

Dr. KNS Memorial Institute of Medical Sciences

Gadia Barabanki



Dated: 16.4.2023

DEPARTMENT OF MEDICAL EDUCATION

ELECTIVE MODULES (BLOCK -1) For MBBS STUDENTS OF 20-21 BATCH AS PER COMPETENCY BASED CURRICULUM

	INDEX		
BLOCK 1			
1.	Biochemistry	Biochemical Laboratory Tests-1	
2.	Biochemistry	Biochemical Laboratory Tests-1	
3.	Microbiology	Biomedical Waste	
4.	Microbiology	Infection Control	
5.	Microbiology	Research - Incidence Pattern of Skin Diseases in School Going Students of Barabanki.	
б.	Pathology	Megaloblastic Anemia	
7.	Pathology	Thrombocytopenia	
8.	Pathology	Blood Banking & Transfusion.	
9.	Pathology	Research Project: Diagnostic Accuracy Of FNAC in Various Diseases	
10.	Pharmacology	Pharmacovigilance	
11.	Community Medicine	Obesity in Diabetic patients	
12.	Community Medicine	Psychosocial Status of Senior Citizens	
13.	Community Medicine	Sanitazion habits	
14.	Community Medicine	Study On Protein Energy malnutrition among under 5yrs children Living in Rural Barabanki	

BLOCK 1

Pre-/Para - clinical disciplines or in other basic sciences laboratory or join ongoing research programs

BIOCHEMISTRY

BIOCHEMICAL LABORATORY TESTS - 1

Name of Block	Block 1
Name of Elective	Biochemistry
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 Describe commonly used laboratory apparatus and equipments, good safe laboratory practice and waste disposal. Observe use of commonly used equipments/techniques in biochemistry laboratory including: pH meter Paper chromatography of amino acid Protein electrophoresis TLC / Electrolyte analysis by ISE ABG analyzer ELISA Autoanalyser Correlation of altered biochemical values with health and disease. Elaborating precautions to be taken in Biochemistry Lab.
	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided
List of activities of student participation	 Work daily with a supervisor to observe commonly used laboratory apparatus and equipments, good safe laboratory practice and waste disposal. Work daily with a supervisor to observe commonly used techniques in biochemistry laboratory

3. Work daily with a supervisor for Correlation of altered biochemical values with health and disease / precautions to be taken in Biochemistry Lab
4. Participate in departmentaleducation activities
5. Present at least two data's done bystudent as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentationdone
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	NA

BIOCHEMICAL LABORATORY TESTS - 2

Name of Block	Block 1
Name of Elective	Biochemistry
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 Describe commonly used laboratory apparatus and equipments, good safe laboratory practice and waste disposal. Explain the basis and rationale of biochemical tests done in the following conditions: Diabetes Mellitus, Dyslipidemia, Myocardial Infarction, Renal Failure, Gout, Proteinuria, Nephrotic Syndrome, Edema, jaundice, liver diseases, pancreatitis, disorders of acid- base balance, -thyroid disorders. Correlation of altered biochemical values with health and disease. Elaborating precautions to be taken in Biochemistry Lab.
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided
List of activities of student participation	 Work daily with a supervisor to observe commonly used laboratory apparatus and equipments, good safe laboratory practice and waste disposal. Work daily with a supervisor to observe the basis and rationale of biochemical tests done in the above conditions Work daily with a supervisor for Correlation of altered

 biochemical values with health and disease / precautions to be taken in Biochemistry Lab 4. Participate in departmental education activities 5. Present at least two data's done by student as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentation done
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

MICROBIOLOGY

BIO-MEDICAL WASTE (BMW)

