

JNNAH MEDICAL AND DENTAL COLLEGE

DEPARTMENT OF MEDICINE

STUDY GUIDE FOR THIRD YEAR BDS 2022-23



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1.VISION

To set local and global standards for quality patient outcomes- creating a culture of excellence to promote a transformative experience for the 21st century clinicians, educators and researchers to benefit all humanity.

2.MISSION

We are committed to develop well rounded academics, thinkers, clinicians and researchers by strengthening a global view, broadening intellectual foundation and teaching effective communication. It is our aspiration to cultivate creative and critical thinking skills for problem solving, sensitive to cultural and ethical values and responsibilities. Our graduates will be role models and leaders for society.

3.VALUES

- Equity
- Quality
- Compassionate behavior
- Social accountability
- Social justice
- Humanistic approach
- Leadership
- Innovation
- Integrity
- Collaboration

4. PROGRAM LEARNING OUTCOMES – 7 STAR DOCTOR - (PMDC)

Our dental graduate shall be able to:

- Develop insight, imagination and curiosity, define one's unique self, one's values and one's place in the world, while incorporating the qualities of a good physician.
- Answer complex questions facing physicians, including the role they should play in society, politics, and promotion of social justice.
- Display enlightenment and moral values to prepare themselves for life and work in a problematic, changing and diverse world.
- Be responsible leaders for their own good of their family, community and country.
- Be humane and socially equipped individuals, in tune with rights of patients and vulnerable groups
- Develop moral reasoning for ethical dilemmas
- Be experts of critical situational analysis
- Believe in diversity in practice
- Display effective communication
- Be able to address population health system issues on the basis of demography, biostatics, epidemiology and cultural nuances.

5. Introduction; Department of medicine Sohail Trust Hospital;

Medicine is a combination of both basic and applied under the umbrella of medical science. It is the science and practice of caring for a patient, managing the diagnosis, prognosis, prevention, treatment, palliation of adult diseases. Training in medicine varies considerably across the world due to regional differences in culture and technology.

The Department of Medicine is the one of the largest as well as the backbone of clinical departments at Sohail Trust Hospital. The department provides quality health care services at minimum costs, through in-patient and out-patient services. The Department also provides specialty services for the following: Neurology, Gastroenterology, Pulmonology, cardiology, and Psychiatry & Dermatology. The Department is affiliated with JMDC/JSMU for undergraduate programs and CPSP for training of FCPS Part-II. Our students are serving in different hospitals across the globe , after successfully completing their training in medicine.

This study guide has been developed to impart integrated teaching as a part of curriculum in Jinnah Medical and Dental College, Karachi. It will be covered in 3rd year BDS. This will benefit the students to understand the basic biomedical information in relation to clinical sciences. This study guide has been designed to fulfil the need clinical medicine knowledge required for a dental graduate. It encompasses the knowledge of health care problems which are commonly encountered during dental practice. Hence it provides a framework within which learners are expected to build future competencies.

WHAT IS A STUDY GUIDE? It is an aid to:

- Inform students how student learning program has been organized.
- Help students organize and manage their studies throughout the year.
- Communicates information regarding list of units/topics, defines learning objectives and teaching methods.
- It gives information on internal assessment and final evaluation methods.
- Provides a list of learning resources such as books, computer assisted learning programs, web- links for students to consult in order to maximize their learning.
- Focuses on information pertaining to examination policy, rules and regulations.

