of AMAs. 2. WHO AWaRe Classification. 3. Rationality Assessment.

LIST OF ACTIVITIES IN WHICH STUDENTS WILL PARTICIPATE	<ol style="list-style-type: none"> 1. Collect prescriptions from SVBP hospital. 2. Record the number of AMAs prescribed in each prescription. 3. Document error in AMAs usage. 4. Assess the rationality of AMAs prescribed.
LEARNING RESOURCES FOR STUDENTS	<ol style="list-style-type: none"> 1. Essentials of Medical Pharmacology- K.D.Tripathi 2. Principles of Pharmacology -H.L. Sharma, K.K. Sharma 3. Medical Pharmacology-Padmaja Udaykumar
PORTFOLIOS ENTRY REQUIRED	<ol style="list-style-type: none"> 1. Documentation of AMAs used in prescriptions. 2. Documentation of rationality of AMAs prescribed. 3. Documentation of evaluation of Poly-AMAs prescribed.
LOGBOOK ENTRY REQUIRED	Satisfactory completion of posting with “M” grade.
ASSESSMENT	Attendance and successful completion of project with logbook entry.
OTHER COMMENTS	NIL

LLRM MEDICAL COLLEGE MEERUT
DEPARTMENT OF PHARMACOLOGY
BLOCK 1

NAME OF BLOCK	Block 1
NAME OF ELECTIVE	Prescription audit
LOCATION OF HOSPITAL/RESEARCH FACILITY	SVBP Hospital & Dept. of Pharmacology, LLRM Medical College, Meerut
NAME OF INTERNAL PRECEPTOR	Dr. Pinki, Dr. Davendra Kumar
NAME OF EXTERNAL PRECEPTOR	--
LEARNING OBJECTIVES	<ol style="list-style-type: none"> 1. To enumerate parts of prescription. 2. To describe the importance of each part of prescription. 3. To detect prescribing errors in the given prescription. 4. To document errors in prescription writing as per prescription audit guidelines. 5. To correct errors in given prescription. 6. To identify measures for promoting good prescription writing practices.
NUMBER OF STUDENTS IN THE ELECTIVE	06
PREREQUISITES	<ol style="list-style-type: none"> 1. Good understanding of prescription writing and rational drug therapy. 2. EML 3. Good knowledge of prescription audit guidelines, NHM.

LIST OF ACTIVITIES IN WHICH STUDENTS WILL PARTICIPATE	<ol style="list-style-type: none"> 1. Collect prescription for audit from SVBP hospital. 2. Document errors in prescription. 3. Identify measures for promoting good prescription writing practices.
LEARNING RESOURCES FOR STUDENTS	<ol style="list-style-type: none"> 1. Prescription audit guidelines, NHM. 2. CBME based Practical Pharmacology, Prof. Farida Ahmad, Dr. Jameel Ahmad. 3. CBME based pharmacology manual for MBBS students, Dr. Arvind Yadav.
PORTFOLIOS ENTRY REQUIRED	<ol style="list-style-type: none"> 1. Record of prescriptions collected. 2. Documentation of results of prescription audit. 3. Documentation of measures promoting good prescription writing practices.
LOGBOOK ENTRY REQUIRED	Satisfactory completion of posting with “M” grade.
ASSESSMENT	Attendance and successful completion of project with logbook entry.
OTHER COMMENTS	NIL

LLRM MEDICAL COLLEGE MEERUT

Department of Forensic Medicine and Toxicology

Block 1

Name of Block	Block 1
Name of Elective	Autopsy incisions
Location of Hospital/ Research Facility	Mortuary Complex, LLRM Campus
Name of Internal Preceptor	Dr. Vinita Kushwaha
Name of External Preceptor	--
Learning Objectives	<ol style="list-style-type: none">1. To know basic dissection techniques.2. Properly dissect organs and sample tissues.3. Recognize normal and abnormal findings at gross level.4. Properly describe the findings and prioritize the diagnoses
Number of students in the elective	04
Prerequisites	Good understanding of anatomy of body organs and their disease pathology
List of activities in which students will participate	<ol style="list-style-type: none">1. Work with preceptor to know types of autopsy incisions.2. Work with the preceptor in dissection of organs and tissues.3. To make differential diagnoses of the cases observed.
Learning resources for students	<ol style="list-style-type: none">1. Textbook of Forensic Medicine and Toxicology2. Robbins and Cotran Pathological basis of Disease.
Portfolios entry required	<ol style="list-style-type: none">1. Proper notes of dissection.2. Photography of the dissection for academic purpose.
Logbook entry required	Satisfactory completion of posting with "M" grade
Assessment	Attendance and successful completion of project with logbook entry
Other comments	Nil

