GENERAL MEDICINE

STUDY GUIDE

MBBS YEAR V

2020-2021

BAQAI MEDICAL COLLEGE

BAQAI MEDICAL UNIVERSITY

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VISION & MISSION

Baqai Medical University Vision Statement:

Baqai Medical University is a community based and community oriented center of excellence striving to mold students to become competent and caring health professionals, groomed to be social leaders capable of improving health, education and socioeconomic well-being locally, nationally and globally.

Baqai Medical University Mission Statement:

The mission of Baqai Medical College is to be recognized as a center of excellence in education, research, patient care and community services by producing highly capable and knowledgeable professionals

Baqai Medical College Vision Statement:

Our vision is to enhance the access and excellence in medical education and research, with the aim of capacity building of students and faculty through innovations, and science and technology competencies, to achieve rapid and sustainable health. The medical graduate thus produced will be informed and trained enough to serve the community better, and to be advisor to the national and international health organizations.

Baqai Medical College Mission Statement:

The mission of the Baqai medical college is to produce medical graduates, who are accomplished individuals and have skills for problem solving, clinical judgment, research & leadership for medical practice at the international level and are also aware of the health problems of the less privileged rural and urban population of Pakistan.

OUTCOMES OF THE MBBS PROGRAM

By the end of five years MBBS program, The Baqai Medical College graduate will be able to:

- Write and report focused history, perform physical examination, formulate a diagnosis and management plan for common health problems.
- Utilize knowledge of basic and clinical sciences for patient care.
- Apply evidence-based practices for protecting, maintaining and promoting the health of individuals, families and community.
- Identify problems, critically review literature, conduct research and disseminate knowledge
- Lead other team members as per situational needs for quality health service.
- Acquire professional behaviours that embodies lifelong learning, altruism, empathy and cultural sensitivity in provision health care service.

POLICIES AND PROCEDURES

Code of Conduct and Maintenance of Discipline of Students Regulations

Under section 25(e) BMU Act.1996

All University students shall be under the full disciplinary control of the University. No students shall be allowed to participate in politics. The action against the act of indiscipline shall include fines, debarring from attending class and cancellation of admission, depending on the gravity of indiscipline.

The following shall constitute acts of indiscipline for which action may be taken against the student or students:

(a) Breach of any rule public morals, such as:

- Use of indecent or filthy language;
- Use of immodest dress:
- Use of undesirable remarks or gestures; and
- Disorderly behavior, such as shouting, abusing, quarrelling, fighting and insolence.

(b) Defiance of authority

(c) Action, defamatory of and derogatory to Islam

(d) Immorality

(e) Being found under the effect of an intoxicant or misuse of drugs including marijuana, LSD dope and other opioids.

(f) False personation or giving false information or willful suppression of information, cheating or deceiving.

(g) Inciting or staging a walk-out, a strike or an unauthorized procession.

(h) Shouting of slogans derogatory to the prestige of the Univeristy or the reputation of its officers or teachers.

(i) Visiting without a pass places which are not to be visited without a pass.

(j) Visiting places declared out of bounds for students

Every student must carry his / her Identity Card which will be open to examination and will be demanded at the time of entrance to the various University Faculties and functions.

No. student will be admitted to the facilities of the library, transport or the canteen unless he /she is in possession of the Identity Card

MESSAGE FROM THE DEAN & CHAIRMAN:

Dear Student physician, Assalam-o-Alaikum

Welcome to Final year Medicine Clerkship Rotation. This study guide provides you an overall picture of your rotation. This will prepare you well advance to acquire the necessary knowledge. The learning objectives prior to a specifically designed section will help you o learn and retain most of the things required as a doctor.

Your study plan during your rotation comprised of following

a) Classroom Lecture

b) Clinical Clerkship

c) Ward Rounds & OPD with consultant

d) Structured Tutorial

e) Evening and Night duties with residents

The material accompanying this document outlines our objectives, expectations & grading criteria for the course. Please take a moment to review them.

You are expected to work up at least one patient per long & short call day & submit written reports to your immediate consultant. Being a Final Year MBBS student, the most important section of these reports will be assessment & plan.

Please review “Preparing & Presenting a case”. It provides important guidelines.

Additionally you have received a ward meeting & journal club schedule. It is mandatory to attend these meetings.

Ask for feedback early & often. Take advantage of teaching situations & make sureyour facilitators understand what you want out of therotation.