Name of Block	Block 1
Name of Elective	Migraphiology DMW
Name of Elective	Microbiology- BMW
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 Define Healthcare Associated Infections (HAI) and enumerate the types. Discuss the factors that contribute to the development of HAI and the methods for prevention Describe the basics of Infection control To assist in monitoring of Air & Surface surveillance of critical areas in hospital. To observe and assist in segregation of BMW according to BMW guidelines To assist in monitoring of transport and storage of BMW Documentation and record maintenance
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations,
	Universal precaution to be taken
Learning resources for students	Departmental handbook and Handouts will be provided
List of activities of student participation	 Work daily with a supervisor inobserving, assisting and defining Healthcare Associated Infections Work daily with a supervisor to assist in monitoring of Air & Surface surveillance of critical areas in hospital / To observe and assist in segregation of BMW according to BMW guidelines / To

assist in monitoring of transport and storage of BMW
3. Participate in departmental activities of segregation &
Transportation of BMW according to BMW guidelines
4. Participate in departmental education activities of
Infectioncontrol measures
5. Keep record of at least 10 patients and Present at least two
data's done by student as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentation
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

INFECTION CONTROL

Name of Block	Block 1
Name of Elective	Microbiology – Infection Control
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 To demonstrate the various causative agents of Infectious diseases & their role in health and disease. To demonstrate various methods used in their detection / Gram Stain, ZN stain and stool routine microscopy / Culture / Serology Describe the epidemiological basis of common infectious diseases Demonstrate the different methods of sterilization and disinfection Choose the most appropriate method of sterilization and disinfection to be used in specific situations in the laboratory, in clinical and surgical practice
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook will be provided

List of activities of student participation	1. Work daily with a supervisor in observing, assisting and
	definingInfection control measures
	2. Work daily with a supervisor To demonstrate various methods
	used in their detection / Gram Stain, ZN stain and stool routine
	microscopy / Culture / Serology Describe the epidemiological
	basis of common infectious diseases / Demonstrate the different
	methods of sterilization and disinfection
	3. Work daily with a supervisor To Choose the most
	appropriate method of sterilization and disinfection to be
	used in specific situations in the laboratory, in clinical and
	surgical practice
	4. Participate in departmental activities of sterilization and
	disinfection of samples & select most appropriate method /
	departmentaleducation activities of Infection control
	5. Keep record of at least 10 patients and Present at least two data's
	done bystudent as a case work up
	done bystudent us a case work up
	•

Portfolio entries required	6. Documentation of worked up cases7. Documentation of presentation
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)' grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

RESEARCH PROJECT: INCIDENCE PATTERN OF SKIN DISEASES IN SCHOOL GOING STUDENTS OF BARABANKI.

Name of Block	Block 1
Name of Elective	Microbiology & Dermatology: Incidence pattern of Skin diseases in school going students of Barabanki.
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning aims & objectives of elective	 To visit the schools in the district Barabanki to Document the presence of various skin disorders in the school going children upto class 8th. Take samples whenever possible for culture and other diagnostic tests for diagnosis of the disease. Propose primary treatment of the condition to these students as advised by the specialist guide. Documentation and record maintenance and prepare a manuscript on the subject for publication.
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided

List of activities of student participation	1. Work daily with a supervisor to Document the
	presence of various skin disorders in the school
	going children upto class 8 th .
	2. Work daily with a supervisor to take samples whenever possible
	for culture and other diagnostic tests for diagnosis of the
	disease / Propose primary treatment of the condition to these
	students as advised by the specialist guide.
	3. Participate in departmentaleducation activities related to
	skin & its control measures (diagnostic & therapeutic).
	4. Keep record of at least 10 patients and Present at least two data's
	done bystudent as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentation
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