LLRM MEDICAL COLLEGE MEERUT

Department of Forensic Medicine and Toxicology

Block 1

Name of Block	Block 1
Name of Elective	Dissection of brain at autopsy
Location of Hospital/ Research Facility	Dept of FMT, Mortuary, LLRM Campus
Name of Internal Preceptor	Dr. Mithun Ghosh
Name of External Preceptor	--
Learning Objectives	<ol style="list-style-type: none">1. To know types of brain dissections2. To know the gross pathologic findings in brain trauma/disease.
Number of students in the elective	04
Prerequisites	Knowing the anatomy of brain.
List of activities in which students will participate	<ol style="list-style-type: none">1. To know different anatomical areas of brain.2. To document the cerebral injuries.3. To correlate the pathological findings with the manner of trauma.
Learning resources for students	<ol style="list-style-type: none">1. Textbook of Forensic Medicine and Toxicology2. Ludwig's Autopsy Practice
Portfolios entry required	<ol style="list-style-type: none">1. Proper notes of dissection.2. Photography of the dissection for academic purpose.
Logbook entry required	Satisfactory completion of posting with "M" grade
Assessment	Attendance and successful completion of project with logbook entry
Other comments	Nil

ENT ELECTIVE COURSE FOR MBBS FINAL PROF PART – 1 STUDENTS

Name of block	Block – 1
Name of elective	To findout the commonest causes of conductive hearing loss among patients presenting in ENT OPD
Location of hospital	LLRM Medical college and hospital
Name of internal preceptor	Dr Vineet Sharma – Prof. & HOD
Name of external preceptor	NOT APPLICABLE
Learning objectives	1- Should be able to take history of patients 2- Should be able to examine the ear of patient 3- Should be able to perform tuning fork tests 4- Should know the causes of conductive hearing loss
Number of students that can be accommodated	5
Prerequisites	Knowledge of history taking of patients with ear diseases Knowledge of examination methods of EAR Knowledge of Tuning Fork Tests
List of activities of student participation	Will do history taking Complete examination of ear To do tuning fork tests for hearing evaluation Record of data and compiling
Learning resources	TEXT Book of ENT, P L Dhingra Hearing evaluation by Tuning Fork Tests/ pure tone audiometry
Log book entry required	yes
Assessment	Attence Successful completion of posting as verified in logbook

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LLRM MEDICAL COLLEGE
DEPARTMENT OF MICROBIOLOGY
ELECTIVES FOR MBBS

Sl. no	Particulars	Description
1)	Name of Block	Block 1
2)	Name of Elective	To perform ELISA for diagnosis of Dengue
3)	Location of hospital lab or research facility	Sample collection, Serology/virology of Department of Microbiology.
4)	Name of internal preceptor(s)	Dr Amit Garg
5)	Name of external preceptor (if any)	None
6)	Learning objectives of the elective	After this elective students should be able to: <ul style="list-style-type: none"> • Know the procedure of phlebotomy and serum separation. • Explain the basic steps involved in ELISA • Can do and explain the procedure of ELISA. • To read and interpret the positive & negative control and test results.
7)	Number of students that can be accommodated in this elective	10
8)	Prerequisites for the elective	<ul style="list-style-type: none"> • Vaccination status, • Consent letter, • Self declaration for adherence to safety measures and universal precautions.
9)	Learning resources for students	<ul style="list-style-type: none"> • Kit Literatures • Observation of routine diagnostic procedures in laboratory • Demonstration by Faculty members • DOAP
10)	List of activities in which the student will participate	<ul style="list-style-type: none"> • Donning of PPE kit • Sample collection observation and practice • Observation & practice of ELISA procedure • Reporting

		<ul style="list-style-type: none"> • Doffing of PPE kit • Day wise record of activities in log book
11)	Portfolio entries required	Yes
12)	Log book entry required	Yes
13)	Assessment	Formative Record of activities in log book and portfolio
14)	Other comments	<ul style="list-style-type: none"> • Certification will be done for the skill of donning and doffing of PPE kit • Periodic tracking of the activities will be done by head of the department.