A summary of grading policy is attached.

Enjoy your clerkship. Your learning experience will be dependent upon your enthusiasm & availability. Feel free to contact me & your coordinator any time & please let us know assoon as problems arise so that we may deal with themearly.

Professor JameelAhmed

MRCP,FRCP

Dean, Faculty of Medicine

Chairman Department of Medicine

Baqai Medical University

FACULTY LIST OF MEDICINE

Professor	Jameel Ahmed	Chairman & Head
Professor	S Tahir Husain	
Professor	Abdul Basit	
Professor	Yaqoob Ahmedani	
Professor	Karim Kameruddin	
Professor	Mirza Shakeel Baig	
Professor	Inam Rasool	Psychiatry
Associate Professor	Dr. Syed Iftikhar Haider	
Associate Professor	Dr. Adil Khan	
Associate Professor	Dr Musarrat Riaz	Medicine, Endocrinology
Associate Professor	Dr Aun Bin Zafar	
Associate Professor	Dr Zahid Miyan	
Assistant Professor	Dr. Masooda Fatima	
Assistant Professor	Dr. Saqib ur Rehman	
Assistant Professor	Dr. Dania Faisal	
Assistant Professor	Dr. Rana Tabassum Ansari	
Assistant Professor	Dr. Marium Tariq	
	Dr. Bushra Rabbani	
	Dr. Ammara Saeed	
	Dr. Amanullah	
	Dr Adeel Ahmed	Medicine, Gastroentero.

	Dr. Anita Haroon	Nephrology
	Dr. Mahira Shafi	Psychiatry
	Dr. Nadia Farooq	Dermatology
	Dr. Saba Nasreen	Dermatology
	D Mehmood Khuasani	Dermatology

LEARNING OBJECTIVES

LECTURE BASED

At the end of 1 hour lecture, the students should be able to:

ACUTE HEPATITIS
• Define hepatitis and differentiate between acute and chronic hepatitis
• Quote regarding etiologic factors of acute hepatitis including viruses and other microbial infection as well as systemic diseases and drugs.
• Discuss the pathophysiology of hepatitis
• Enlist the clinical features with which patient present
• Formulate a proper plan for diagnosis of hepatitis as well as specific investigations to explore the etiology as well as tests to determine possible complications
• Prescribe symptomatic as well as curative treatment
CHRONIC HEPATITIS
• Define hepatitis and differentiate between acute and chronic hepatitis
• Quote regarding etiologic factors of chronic hepatitis including microbes, drugs as well as systemic diseases effecting liver

- Enlist the names of viruses causing chronic hepatitis mainly hepatitis B and C
- Discuss the pathogenesis of chronic hepatitis.
- Enlist the clinical presentation of chronic hepatitis
- Discuss the investigations which are required to for confirmation of the diagnosis as well as evaluation of patients with chronic hepatitis B and C infections
- Formulate a proper management plan to treat both infection

CHRONIC LIVER DISEASE

- Discuss etiology and pathophysiology of chronic liver disease
- Recite the possible symptoms and signs in patient both compensatedand noncompenstateddisease
- Enlist the possible complications of the chronic liver disease
- Formulate a proper diagnostic plan including serological as well radiologicaltests
- Discuss child pugh scoring of chronic liver disease
- Demonstrate all possible treatment options including pharmacological as well as interventional measures
- Counsel the patient and family regarding the possible complications in which patient should be immediately taken to emergency room of a tertiary care hospital

FATTY LIVER

- Enlist etiological factors including alcohol abuse, life style factors and diseases as well as drugs likely to produce fatty liverdisease
- Discuss the pathophysiology of thedisease
- Enlist the possible signs andsymptoms
- Describe test required to diagnose fatty liver diseases

• Prescribe treatment options for thedisease
• Counsel the patient regarding required life style changes as well as inform patient about the possible complications which can occur if these measures are nottaken
HYPERTENSION
• Define hypertension
• Explain etiology pathogenesis and staging of hypertension
• Outline various clinical presentations and devices used to check bloodpressure
• Demonstrate proper procedure of checking blood pressure usingsphygmomanometer
• Evaluate hypertensive patients with laboratory, electrophysiology and radiological tests
• Recite the drugs available to manage hypertension, discussing clinical indications, dosing and side effects and formulate a proper treatment plan of a givenscenario
• Counsel the patient regarding the fact that it is a disease which cannot be cured but can be managed and discuss the patient regarding life style measures which shouldbe carried out to preventcomplications
ISCHEMIC HEART DISEASE
• Define ischemic heart disease and enlist multiple modifiable and non-modifiable risk factors for thedisease
• Discuss the pathogenesis of chronic hepatitis.
•
• Enlist the various clinical presentation of ischemic heart disease from angina to myocardialinfarction
• Discuss the investigations which are required to for confirmation of the diagnosis including radiology, laboratory, electrophysiological tests as well asinterventional evaluationprocedures