HIERARCHY OF MEDICINE DEPARTMENT AT SOHAIL TRUST HOSPITAL

Head of department

Prof. M. Ishaq Ghauri

↓↓

Prof. Ajeet Kumar

Prof of medicine

↓↓

Dr. Ashok Kumar

Associate Professor

Dr. Salma Razzaque

Associate Professor

Dr.Aneel Kumar

Associate Professor

↓↓

Dr. Rajesh Kumar

Assistant professor

Dr. Syeda Urooj Riaz

Assistant professor

Dr.Ghulamulah Lail-gastroenterologist

Assistant professor

Dr. Mehwish Butt-Neurologist

Assistant professor

Dr. Vinesh Kumar-cardiologist

Assistant professor

Dr. Nausheen Iqbal-Pulmonologist

Assistant professor

Dr.Raheel Dalia-Nephrologist

Assistant professor

Dr.Fareena Zameer -Dermatologist

Registrar



Residents

House officers

Students

General Learning Outcomes of teaching medicine;

By the end of the Medicine teaching in 3rd year BDS, dental students will be able to:

1. Recognize basic concepts in medicine and working protocols in medicine ward
2. Describe definition, demography, etiology/risk factors, pathogenesis, symptoms and signs, investigations, management and complications of various disease in Gastroenterology
3. Describe definition, demography, etiology/risk factors, pathogenesis, symptoms and signs, investigations, management and complications of various disease in Neurology
4. Describe definition, demography, etiology/risk factors, pathogenesis, symptoms and signs, investigations, management and complications of various disease in Infectious diseases
5. Describe definition, demography, etiology/risk factors, pathogenesis, symptoms and signs, investigations, management and complications of various disease in Rheumatology
6. Describe definition, demography, etiology/risk factors, pathogenesis, symptoms and signs, investigations, management and complications of various disease in cardiology
7. Describe definition, demography, etiology/risk factors, pathogenesis, symptoms and signs, investigations, management and complications of various disease in nephrology
8. Describe definition, demography, etiology/risk factors, pathogenesis, symptoms and signs, investigations, management and complications of various disease in hematology
9. Describe definition, demography, etiology/risk factors, pathogenesis, symptoms and signs, investigations, management and complications of various disease in endocrinology
10. Describe definition, demography, etiology/risk factors, pathogenesis, symptoms and signs, investigations, management and complications of various disease in pulmonology
11. Perform safe practice in ward while working during clinical rotation
12. Take comprehensive history from the patient and present it in a systemic manner. and perform physical examinations of all the systems
13. Perform precise general physical examination and interpret the positive findings
14. Perform precise Gastrointestinal examination and interpret the positive findings.
15. Perform precise chest examination and interpret the positive findings.
16. Perform precise cardiovascular examination and interpret the positive findings.
17. Perform precise neurological examination and interpret the positive findings.
18. Identify common medical instruments and devices, describe its uses, contraindication and complications

19. Identify and interpret common pathologies in chest Xray.
20. Perform proper counselling regarding common medical conditions like diabetes, hypertension, smoking cessation, needle stick injuries
21. Recognize and interpret scenario and pictures related common medical conditions included in syllabus, also suggest suitable investigations and management plan.

TEACHING AND LEARNING STRATEGIES

Lectures (large group teaching)

In lectures third year BDS students are taught basics concepts of different specialties in medicine. The lectures are conducted twice a week with duration of 50 minutes each. For student engagement and active participation to its fullest, following are employed:

- a. Quizzes
- b. Class test
- c. Case based Interactive discussion

Skills Development Sessions-small group discussion

Skill based learning is achieved through clinical rotations, students have 2 clinical rotations of 8 weeks each. Each Clinical session duration about 3.5 hrs, which is sub-divided into bed-side teaching and case-based discussion. On first day an orientation session is conducted to guide about the ward / department and safe and ethical clinical practice. During bed-side teaching, students are taught how to take a history from patient and perform a clinical examination to detect physical findings. While during case-based discussion students presents their histories, discuss the problems in the case, formulate a diagnosis and discuss a suitable management plan. Moreover, they are taught about common medical instruments, Xray chest and scenarios during small group discussion

Learning guidance and E-Learning

In the challenging times of pandemic COVID-19, distant learning has been incorporated in the strategies of learning and teaching. All the lectures and other teaching material are uploaded periodically on student's web portal. Each student has the access to the portal through their individual Ids, on which they can go through the recorded lectures and material, whenever they want.