PATHOLOGY

MEGALOBLASTIC ANEMIA

Name of Block	Block 1
Name of Elective	Pathology – Megaloblastic Anemia
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 Describe laboratory investigations of Macrocytic anemia The metabolism of Vitamin B12 and the etiology and pathogenesis of B12 deficiency Perform in a team to do peripheral blood smear and identify picture of Macrocytic anemia Enumerate the differences and describe the etiology and distinguishing features of Megaloblastic and non-Megaloblastic Macrocytic anemia
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided
List of activities of student participation	 Work daily with a supervisor inobserving, assisting and performing laboratory investigations of Macrocytic anemia Perform in a team to do peripheral blood smear and identify picture of Macrocytic anemia Perform in a team to Enumerate the differences and describe the etiology and distinguishing features of Megaloblastic and non-Megaloblastic Macrocytic anemia Participate in departmentaleducation activities Keep record of at least 10 patients and Present at least two data's done bystudent as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentationdone
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

THROMBOCYTOPENIA

Name of Block	Block 1
Name of Elective	Pathology – Thrombocytopenia
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 Describe laboratory investigations of Thrombocytopenia the metabolism of Platelets and the etiology and pathogenesis of Platelet B12 deficiency Perform in a team to do peripheral blood smear and identify picture of Thrombocytopenia Enumerate the differences and describe the etiology and distinguishing features of Thrombocytopenia nd other causes of bleeding disorders.
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided
List of activities of student participation	 Work daily with a supervisor inlaboratory investigations of Thrombocytopenia Participate in departmentaleducation activities Perform in a team to do peripheral blood smear and identify picture of Thrombocytopenia Perform in a team to enumerate the differences and describe the etiology and distinguishing features of Thrombocytopenia nd other causes of bleeding disorders. Keep record of at least 10 patients and Present at least two data's done bystudent as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentationdone
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

BLOOD BANKING & TRANSFUSION.

Name of Block	Block 1
Name of Elective	Pathology – Blood Banking & Transfusion.
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 Classify and describe blood group systems (ABO and RH) Describe the indications, principles, and the steps of compatibility testing Blood components and describe their clinical uses Perform in a team to do blood transfusion. Enumerate and describe infections transmitted by blood transfusion Describe transfusion reactions and enumerate the steps in the investigation of a transfusion reaction
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided
List of activities of student participation	 Work daily with a supervisor inClassify and describe blood group systems (ABO and RH) / compatibility testing Work daily with a supervisor to Perform in a team to do blood transfusion Work daily with a supervisor to find out infections transmitted by blood transfusion / its investigations & management Participate in departmentaleducation activities Keep record of at least 10 patients and Present at least two data's done bystudent as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentationdone
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

RESEARCH PROJECT: DIAGNOSTIC ACCURACY OF FNAC IN VARIOUS DISEASES

Name of Block	Block 1
Name of Elective	Pathology & other concerned Clinical Departments
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning aims & objectives of elective	 To enumerate diseases in which FNAC is advised. To perform in a team to take FNAC samples. To perform in a team to diagnose diseases in various samples. To note diagnostic accuracy of FNAC in diagnosing various diseases coming to Department of Pathology.
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided
List of activities of student participation	 Work daily with a supervisor to enumerate diseases in which FNAC is advised To perform in a team to take FNAC samples. To perform in a team to diagnose diseases in various samples. Work daily with a supervisor To note diagnostic accuracy of FNAC in diagnosing various diseases coming to Department of Pathology Participate in departmentaleducation activities Keep record of at least 10 patients and Present at least two data's done bystudent as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentationdone
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

PHARMACOLOGY

PHARMACOVIGILANCE

Name of Block	Block 1
Name of Elective	Pharmacology - Pharmacovigilance
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
· · · · · · · · · · · · · · · · · · ·	
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 Describe principles of Pharmacovigilance & ADR reporting systems Define, identify and describe the management of adverse drug reactions (ADR) Identify and describe the management of drug interactions Functioning of Regulatory body for Pharmacovigilance Department (clinical) visits to note adverse drug reactions in the last 6 months.
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided
List of activities of student participation	 Work daily with a supervisor to understand principles of Pharmacovigilance & ADR reporting systems Work daily with a supervisor to understand principles of management of adverse drug reactions (ADR) / drug interactions Work daily with a supervisor for visits to note adverse drug reactions in the last 6 months. Participate in departmentaleducation activities Keep record of at least 10 patients and Present at least two data's done bystudent as a case work up