• Formulate a proper treatment plan regarding acute presentation of ischemicheart disease with unstable angina and myocardial infarction in emergencyroom
• Design a proper management scheme for the patient including life style measures and pharmacological as well as interventionaltreatment
• Counsel the patient to follow the advised life stylemeasures
CHRONIC HEART FAILURE
• Define heart failure and acute pulmonaryedema
• Discuss etiology and pathophysiology ofCCF
• Describe both the left and right ventricular failure as well a systolic and diastolicfailure
• Recite the possible symptoms and signs in patient suffering fromCCF
• Enlist the possible complications
• Formulate a proper diagnostic plan including electrophysiology, radiology and laboratory testing
• Demonstrate all possible treatment options including pharmacological as wellas interventionalmeasures
• Formulate a treatment plan for patient presenting with acute pulmonaryedema
• Counsel the patient and family regarding the possible complications in whichpatient should be immediately taken to emergency room of a tertiary carehospital.
ASTHMA
• Define asthma and discuss various types ofasthma
• Quote regarding etiologic as well as precipitating factors for the disease
• Discuss the pathogenesis ofasthma
• Enlist the clinical presentation of asthma both acute attack and chronicdisease

• Describe the clinical staging of acute asthmatic attack as well as classifychronic disease as mild, moderate and severe
• Discuss the investigations which are required to for confirmation of thediagnosis
• Formulate a proper management plan to treat both acute attacks and chronicdisease
• Counsel patient regarding the importance of daily drug dosing through inhalational solutions, and should be trained to use inhaler and nebulizers with a propertechnique
CHRONIC OBSTRUCTVE PULMONARY DISORDERS
• Discuss etiology and pathophysiology of COPD Including all the possible factorswhich result in development of thedisease
• Discuss clinical classification of COPD as blue bloaters and pinkpuffers
• Recite the possible symptoms and signs in patient both during acute phase andchronic illness
• Enlist the possible complications of thedisease
• Formulate a proper diagnostic plan including serological, spirometric as well radiologicaltests
• Demonstrate all possible treatment options including pharmacological as well as interventionalmeasures
• Counsel the patient to stop smoking and carry out required life style changes and need for continuous oxygendelivery
PNEUMONIA
• Recalls the list of common viruses, parasites and bacteria causingpneumonia
• Review the pathophysiology linked with theinfection
• Identify common clinical presentation of patient suffering frompneumonia
• Describe CURB 65 scoring of pneumoniapatients
• Enlist and interpret laboratorial as well as radiological investigations required to diagnose thedisease
• Design and outline proper plan of management according to their severity and whether he should be treated in outpatient or inpatientbasis

PULMONARY TUBERCULOSIS
• Discuss etiology and pathophysiology of tuberculosis generally as well as for pulmonary tuberculosis
• Recite the possible symptoms and signs in patient of the diseasemanifestations
• Enlist the possible complications of thedisease
• Formulate a proper diagnostic plan including serological, sputum, radiological aswell as interventionalstudies
• Discuss a proper treatment plan including name of drugs which should be given forthe disease and their dosing as well as duration oftreatment
• Counsel the patient regarding the severity of disease and life style measures which should be taken to prevent disease spread to family members and close contacts
• Counsel the family regarding prophylactic methods available for contact including drugs.
ACID PEPTICDISEASE
• Describe basic etiology and pathophysiology of the acid peptic diseaseincluding gastritis, peptic ulcer disease and functionaldyspepsia
• Detect the patient at risk for the disease, and appraise the predisposingfactors
• Review various clinical presentations of the acid pepticdisease
• select appropriate investigations to diagnose the disease and judge its results using laboratory and endoscopy services along with microscopic evaluation of tissuetaken the gut
• Determine a proper management plan for the patient including pharmacologicaland non pharmacological treatment options and life stylemeasures
• Counsel the patient to change his nutritional and life style habits to aid in treatment process
ABDOMINAL TUBERCULOSIS
• Describe pathophysiology of abdominal tuberculosis and discuss itsintestinal,