LLRM MEDICAL COLLEGE

DEPARTMENT OF MICROBIOLOGY

ELECTIVES FOR MBBS

Sl. no	Particulars	Description
1)	Name of Block	Block 1
2)	Name of Elective	Culture & Sensitivity of clinical specimens like urine, pus, body fluids etc.
3)	Location of hospital lab or research facility	Sample collection, Bacteriology
4)	Name of internal preceptor(s)	Dr Karvi Agarwal
5)	Name of external preceptor (if any)	None
6)	Learning objectives of the elective	After this elective students should be able to: <ol style="list-style-type: none">1. To instruct patients about the aseptic sample collection, labeling2. Perform staining, culture, biochemical tests and other identification methods of the isolate and to put antibiotic susceptibility testing.3. Evaluate the results of the biochemical tests and sensitivity pattern.4. Formulate how you will organize and address identifying unknown bacteria based on observations of the patterns in your results.5. To prepare the reports and to record the results in record register.
7)	Number of students that can be accommodated in this elective	10
8)	Prerequisites for the elective	<ul style="list-style-type: none">• Vaccination status,• Consent letter,• Self declaration for adherence to safety measures and universal precautions.
9)	Learning resources for students	<ul style="list-style-type: none">• Mackie & McCartney Practical Medical Microbiology• Observation of routine diagnostic procedures in laboratory• Demonstration by Faculty

		members <ul style="list-style-type: none"> • DOAP
10)	List of activities in which the student will participate	<ul style="list-style-type: none"> • Sample collection observation and instruction • Inoculation of specimen on culture media • Reading of colony morphology • Motility testing • Inoculation of biochemical tests & its reading • Performance & reading of Antibiotic susceptibility testing • Reporting • Day wise record of activities in log book
11)	Portfolio entries required	Yes
12)	Log book entry required	Yes
13)	Assessment	Formative Record of activities in log book and portfolio
14)	Other comments	<ul style="list-style-type: none"> • Certification will be done for the skill of Gram staining and its observation • Periodic tracking of the activities will be done by head of the department.

LLRM MEDICAL COLLEGE
DEPARTMENT OF MICROBIOLOGY
ELECTIVES FOR MBBS

Sl. no	Particulars	Description
1)	Name of Block	Block 1
2)	Name of Elective	KOH mount & Culture of cutaneous specimens
3)	Location of hospital lab or research facility	Sample collection Mycology laboratory of Department of Microbiology.
4)	Name of internal preceptor(s)	Dr Deepika
5)	Name of external preceptor (if any)	None
6)	Learning objectives of the elective	<p>After this elective students should be able to:</p> <ul style="list-style-type: none"> • Explain the cutaneous mycoses and pathogenesis. • Know how to take sample for cutaneous mycoses. • Should able to perform direct demonstration of the causative agent. • Should know culture techniques for fungus. • Should know how to report?
7)	Number of students that can be accommodated in this elective	10
8)	Prerequisites for the elective	<ul style="list-style-type: none"> • Vaccination status, • Consent letter, • Self declaration for adherence to safety measures and universal precautions.
9)	Learning resources for students	<ul style="list-style-type: none"> • Text books • Observation in Mycology laboratory
10)	List of activities in which the student will participate	<ul style="list-style-type: none"> • Donning of PPE kit • Sample collection • Direct demonstration & Culture methods • Reporting • Doffing of PPE kit • Day wise record of activities in log book

11)	Portfolio entries required	Yes
12)	Log book entry required	Yes
13)	Assessment	Formative Record of activities in log book and portfolio
14)	Other comments	<ul style="list-style-type: none">• Certification will be done for doing the KOH mount & culture on SDA• Periodic tracking of the activities will be done by head of the department.