Portfolio entries required	1. Documentation of worked up cases
	2. Documentation of presentationdone

Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

COMMUNITY MEDICINE

PREVALENCE OF OBESITY IN DIABETIC PATIENTS IN RURAL BARABANKI

Name of Block	Block 1
Name of Elective	Community Medicine
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 Evaluation of incidence of Obesity in known cases of diabetes patients in Barabanki. Grading Obesity as per WHO criterias Role of Obesity in severity of Diabetes Incidence of Obesity with type of Diabetes.
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided
List of activities of student participation	 Work daily with a supervisor inobserving, assisting Evaluation of incidence of Obesity in known cases of diabetes patients in Barabanki. Work daily with a supervisor inobserving role of Obesity in severity of Diabetes Work daily with a supervisor in observing Incidence of Obesity with type of Diabetes. Participate in departmentaleducation activities Keep record of at least 10 patients and Present at least two

data's done bystudent as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentationdone
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

KNOWLEDGE AND PRACTICE OF SCHOOL GOING CHILDREN ABOUT SANITATION HABITS AND ITS CORRELATION WITH HEALTH STATUS

Name of Block	Block 1
Name of Elective	Community Medicine
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 Evaluation of Knowledge and practice of school going children about sanitation habits of children in Barabanki. Awareness of these children towards: Washing Hands Covering mouth while coughing Having regular baths & Shower Brushing Teeth Evaluation of parental awareness towards sanitation habits of children
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided
List of activities of student participation	 Work daily with a supervisor inobserving, assisting and collecting data on Knowledge and practice of school going children about sanitation habits of children in Barabanki. Work daily with a supervisor in finding parental awareness towards sanitation habits of children

3. Participate in departmentaleducation activities
4. Keep record of at least 10 patients and Present at least two
data's done bystudent as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentationdone
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

STUDY ON PROTEIN ENERGY MALNUTRITION AMONG UNDER 5YRS CHILDREN LIVING IN RURAL BARABANKI

Name of Block	Block 1
Name of Elective	Community Medicine
Location of hospital Lab or researchfacility	Medical College hospital
Name of internal preceptor(s)	Names will be mentioned after allotment
Name of external preceptor (if applicable)	N/A
Learning objectives of elective	 Evaluation of PEM in under 5years population in Barabanki. Incidences of PEM in under 5years population in Barabanki. Parental awareness towards PEM in these children. Suggestions of measures for improvement including referrals.
Number of students that can beaccommodated in this elective	10
Prerequisites for elective	Necessary immunizations, Universal precaution to be taken
Learning resources for students	Departmental handbook provided
List of activities of student participation	 Work daily with a supervisor Evaluation of PEM in under 5years population in Barabanki Participate in departmentaleducation activities related to PEM Work daily with a supervisor towards Parental awareness towards PEM in these children. Keep record of at least 10 patients and Present at least two records done bystudent as a case work up

Portfolio entries required	 Documentation of worked up cases Documentation of presentationdone
Log book entry required	Completion of posting signed by preceptor with a "meets expectation '(M)'grade"
Assessment	 Formative: attendance; day-to-day participation in departmental activity performance of assigned tasks and presentation of worked up case in department
Other comments	

No MIMS/EX/2022/19

Dated: 17.02.2022

DEPARTMENT OF MEDICAL EDUCATION

ELECTIVE MODULES (BLOCK -1) For MBBS STUDENTS OF 2019-20 BATCH AS PER COMPETENCY BASED CURRICULUM

Dr. Sumit Sharma IP OI M Coordinator MEU DEFANTINES MIMS, BBK. DICAL EDUCATIO

Dr Virendra Kumar Dean, MIMS, BBK.