peritoneal and lymphadenopathyforms
• Relate appropriate signs and symptoms with the various clinical presentationof the disease
• Prescribe the required laboratory and radiographic test along withinterventional procedures, to support thediagnosis
• Select the drugs used in intensive and continuous phases of treatment withtheir dosing and total duration of treatment of both phases in accordance with world health organization TBguidelines.
• Counsel the patient for the required interventional proceduresincluding endoscopy, peritoneal paracentesis and tissuebiopsy
• Counsel the patient to take appropriate doses of drug before breakfast and persuade him from skipping thedose.
IRRITABLE BOWEL SYNDROME
• Define the disease according to Rome4
• Discuss the pathophysiology of disease process and select the patient at risk fordisease
• Recite symptoms and signs in the patient suffering from the disease with its both clinicalforms
• Illustrate the Rome 4 criteria for the diagnosis of irritable bowelsyndrome
• Prescribe and interpret the investigations required to support thediagnosis
• Decide a proper treatment plan in accordance with clinicalpresentation
INFLAMMATORY BOWEL DISEASE
• Describe basic etiology and pathophysiology linked with the disease including bothulcerative colitis and crohn’s disease.
• Identify predisposing factors of the disease
• Review signs and symptoms of the disease and relate these to specific clinical form
• Enlist and analyze the investigations needed to support the diagnosis including radiology, and laboratory tests along with interventional procedures required for final diagnosis
• Determine a proper management plan for the patient presenting in

exaggerated phase and schedule pharmacological treatment for the chronic disease process along with monitoring of the disease process
• Restat various clinical complications
DIABETESE MELLITIUS
• Describe pathogenesis of diabetes and its effect on metabolism ofbody.
• Classify diabetes into primary and secondary type and then type 1and type 2 diabetesmellitus
• Identify patients at risk for thedisease
• Various signs and symptoms associated with the disease and itscomplications
• Prescribe the investigations required to support the diagnosis and tabulate thediagnostic criteria for diabetes mellitus according to currentguidelines
• Develop a proper treatment plan to manage the disease including nutritional factors alongwithdrugswithregularmonitoringofpatientwithrandomandbloodsugarlevels
• Evaluate the patient on every visit to detect any possible microvascular and macrovascularcomplicationsincludingnephropathy,neuropathy,retinopathyand select a appropriate treatmentplan
• Counsel the patient to strictly follow the advises regarding diet, life style and treatment plan
HYPERTHYROIDISM
• Describe pathophysiology of and the endocrine dysfunction associated with over functioning of thyroidgland
• Identify the clinical manifestations of disease and confirm the diagnosis by hematologicaland Nuclear radiologyservices
• Choose appropriate treatment plan to control and eradicate the diseaseprocess
• Counsel the patient regarding the disease morbidity andmortality
HYPOTHYROIDISM
• Discuss the etiology and pathophysiology of the underfunctioning of thyroidgland

• Recognizesignsandsymptomsassociatedwithdiseaseandconfirmthediagnosiswithe help of hormonal assays and nuclear radiologystudies
• Select an appropriate treatment plan for management of hypothyroidism including drugsas well as surgical strategies to rectify the clinicaleffects.
• Counsel the patient regarding the endocrinedisorder
PITUATRY DISORDERS
• Ascertain the pathophysiology of both over and under functioning of pituitarygland
• Associate the signs and symptoms with specific disorders including excess or deficiency of pituitaryhormones
• Confirm the diagnosis with the help of hormone analysis and nuclearradiology
• Employ accurate treatment steps to eradicate the endocrinedisturbance
• Counsel the patient regarding the disease associated morbidity andmortality
ADRENAL DISORDERS
• Describe the endocrine disorders associated with the adrenal glands including diseases resulting in hypo and hyperadrenalism
• Enlist etiological factors responsible for the malfunctioning of adrenalgland
• Recognize signs and symptoms associated with bothdisorders
• Schedule investigational plan including both hematological and radiologicaltests
• Design an appropriate treatment plan to manage thedisease
• Counsel the patient regarding the disease morbidity and mortality
ACUTE KIDNEY INURY
• Review pathogenesis of acute kidneyinjury
• Identify all the drugs, toxins and diseases which precipitate the acute kidneyfailure.
• Recite symptoms and signs which points towards risk ofacute kidneyinury
• Prescribe and interpret the investigations confirming diagnosis using laboratory aswell as radiologytests.
• Determine a proper management plan for the patient including