LLRM MEDICAL COLLEGE

DEPARTMENT OF MICROBIOLOGY

ELECTIVES FOR MBBS

Sl. no	Particulars	Description
1)	Name of Block	Block 1
2)	Name of Elective	Performing slide & tube WIDAL test
3)	Location of hospital lab or research facility	Sample collection, Serology laboratory of Department of Microbiology.
4)	Name of internal preceptor(s)	Dr Prem Prakash Mishra
5)	Name of external preceptor (if any)	None
6)	Learning objectives of the elective	<p>After this elective students should be able to:</p> <ul style="list-style-type: none"> • Know the procedure of blood collection and separation of serum. • Should understand principle of WIDAL test. • Know the procedure of the test. • Understand the interpretation of result. • Reporting
7)	Number of students that can be accommodated in this elective	10
8)	Prerequisites for the elective	<ul style="list-style-type: none"> • Vaccination status, • Consent letter, • Self declaration for adherence to safety measures and universal precautions.
9)	Learning resources for students	<ul style="list-style-type: none"> • Research articles • Observation in Serology laboratory • Data records
10)	List of activities in which the student will participate	<ul style="list-style-type: none"> • Donning of PPE kit • Sample collection observation only • Performance of test • Interpretation of result. • Reporting • Doffing of PPE kit • Day wise record of activities in log book
11)	Portfolio entries required	Yes
12)	Log book entry required	Yes
13)	Assessment	Formative Record of activities in log

		book and portfolio
14)	Other comments	<ul style="list-style-type: none">• Certification will be done for the test procedure & interpretation of results from controls.• Periodic tracking of the activities will be done by head of the department.



L.L.R.M. MEDICAL COLLEGE - MEERUT

DEPARTMENT OF RADIODIAGNOSIS

1	Name of Block	BLOCK-1
2	Name of Elective	Basic Radiological skills
3	Location of hospital lab or research facility	Ultrasound / X-Ray / Department of Radiodiagnosis
4	Name of Internal Perceptor	Dr. Yasmeen Usmani, Prof. & Head Department of Radiodiagnosis
5	Name of External Perceptor	N. A.
6	Learning Objectives of Elective	<ol style="list-style-type: none"> 1. Identify basic and emergency Radiograph Pathologies. 2. Assist radiological procedures. 3. Identification of normal anatomical organ and basic pathologies on Ultrasonography. 4. Assist USG guided procedures like FNAC, Biopsy, Pigtail and suprapubic catheterisation
7	No. of students that can be accommodated in this elective	Four
8	Prerequisite for elective	Basic communications skills History taking Basic Anatomical knowledge
9	List of activities of student participation	<ul style="list-style-type: none"> • Orientation of X-Ray and Ultrasonography room • Interactive teaching on basic radiological anatomy and pathology • History taking • Demonstration of radiological procedures (like – Barium studies, IVP, RGU/MCU etc.)
9.1	Week -1	



L.L.R.M. MEDICAL COLLEGE - MEERUT

DEPARTMENT OF RADIODIAGNOSIS

		<ul style="list-style-type: none">• Small group teaching• Hands on training of handling X-Ray and ultrasound equipments• Assisting in report making of USG / X-Ray• Quality control monitoring• Formative assessment at the end of week
10.	Learning resources	Radiology made easy Text book of Radiology and imaging – Sutton Guide to Radiological procedures – Chapman. Web links, SOP's
11.	Portfolio entries required	Work book enteries Presentations
12.	Log book entry required	Log book enteries and verification
13.	Assessment	Assessment at the end of week. Successful verification of required portfolio enteries
15.	Other Comments	

**DEPARTMENT – COMMUNITY MEDICINE
LLRM MEDICAL COLLEGE, MEERUT**

Block: 1

Name of Block	Block-1
Name of Elective	Screening of non-communicable diseases (NCDs)
Location of hospital Lab or research facility	Community Medicine OPD, LLRM Medical College, Meerut
Name of Internal preceptor(s)	Dr. Seema Jain
Name of Co-preceptor (if applicable)	Dr. Kraty Singh
Learning objectives of elective	<ul style="list-style-type: none"> • To identify the various non-communicable diseases (NCDs) • To find out the major risk factors for non-communicable diseases (NCDs) • Correct ways of measuring the instruments like Blood pressure, Weight, Height, BMI etc. • National Programme for Prevention & Control of Non-Communicable Diseases [NP-NCD] • Creating awareness regarding non-communicable diseases (NCDs) and help in preventing and controlling among the community
Number of students that can be accommodated in this elective	Approx. 8-10 students (half of them were male and female students)
Prerequisites for elective	<ul style="list-style-type: none"> • Good communication skills while dealing with patients. • Carry all instruments like Stethoscope, torch, hammer, measuring tape, BP apparatus, weighting machines etc. as per requirement. • Students should follow the protocol while interacting with patients, like wearing masks, aprons, etc.
Learning resources for students	<ol style="list-style-type: none"> 1. NP-NCD government guidelines 2. Park's Textbook of Preventive and Social Medicine
List of activities of student participation	<ul style="list-style-type: none"> • 6 days a week duty in Community Medicine OPD under supervision • Research works
Portfolio entries required	<ul style="list-style-type: none"> • Documentation of patient records for screening in log book/register • Daily entry of data on Google form is necessary
Logbook entry required	<ul style="list-style-type: none"> • Completion of posting signed by Internal Preceptor/ External Preceptor
Assessment	Day-to-day filling of data in Google form and OPD Patient Register
Other comments	