ASSESSMENT TOOLS AND STRATEGIES:

In-Class Assessment:

Regular Class test are conducted on completion of each unit, the results of which are discussed with the students and guidance is given regarding their mistakes/errors.

Ward Assessment:

A test is conducted at the end of the clinical rotation to assess the learning of students which is based upon clinical skills. This is to ensure that the students develop the required skills under supervision in a controlled environment.

Mid Term examinations:

These are conducted in the mid of the academic year. It has the following components:

Component	Marks
BCQs	100
OSCE	100
TOTAL	200

Pre-Professional examinations:

These are conducted at the end of the academic year before the final professional examination. The break-up is as follows:

Component	Marks
BCQs	100
OSCE	100
TOTAL	200

INTERNAL EVALUATION/ CONTINUOUS ASSESSMENT POLICY:

Continuous Assessment

Continuous Assessment Policy

1. Assignment/ class test/ ward test etc. 25%
2. Mid-term exam 35%
3. Pre-prof. exam 35%
4. Extra effort 5%

Details of Assignments/ Test/Mid-term/ Pre-professional examinations.

Present and fail = 25%

Pass = Actual percentage

Absent = zero

Professional Annual Examinations:

Professional annual examinations are conducted by the University (JSMU) and comprise theory examinations and OSPE/OSCE.

Eligibility criteria for sitting in the Professional Annual Examinations is as follows:

Minimum of 40% aggregate marks in all continuous assessment examinations (Mid- Term Examinations, Pre-Professional Examinations, Assignments and Tests)

1. Students less than 75% overall attendance will not be allowed to sit in the Annual Professional Examinations.
2. Clinical attendance will be maintained separately. Attendance in any clinical rotation which falls below 75% must be made up by students.

Students must obtain passing marks in the clinical ward tests. Failing to do so, students will have to sit for re-take ward test (Only one re-take is allowed. To be considered successful in annual professional examination the students must pass individual components of the professional examination. This is to say, that the students must pass theory and OSPE/ OSCE examinations independent of each other. The student will then have to appear for supplementary examination in that component of the subject.

CIRRICULUM FOR 3RD YEAR BDS MEDICINE

INTRODUCTION

<u>s.no</u>	<u>Content</u>	<u>Learning Objectives</u>	<u>Mode of Teaching</u>	<u>Assessment tools</u>
1	Introduction to general medicine	Discuss scope of general medicine. Identify goals of studying general medicine. Discuss the importance of a doctor and patient relation. Explain the importance of Ethics when managing patients.	Bedside teaching/ Clinical Group Discussion	MCQ/OSCE

UNIT; GASTROENTEROLOGY

S.NO	CONTENT AREAS	LEARNING OBJECTIVES	Mode of teaching	Assessment tools
1	Acute Diarrhea	At the completion of this unit, students will be able to: Define acute and chronic diarrhea Discuss the causes of acute diarrhea How will you investigate a patient who presents with acute diarrhea? Discuss management and complications of acute diarrhea	Lectures+ small group discussion	MCQs / OSCE

		Prevention of acute gastroenteritis/cholera		
2.	Chronic diarrhea/ malabsorption syndromes	<p>Define chronic diarrhea,</p> <p>Discuss types of chronic diarrhea</p> <p>Elaborate causes of malabsorption syndrome</p> <p>Explain the work up, management and complications of common causes of chronic diarrhea e.g.; coeliac disease, intestinal Tuberculosis, etc.</p>	Lectures+ small group discussion	MCQs / OSCE
3	Dysphagia/GERD	<p>Define the term dysphagia and odynophagia</p> <p>Discuss different causes of dysphagia (central, mechanical, motility disorders)</p> <p>How will you investigate a patient with dysphagia?</p> <p>Describe the definition, etiology/risk factors, clinical features, investigation, management of GERD</p> <p>Discuss serious complication of GERD e.g.; esophageal stricture, Barret esophagus and esophageal carcinoma</p>	Lectures	MCQs