pharmacologicaland non pharmacological treatment options includinghemodialysis
• Counsel the patient regarding his disease and in severe cases for the needof hemodialysis to aid the treatmentprocess.
CHRONIC KIDNEY FAILURE
• Summarize the etiology and pathophysiology of thedisease
• Specify the diseases and disorders causing chronic kidney failure
• Discuss various clinical features with which the patient presentsincluding encephalopathy and pulmonary edema
• Prescribe the required radiology, electrophysiology and laboratory tests to confirm the diagnosis and interpret the results of thesetests.
• Determine a proper management plan for the patients which are not acandidate for renal replacement therapy including fistula preparation andvaccinations.
• Identify the patient at need of renal replacement therapy in form ofhemodialysis and kidney transplantation.
• Counsel the patient and family for the need of hemodialysis and renal transplantationtherapy
RHEUMATOID ARTHRITIS
• Review the pathogenesis of rheumatoid arthritis in association withautoimmunity
• Critique various sign and symptoms associated with the diseases along with features indicatingcomplications
• Appraise the ACR criteria for diagnosis of Rheumatoidarthritis
• Select appropriate investigations to diagnose the disease and judge its results using laboratory and radiology services
• Sketch a treatment schedule to manage patients disease including pharmacologicalas well as non pharmacological mechanisms of diseasecontrol
• Counsel the patients regarding the disease associatedmorbidity
SYSTEMIC LUPUS ERYTHROMATOTUS
• Describe basic pathophysiology of the autoimmune diseases in general and

SLE in particular.
• Enlist the other common autoimmunediseases
• Review signs and symptoms relating to autoimmune disease as well as variousclinical manifestations ofSLE
• Enlist and analyze the serological test required to confirm the autoimmunity andother specific investigations for each autoimmunedisease
• Review investigations needed to support the diagnosis of SLE including radiologyand laboratory tests.
• Appraise the ACR criteria for diagnosis of SLE and other autoimmunedisorders
• Determine a proper management plan for the patient including pharmacologicaland non pharmacological treatment options for both acute exaggerations and chronic phases for SLE snd other autoimmunediseases
• Counsel the patient t regarding relapsing remitting of diseases and the importance of pharmacological treatment during the chronic possibly asymptomaticphase.
DIABETESE MELLITIUS
• Describe pathogenesis of diabetes and its effect on metabolism ofbody.
• Classify diabetes into primary and secondary type and then type 1and type 2 diabetes mellitus
• Identify patients at risk for thedisease
• Various signs and symptoms associated with the disease and itscomplications
• Prescribe the investigations required to support the diagnosis and tabulatethe diagnostic criteria for diabetes mellitus according to currentguidelines
• Develop a proper treatment plan to manage the disease including nutritionalfactors along with drugs with regular monitoring of patient with random and blood sugar levels
• Evaluate the patient on every visit to detect any possible microvascular and macrovascular complications including nephropathy, neuropathy, retinopathyand select a appropriate treatmentplan
• Counsel the patient to strictly follow the advises regarding diet, life style and treatmentplan

ADRENAL DISORDERS
• Describe pathophysiology of adrenals and the endocrine dysfunction associatedwith malfunctioning or over functioning of adrenalgland
• Classify adrenal disease into 2 major group hypoadrenalism (and hyperadrenalism (Cushingsyndrome)
• Identify the other endocrine disorders associated with the adrenal disease and the diseases resulting in hypo and hyper adrenalism
• Various signs and symptoms associated with bothdisease and itscomplications
• Prescribe the investigations required to support thediagnosis
MALARIA
• Describe the pathophysiology associated with plasmodium speciesinfection
• Classify the plasmodium species into 4subtypes
• Review symptoms and signs associated with the malaria in all 4 types of
• infection along with the severityanalysis
• Enlist hematology and microscopy tests required to confirm thediagnosis
• Determine appropriate anti plasmodial drugs used for treatment in accordance to severity of thedisease
ENTERIC FEVER
• Summarize the etiology and pathophysiology of the infection caused bysalmonella species
• Discuss the clinical presentation and complication ofdisease
• Prescribe and interpret the required hematology, microscopy and culturestudies to confirm thediagnosis.
• Determine a proper management plan for the patients including antibacterialdrug use along with symptomatictherapy.
DENGUE FEVER
• Identify the etiological virus and the pathophysiology associated with this viraldisease
• Discuss signs and symptoms associated with the disease and review possible complications.