**DEPARTMENT – COMMUNITY MEDICINE
LLRM MEDICAL COLLEGE, MEERUT**

BLOCK –1:

Name of Block	Block -1
Name of elective	Community Outreach
Location of hospital/research facility	Urban Health Training Centre, Department of Community Medicine, LLRM Medical College
Name of internal preceptor	Dr. Seema Jain
Name of external preceptor	Dr. Tribhuvan Raghav
Learning objectives	<ol style="list-style-type: none"> 1. To provide primary care to patients in a resource-limited setting under supervision 2. To function as a member of a health care team in a primary care centre. 3. To participate in health outreach activities of a primary care centre.
Number of students in the electives	2
Prerequisites	Required immunisations to be taken.
List of activities in which students will participate	<ol style="list-style-type: none"> 1. Provide patient care under the supervision of a community clinic preceptor. 2. Assist in common procedures in a community care clinic 3. Counsel patients in their own language 4. Participate in national health care programs offered through the UHTC 5. Participate in Outreach Programs (Health Education, Immunisation, etc)
Learning resources for students	<ol style="list-style-type: none"> 1. Oxford Textbook of Public Health 2. Park’s Textbook of Preventive and Social Medicine
Portfolios entry required	Daily log of patients seen and activities to be done and signed by the Supervisor
Logbook entry required	Satisfactory completion of posting with a “meets expectation ‘(M)’ grade”
Assessment	<ol style="list-style-type: none"> 1. Attendance 2. Logbook entry 3. Periodic formative assessment of the clinical skills and summative assessment at the end of the module.
Other comments	

**DEPARTMENT – COMMUNITY MEDICINE
LLRM MEDICAL COLLEGE, MEERUT**

BLOCK –1:

Name of the Teacher	: Dr. Tanveer Bano, Dept. of Community Medicine
Name of Block	: Block 1
Name of Elective	: Drop out rate of immunisation.
Location of Elective	: Urban Health Training Centre (UHTC), Surajkund under LLRM Medical College, Meerut
Name of Internal Perceptor	: Dr. Tanveer Bano
Name of External Perceptor	: Dr. Shubhali Batra
Learning Objectives	: a) Learn to calculate drop out rates of various vaccines. b) To find out drop out rate among under-5 children attending vaccination OPD at UHTC
Number of Students in Elective Required	04
Pre requisite for elective	: Good Clinical Practice
List of activities of students	: 1) Attending Immunisation OPD at UHTC 2) Learn to calculate drop out rates of vaccines 3) Give health education to mothers regarding vaccination
Learning resources	: Handbook of Immunisation for Medical officers and Park's Textbook of Preventive & Social Medicine
Portfolio entries required	: Immunisation Cards, Immunisation Register
Logbook entry required	: - Satisfactory Completion of Posting with a “meets expectation ‘(M)’ grade - Attendance.

LLRM MEDICAL COLLEGE, MEERUT DEPARTMENT
- COMMUNITY MEDICINE

Name of Block	01
Name of Elective	Immunisation and Vaccination coverage
Location of Hospital / Resarch Facility	Vaccination OPD and Urban Health Training Centre, Surajkund under LLRM Medical College, Meerut.
Name of Internal Receptor	Dr. Neelam S. Gautam
Name of External Receptor	Dr. Banisha
Learning Objectives	<ul style="list-style-type: none"> a) To provide vaccination covered under National Immunisation Programme. b) To teach different techniques ie. IM, SC, ID methods. c) To learn cold chain maintenance – storage and transportation of vaccines. d) To assess the immunisation coverage in the area.
Number of student in the Electives	05
Pre requisites	Vaccines and Syringes
List of activities in which students will participate	<ul style="list-style-type: none"> a) Identifying the vaccines. b) Demonstrate the techniques of various routes of vaccination. c) Cold chain maintenance and record keeping. d) Vaccine demand calculation.
Learning resources for students	Vaccines, MCP card, children, vaccination manual
Portfolios entry required	As per requirment
Log book entry required	Yes
Assessment	Carrying out independent vaccination sessions
Other comments	Need based identifying barriers to have good vaccination coverage