4	Gastritis/peptic ulcer disease	<p>Describe the definition, etiology of peptic ulcer, clinical features, investigation, management,</p> <p>Discuss H.Pylori gastritis, its work up and eradication therapies</p> <p>Discuss serious complication of Gastritis/peptic ulcer e.g. pyloric stenosis, perforation, gastric carcinoma</p>	Lectures+ small group discussion	MCQs / OSCE
5	Inflammatory bowel (IBD) diseases/irritable bowel syndrome	<ul style="list-style-type: none"> • Define types of IBD • How will a patient present who has IBD? • Discuss the line of investigation, treatment and complications • Define IBS • List the possible causes, • Diagnostic criteria and treatment options of IBS 	Lectures+ small group discussion	MCQs/ OSCE
6	Acute Hepatitis	<p>Define acute hepatitis</p> <p>Elaborate the causes, mode of transmission, clinical features,</p>	Lectures+ small group discussion	MCQs/ OSCE

		investigations, management and complications.		
7	Chronic hepatitis	<p>Define chronic hepatitis</p> <p>List the causes of chronic hepatitis, Hepatitis B and C.</p> <p>Explain mode of transmission clinical features, investigations, management of chronic viral hepatitis (Hepatitis B and C)</p>	Lectures+ small group discussion	MCQ/OSCE
8	Liver Cirrhosis/Chronic liver disease (CLD) and its complications	<p>Define compensated and uncompensated liver cirrhosis</p> <p>Enlist all the possible causes of CLD including viral hepatitis, alcoholism, autoimmune hepatitis, genetic diseases</p> <p>Discuss clinical features, investigations in liver cirrhosis</p> <p>Elaborate the complications of Chronic liver disease/hepatocellular ca</p>	Lectures+ small group discussion	MCQs / OSCE

UNIT; CARDIOLOGY

S.NO	CONTENT AREAS	LEARNING OBJECTIVES	Mode of teaching	Assessment tools
1	Hypertension	<p>At the completion of this unit, students will be able to:</p> <p>Define /staging of Systemic hypertension</p> <p>Discuss the primary/sec HTN, risk factors, pathogenesis, clinical features, investigations, management and complications</p>	Lectures+ small group discussion	MCQs / OSCE
2.	Ischemic Heart Disease (Angina / MI)	<p>Define Acute Coronary syndrome/ typical cardiac pain, types.</p> <p>Discuss the risk factors, pathogenesis, clinical features, differential diagnosis, investigation, management, complications ,prognosis and prevention of Ischemic heart diseases</p>	Lectures+ small group discussion	MCQs / OSCE
3	Congestive heart failure	<p>Define Congestive Heart failure</p> <p>Discuss the etiology, pathogenesis, clinical features, investigation, management, complications and</p>	Lectures+ small group discussion	MCQs / OSCE

		prognosis of congestive heart failure		
4	Rheumatic Fever	Define Rheumatic fever Discuss etiology, pathogenesis, clinical features, differential diagnostic criteria, management, complications prognosis of Rheumatic fever	Lectures+ small group discussion	MCQs / OSCE
5	Infective endocarditis	Define Infective Endocarditis Discuss the etiology/risk factors, clinical features, investigation, management, complications and prevention of Infective Endocarditis	Lectures+ small group discussion	MCQs / OSCE
6	Valvular Heart Diseases (MS / MR / AS / AR)	Define Valvular anomalies Explain the etiology, clinical features, investigation, management, complications, prevention of Valvular Heart Disease	Lectures+ small group discussion	MCQs / OSCE

7	Congenital Heart Diseases (VSD / TOF	Discuss the types, etiology, clinical features, investigation, management and complications of congenital heart diseases	Lectures+ small group discussion	MCQs / OSCE
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UNIT; RHEUMATOLOGY