• Categorize the disease as mild, moderate or severe hemorrhagic fever on the basis of signs andsymptoms
• Enlist and interpret the laboratory tests including serology and antigen detectiontest
• Determine appropriate antiviral drugs for treatment of thedisease
• Notify the case to infection controldepartment.
ANEMIA
• Defineanemia
• Classify anemia on the basis of cellularity, nutrient deficiency, bone marrow disorders including aplasia and leukemia, inflammation, genetic disorders and hemolysis.
• Review pathophysiologic processes associated with each and every specific types
• Enlist signs and symptoms with which patient of anemia present andthe clinical features differentiating between various types ofanemia
• Arrange a proper investigational plan for diagnosing each specifictypes including basic biochemical tests, serological testing as well as bone marrow studies if needed.
• Discuss treatment plan of various subtypesindividually
• Design a treatment plan reviewing all therapeutic options includingblood transfusions, parenteral and enteral drug treatment options as well as options of bone marrow and cellulartransplantation.
• Counsel patient and family regarding the disease
LEUKEMIA
• Describe pathogenesis of leukemia both acute and chronicdisease
• Classify the types of acute and chronic myeloidleukemia
• Enlist presenting signs and symptoms and the clinical staging of acuteand chronicleukemia
• Enlist investigation required for diseases including hematological, radiological tests.

• Demonstrate procedure of bone marrow aspiration and biopsy alongwith tissue histopathology.
• Design plot of management according to clinical staging of the disease Including chemotherapy, radiotherapy along with surgical therapy as well as bone marrowtransplantation
• Counsel family regarding the disease process and its morbidity, available treatment options as well as mortality risk with and without treatment
LYMPHOMA
• Describe etiology and pathophysiology of various types of lymphoma
• Demonstrate clinical features of the various types and clinical staging of disease according to standardcriteria
• Design a series of investigation to confirm the diagnosis utilizinghematological, radiological tests as well as histopathological evaluation ofdisease
• Formulate a treatment plan according to clinical stage including excision anddebulking of lymphomatous tissue including chemotherapy, radiotherapy and stem cell transplantation.
• Counsel patient and family regarding the disease process and associated morbidity and mortality rand possible treatmentstrategies.
THROMBOCYTOPENIA
• Define thrombocytopenia and describe itscomplications
• Enlist the diseases and drugs which can result inthrombocytopenia
• Demonstrate signs and symptoms associated with the diseaseprocess
• Prescribe important biochemical tests, serological tests as well asrequired radiologicalstudies
• Determine treatment of thrombocytopenia including blood transfusions, parenteral and enteral drug treatment options as well as options ofbone marrowtransplantation.
• Counsel patient and family regarding thrombocytopenia and itshazards.
STROKE
• State basic definition of stroke and transient ischemicattack

• Enlist predisposing factors, and discuss pathophysiology lined with bothdiseases
• Appraise distinguished clinical features with which patients suffering from these diseasepresent
• Assemble the list of investigations required to diagnose the disease includingboth radiological and laboratorytests.
• Formulate pharmacological and nonpharmacological measure in the acute phase of disease
• Formulate proper management plan for the patient for stroke prophylaxis, which shouldincludelifestylemeasures,andnonpharmacologicalaswellaspharmacological treatmentoptions
EPILEPSY
• Defines seizure and epilepsy and discuss seizure classification into partialand generalizedtypes
• Discuss regarding predisposing factors, etiology as well as pathophysiologyof seizure
• Comprehend regarding specific clinical features occurring during a seizures episode of both partial and generalizedtypes
• Enlist the investigations required for the evaluation of seizures and epilepsy which should include electrophysiology, radiography and laboratorytesting
• Illustrate the management steps which should be carried out when apatient presents in the emergency withfits.
• Discuss the indications and administration of antiepileptic drugs
• Select an antiepileptic drug for the patient in various circumstancesincluding pregnancy and lactation along with the pharmacological monitoring of drugs levels.
• Counsel the family of the patient regarding the illness, and in housei mmediate measures to deduct the morbidity and trauma during the attack, as well asreport before planningconception