LLRM MEDICAL COLLEGE MEERUT
DEPARTMENT OF PATHOLOGY
BLOCK 1

1	Name of Block	BLOCK-1
2	Name of Elective	Diagnosis of microcytic hypochromic anemia
3	Location of hospital lab or research facility	Hematology Unit, Central Lab, SVBP Hospital
4	Name of Internal Perceptor	MOIC, Central Lab
5	Name of External Perceptor	NA
6	Learning Objectives of Elective	<ol style="list-style-type: none"> 1. Define anemia 2. Classification of anemia 3. Diagnosis of microcytic hypochromic anemia. How to differentiate microcytic hypochromic anemia from other anemias 4. Treatment of microcytic hypochromic anemia
7	No. of students that can be accommodated in this elective	Five
8	Prerequisite for elective	Use of universal precautions in lab
9	List of activities of student participation	<ul style="list-style-type: none"> • Orientation of hematology lab • Interactive teaching on anemia • Sample collection and identification • Demonstration of laboratory procedures (CBC, making and staining smears, microscopy etc.) • Small group teaching • Hands on training of various lab procedures • Quality control monitoring
9.1	Week -1	
9.2	Week - 2	
9.3	Week – 3	
9.4	Week - 4	

		<p>of lab</p> <ul style="list-style-type: none"> • Formative assessment at the end of every week
10.	Learning resources	<p>Robbins textbook of Pathology Dacie & Lewis Practical Hematology hand outs, Web links, lab manuals SOP's</p>
11.	Portfolio entries required	<p>Lab notes Work book enteries Presentations</p>
12.	Logbook entry required	<p>Log book enteriesand verification</p>
13.	Assessment	<p>Assessment at the end of everyweek. Successful verification of required portfolio enteries</p>
15.	Other Comments	

**LLRM MEDICAL COLLEGE MEERUT
DEPARTMENT OF PATHOLOGY**

BLOCK 1

NAME OF BLOCK	Block 1
NAME OF ELECTIVE	Diagnostic Surgical Pathology
LOCATION OF HOSPITAL/ RESEARCH FACILITY	Histopathology lab, Dept. of Pathology LLRM Medical College, Meerut
NAME OF INTERNAL PRECEPTOR	Dr. Anshu Singh
NAME OF EXTERNAL PRECEPTOR	N/A
LEARNING OBJECTIVES	<p>Develop the student's knowledge of the pathology of disease.</p> <p>Describe the roles of pathologist as member of the health care team.</p> <p>Describe the operations of diagnostic surgical pathology including gross and microscopic techniques, frozen sections and immunohistochemistry.</p> <p>Develop understanding about the various steps in Histopathology: Tissue processing Staining (manual/ automated).</p> <p>Know about new technologies in surgical pathology .</p>
NUMBER OF STUDENTS IN ELECTIVE	04
PREREQUISITES	Prior Knowledge of normal anatomy/ histology. Necessary Hepatitis vaccination

LIST OF ACTIVITIES IN WHICH STUDENTS WILL PARTICIPATE	<p>1. Work daily with a supervisor in observing, acting and performing histopathology grossing.</p> <p>2. Participate in routine microscopic sign out with faculty including biopsies and gross surgical specimens</p> <p>2. Participate in departmental education activities.</p> <p>3. Case Presentation by students</p>
LEARNING RESOURCE FOR STUDENTS	<p>Department SOP provided .</p>
PORTFOLIOS ENTRY REQUIRED	<p>1. Documentation of worked up cases 2. Documentation of presentation done</p>
LOGBOOK ENTRY REQUIRED	<p>Completion of posting signed by preceptor with a 'Meets expectation (M) grade'</p>
ASSESSMENT	<ul style="list-style-type: none"> - Formative attendance - Day to day participation in department activity - Performance of assigned tasks and presentation of worked up cases in department.
OTHER COMMENTS	<p>NIL</p>