S.NO	CONTENT AREAS	LEARNING OBJECTIVES	Mode of teaching	Assessment tools
		At the completion of this unit, students will be able to:		
1	Rheumatoid arthritis/ Sjogren's syndrome	<p>Define Rheumatoid arthritis</p> <p>Describe the etiology, Clinical features and diagnostic criteria, X-ray findings, articular and extra-articular complications of R.A treatment options and side effects of treatment</p> <p>Define Sjogren's syndrome,</p> <p>Describe the etiology, clinical presentation, investigations, treatment and complication of Sjogren 'syndrome</p>	Lectures+ small group discussion	MCQs / OSCE

2	SLE	<p>Define Systemic Lupus Erythematosus</p> <p>Describe the Clinical presentation, diagnostic criteria, investigations, management and complications of SLE</p>	Lectures+ small group discussion	MCQs / OSCE
3	Sero-negative spondyloarthropathies	<p>Enlist causes, etiology, pathogenesis clinical features, investigations, extra articular manifestations treatment options</p>	Lectures+ small group discussion	MCQs / OSCE
4	Osteoporosis / Osteomalacia	<p>Define osteoporosis and osteomalacia</p> <p>Describe the etiology, pathogenesis, clinical features, investigations, treatment options and complications</p>	Lectures+ small group discussion	MCQs / OSCE

UNIT; PULMONOLOGY

S.N O	CONTENT AREAS	LEARNING OBJECTIVES	Mode of teaching	Assessmen t tools
1	Pulmonary Tuberculosis	<p>At the completion of this unit, students will be able to:</p> <p>Describe etiology, primary/reactivation of TB, MDR TB transmission, risk factors, clinical features, Chest x-ray findings sputum analysis of Pulmonary Tuberculosis</p> <p>Discuss the first line and second line anti tuberculous drugs</p> <p>Explain the Adverse effects of ATT</p>	Lectures+ small group discussion	MCQs / OSCE
2	COPD	<p>Define the Chronic bronchitis and Emphysema,</p> <p>Discuss the risk factors, clinical features, investigations, acute and long-term management,</p>	Lectures+ small group discussion	MCQs / OSCE

		complications and prevention		
3	Asthma	<p>Define the terms of obstructive and restrictive lung disease</p> <p>Define Asthma,</p> <p>Discuss triggers and severity of asthma the clinical features, investigations, treatment options (controllers/relivers), side effects of therapy, Management of acute exacerbation of Asthma</p>	Lectures+ small group discussion	MCQs / OSCE
4	Pneumonia	<p>Define community acquired pneumonia</p> <p>Discuss the etiology, risk factors, clinical features, investigations, management, complications and prevention of pneumonia</p>	Lectures+ small group discussion	MCQs / OSCE
5	Bronchogenic Carcinoma	<p>Identify the risk factors, types, clinical features, investigations, staging, treatment options, complications, paraneoplastic</p>	Lectures+ small group discussion	MCQs / OSCE

		syndromes and prognosis of Bronchogenic carcinoma		
6	Bronchiectasis	Define Bronchiectasis Enlist the causes, clinical presentations, investigations, treatment options and complications of Bronchiectasis	Lectures	MCQ
7	Pneumothorax / Pleural effusion	<ul style="list-style-type: none"> • Define the terms pleural effusion and pneumothorax • Enlist the causes of pleural effusion and Pneumothorax • Interpret Chest x-ray findings of Pleural effusion and Pneumothorax • Describe the investigations and treatment options of 	Lectures+ small group discussion	MCQs / OSCE

		Pleural effusion and Pneumothorax		
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UNIT ;NEUROLOGY