CNS INFECTION
• Recalls the list of common viruses, parasites and bacteria causing CNSinfections.
• Review the pathophysiology linked with theseinfections.
• Identify common clinical presentation of patients presenting with CNS infections as well as Distinguishing features which can help the physician to differentiate between encephalitis, meningitis and cerebralmalaria.
• Enlist and interpret laboratorial as well as radiological investigations required to diagnose thedisease
• Design and outline proper plan of management according to theirdiagnosis.
• Counsel the family of patient regarding morbidity and mortality associatedwith disease
MYASTHENIA GRAVIS
• Define myasthenia gravis and comprehend basic pathophysiology linked withthe disease
• State regarding clinical presentation of these patients
• Outline an investigational plan to diagnose the disease in suspected cases, including electrophysiological and laboratorytests.
• Design a management plan for the treatment of patient including symptomatic, transient immunomodulation and chronic immunosuppressive treatmentoptions
• Counsel the patient and family regarding the disease its complications and treatment options including thymectomy
POISONING
• Classify various types of poisons used for suicidal and homicidaluse
• Determine the basic pathophysiology linked with thedisease
• Identify clinical features ofdisease
• Draw a plan for diagnosis including hematological and urinetests
• Employ treatment steps including symptomatic and anti doseadministration
• Counsel the patient and familyaccordingly
• Notify to security services of thecountry

- Schedule psychoanalysis of patient and utilize then counseling and drugfor treatment

Clinical Clerkship Outcomes

Aims:

To acquire core curriculum knowledge and develop clinical and communication skills through supported and supervised patient contact.

Essential Skills to be learnt:

1) Taking a proper history from patient & perform clinicalexamination.
2) Decidingmanagementplan&discussinganyprobleminmanagementwithconsultantin a properway
3) Case presentationskills.
4) Deal with medicalemergencies.
5) ECGinterpretation.
6) Reporting chestradiograph.

Desired outcomes:

1. Be able to take and record a patient's medical history and recognizetheroleoftaking a focusedhistory.
2. Be able to present a coherent and comprehensive medical history along with a precisesummary.
3. Beabletotakeandrecordapatient'smedicalhistoryandrecognizetheroleoftaking a focusedhistory.
4. Be able to present a coherent and comprehensive medical history along with a precisesummary.
5. Attain competence in the basics of physical examination and key systems examinations, namely cardiovascular, respiratory,

abdominal, neurological and musculoskeletalexaminations.

6. Learn to apply theoretical knowledge to clinicalpractice.
7. Demonstrate effective communication skills with patients and with professionals
8. Within the multidisciplinary team.
9. Recognize the importance of a holistic approach, with particular reference to disease management and palliative care
10. Achieving ad demonstrating a positive and appreciable change in attitude.
11. Be able to debate ethical issues with patients, attendants and the multidisciplinary team.
12. Recognize the importance of a holistic approach, with particular reference to disease management and palliative care.
13. Achieving ad demonstrating a positive and appreciable change in attitude.
14. Be able to debate ethical issues with patients, attendants and the multidisciplinary team

Ward based objectives

At the end of the 2-hour ward session, the student should be able to:

General Physical Examination
• Perform the examination in a methodical manner
• Detect the abnormalfindings
• Interpret the clinicalfinding
• Comment on the logicaloutcome
Cardiovascular Examination

- Locate and comment on the strength of the following pulses: redial, brachial, carotid, popliteal, dorsalis pedis, posterior tibial, femoral pulses.

- take blood pressure manually and using automated methods

- Recognize and assess the JVP

- conduct full cardiac examination including aortic and mitral maneuvers

Respiratory System

- Record a pertinent history from the given patient so as to be able to reach a working diagnosis

- Demonstrate the logics,sequential steps of chest examination on a given patient. Comprised of :
- Inspection- See- movement and symmetry at foot end of the bed, shape elliptical, barrel, pigeon, use of accessory muscles, in drawing of supra and infra clavicular fossae, and sternal notch, tracheal tug, pulsation including apex beat, mass, venous engorgement, scars etc
- Palpation - Feel, trachea, apex beat, chest expansion, tactile vocal fermitus, tenderness, mass, etc
- Percussion- Tap, both side of the chest equally resonant, hyper resonant, dull, stony dull, upper border of liver, area of cardiac dullness etc
- Auscultation- Listen, breath sounds, normal vesicular, vesicular with prolonged expiratory phase or bronchial. Added sounds, cackles, wheeze, pleural rub, vocal resonance etc.