LLRM MEDICAL COLLEGE MEERUT
DEPARTMENT OF PATHOLOGY


BLOCK 1

1	Name of Block	BLOCK-1
2	Name of Elective	Hematology Automated Techniques
3	Location of hospital lab or research facility	Hematology Unit, Central Lab, SVBP Hospital
4	Name of Internal Perceptor	MOIC, Central Lab
5	Name of External Perceptor	NA
6	Learning Objectives of Elective	<ol style="list-style-type: none"> 1. Define anemia 2. Classify the morphological types of anemia 3. Perform data collection and interpretation 4. Analyse clinic-pathological profile of anemia in paediatric age group
7	No. of students that can be accommodated in this elective	Six
8	Prerequisite for elective	<ol style="list-style-type: none"> 1. Knowledge of cut-off for paediatric age group 2. Knowledge of RBC indices 3. Knowledge of morphological classification of anemia
9	List of activities of student participation	<ol style="list-style-type: none"> 1. Histogram interpretation 2. Independently perform CBC sampling on 3-part & 5-part hematology automated analyzer 3. Independently perform Leishman stain 4. Peripheral blood smear interpretation
9.1	Week -1	
9.2	Week - 2	
9.3	Week – 3	
9.4	Week - 4	

		<p>5. Interpretation of CBC reports</p> <p>6. Record patient details and corresponding clinical and hematological reports</p>
10.	Learning resources	<p>Robbins textbook of Pathology</p> <p>Dacie & Lewis Practical Hematology</p> <p>Web links</p> <p>SOP of Hematology Lab</p>
11.	Portfolio entries required	Maintain master chart / data sheet
12.	Logbook entry required	Log book entries and verification with signature of faculty and should be graded meet expectations
13.	Research project	Complete the project within the allotted time
14.	Assessment	<p>Formative</p> <p>Attendance and viva voice</p> <p>Presentation in the lab noted in portfolio</p>
15.	Comments	Manuscript writing and publication will be encouraged


L.L.R.M.MEDICAL COLLEGE, MEERUT
DEPARTMENT :- OPHTHALMOLOGY
BLOCK :- 01

Name of block	1
Name of Elective	OCULAR SURFACE DISEASE
Location of hospital or Lab	S.V.B.P.Hospital
Name of Internal Preceptor	Dr. Jaishree Dwivedi
Name of External Preceptor	NA
Learning Objective of the Elective	To function as a part of health care worker in eye OPD Screening every patient for prevalence of Dry Eye Disease Screening of patients with prolonged Screen time
Learning Resources for Students	Textbook of Ophthalmology by Dr.Sanjeev Mittal
Number of Students that can be accommodated in this Elective	6
List of Activities in which students will Participate	Participate in routine Eye OPD for screening of Dry Eye patients with prolonged screening time Participate in academic programs of department Present at least two patients on academic forum
Portfolio Entries Required	Documentation of worked up cases Documentation of presentation done
Log Book Entry Required	Completion of portfolio signed by preceptor with a meet expectation M grade
Assessment	Attendance Day to day participation in department activities Performance of assigned task and presentation of work up cases in department


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L.L.R.M.MEDICAL COLLEGE,MEERUT
DEPARTMENT :- OPHTHALMOLOGY
BLOCK :- 01

Name of block	1
Name of Elective	Refraction
Location of hospital or Lab	S.V.B.P.Hospital
Name of Internal Preceptor	Dr. Priyanka Gusain,
Name of External Preceptor	NA
Learning Objective of the Elective	To work with Team of HCW To assess the prevalence of myopia in Childhood between 5-15 Years To assess risk factors related to onset and development of myopia in childhood
Number of Students that can be accommodated in this Elective	6
Pre Requisites for Elective	Universal [recautions,adequate knowledge of myopia and practice to complete the modules
List of Activities in which students will Participate	Participate in routine eye OPD and various eye Camps held in Schools Participate in Academic programs of department Study the prevalence and risk factors of myopia Present at least two cases in academic forUm
Portfolio Entries Required	Daily log of patients seen and activities participated At least 04 fully worked up patients documented
Log Book Entry Required	Yes
Assessment	Attendance Successful Verification of required Portfolio Enteries Successful completion of patients certified in the log book with a meets expectation M grade


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