Gastroenterology

- Record a related history from the patient so as to be able to formulate a working diagnosis.

- Illustrate the logical, sequential steps of abdominal examination on a

given patient has includes : Inspection- See, movement, shape flat, distended, scaphoid, any pulsation, mass, venous engorgement peristaltic activity, hernial orifices etc Palpation - Feel, tenderness, mass, visceromegaly etc Percussion- Tap, lie bodes, shin dullness, fluid thill etc Auscultation- Listen, gut sound, bruits etc DRE Digital rectal examination
• Correlate the information in history taking with the findings of the physical examination to formulate a working diagnosis.
Central nervous system:
• Record a complete history from the given patient so as to draw a likely workingdiagnosis.
• Employ the logical and sequential steps of higher mental functions , cranial nerves , upper and lower limb examination both motor and sensory, signs of cerebella dysfunction, extra pyramidal system, signs of meningialirritation
• Ophthalmoscopy
Musculo-Skeletal System
Inspect and palpate movement of joints

Tutorial based objectives

Introduction to ECG leads & ECG recording

- Identify three planes of electrocardiography: Standard limb leads, augmented leads, precordial leads

- Describe components of normal 12-lead ECG

Normal wave pattern of ECG

- Describe electrical pathwayof heart
- Describe components of normal 12-leadECG

Abnormalities of P-wave & PR- interval

- Describe systemic approachto interpretation of 12-leadECG
- Determine presence of conductionabnormalities (Heart block)
- Recognize chamber Recognize chamberenlargement

Abnormalities of QRS complex, ST segment T-waves

- Relate coronary arteryanatomy to myocardialperfusion
- Recognize common ECG patterns associated with various locations ofinjury/infarction
- Determine presence of conduction abnormalities (Heart block & Bundle branch block)
- Recognize chamber enlargement

Discuss tachyarrhythmia

- Determine probability of Supraventricular (SVT) Vs Ventricular tachycardia(VT)

Practice session

- Learner should be able to evaluate and interpret basic 12 lead ECG.

Practice session

- Learner should be able to evaluate and interpret basic 12 lead ECG.

Assessment
• Learner should be able to evaluate and interpret basic 12 lead ECG.

CHEST X-RAY INTERPRETATION COURSE

Learning Outcome:

• As a result of this course learner should be able to evaluate and interpret CXR in different views.

Learning Objectives:

CHEST X-RAY INTERPRETATION COURSE FINAL YEAR MBBS

Upon conclusion of this course, students should be able to:

• Recognize normal anatomy of chest radiographs in different views.

• Identify different CXR views & describe when they are helpful as well as limitations of each

• List different pathologies that can produce opacity on CXR

• Recognize pleural effusion & pneumothorax on CXR

• Recognize mediastinal & hilar abnormalities

• Recognize cardiac abnormalities on CXR

Teaching Plan:

Small group discussion is arranged of one hour duration, every Friday from 10 to 11 PM. Total eight session are arranged. In 1st Five sessions students are taught Normal anatomy of CXR & common abnormalities Last three sessions are practice sessions in which different CXR from ward

record/online resources are displayed & discussed. Details of every session is mentioned below:

Normal CXR
• Recognize normal anatomy of chest radiographs in different views.
• Identify different CXR views & describe when they are helpful as well as limitations of each
Normal CXR
• Recognize normal anatomy of chest radiographs in different views.
• Identify different CXR views &describe when they are helpful as well as limitations ofeach
Opacities in lung fields+ Pleural effusion+ Pneumothorax
• List different pathologies that can produce opacity onCXR
• Recognize pleural effusion & pneumothorax on CXR
Mediastinum & Hilar abnormalities on CXR
• Recognize mediastinal &hilar abnormalities
Heart on CXR
• Recognize cardiac abnormalities on CXR
Practice session
• Learner should be able to evaluate and interpret CXR in differentviews.
Practice session
• Learner should be able to evaluate and interpret CXR in differentviews

Assessment
• Learner should be able to evaluate and interpret CXR in differentviews.

Assessment:

Following skills will be tested towards the end of posting in OSCE.

1) History Taking 10%

2) Physical Examination 25%

3) Patient counselling 5%

4) ECG interpretation 10%

5) Chest Radiographs 10%

6) Medical procedures 5%

7) Medical emergencies 10%

8) Lab data interpretation 25%