S.NO	CONTENT AREAS	LEARNING OBJECTIVES	Mode of teaching	Assessment tools
		At the completion of this unit, students will be able to:		
1	Facial nerve palsy/trigeminal neuralgia	<ul style="list-style-type: none"> List the causes of facial palsy Describe Clinical presentation, investigations and medical and surgical management of facial nerve palsy and trigeminal neuralgia 	Lectures+ small group discussion	MCQs / OSCE
2	Stroke/TIA	<ul style="list-style-type: none"> Define the terms stroke and its types, Describe etiology and pathology, signs & symptoms, investigation, management and 	Lectures+ small group discussion	MCQs / OSCE

		rehabilitation and complications		
3	Epilepsy	<ul style="list-style-type: none"> • Define epilepsy & status epilepticus • Discuss pathophysiology, types of seizures • List most common causes of seizures • Discuss treatment of epilepsy 	Lectures+ small group discussion	MCQs / OSCE
4	Headache/facial pain	List the common causes Describe the clinical presentation, investigations and management of migraine, cluster and tension headache	Lectures+ small group discussion	MCQs / OSCE
5	Parkinson's disease	<ul style="list-style-type: none"> • Define Parkinson's disease • Describe the common causes, clinical presentation investigations, management and complications of a patient Parkinson's disease. 	Lectures+ small group discussion	MCQs / OSCE

6	Meningitis/encephalitis	<ul style="list-style-type: none"> Define meningitis Describe the causes, clinical features & investigations, management and complications of, meningitis/encephalitis 	Lectures+ small group discussion	MCQs / OSCE
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UNIT;NEPHROLOGY

S.NO	CONTENT AREAS	LEARNING OBJECTIVES	Mode of teaching	Assessment tools
1	Nephrotic syndrome.	<p>At the completion of this unit, students will be able to:</p> <ul style="list-style-type: none"> Define diagnostic criteria Explain the causes pathogenesis, clinical features, investigation, management, complications of nephrotic syndrome 	Lectures+ small group discussion	MCQs / OSCE

2	Nephritic Syndromes	<ul style="list-style-type: none"> • Define diagnostic criteria • Explain the causes pathogenesis, clinical features, investigation, management, complications of nephritic syndrome 	Lectures+ small group	MCQs / OSCE
3	Acute renal failure (AKI)	<ul style="list-style-type: none"> • Define acute kidney injury • Explain the etiology, pathogenesis, clinical features, investigation, management, indication of dialysis, complications and prognosis of Acute Kidney injury 	Lectures+	MCQs

4	Chronic Renal Failure (CKD)	<ul style="list-style-type: none"> • Define Chronic kidney disease • Explain the etiology, pathogenesis, clinical features, investigation, management, indication of dialysis, complications and prognosis of CKD 	Lectures+	MCQs /
5	UTI	Explain the etiology/risk factors pathogenesis, clinical features, investigation, management, complications and prevention of recurrent UTI	Lectures+ small group	MCQs / OSCE
6	Electrolytes Imbalances(Na,K,CA)	Explain the causes, clinical presentation investigations Management and Complications of hypo/hyper Na,K and Ca	Lectures+	MCQs /

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UNIT; ENDOCRINOLOGY

S.NO	CONTENT AREAS	LEARNING OBJECTIVES	Mode of teaching	Assessment tools
		At the completion of this unit, students will be able to:		
1	Diabetes Mellitus	<ul style="list-style-type: none"> • Define Diabetes Mellitus • Discuss types, risk factors, pathogenesis, clinical features, investigation, diagnostic criteria, • management, oral medications/types of insulin therapy and their side effects, • Describe the complications of diabetes (micro/macro 	Lectures+ small group discussion	MCQs / OSCE

		vascular, infections)		
2	Pituitary Diseases	<p>Define Pituitary diseases</p> <p>Explain the etiology, clinical features, investigation, management and complications of Pituitary diseases</p>	Lectures+ small group discussion	MCQs /osce
3	Thyroid Disorders	<ul style="list-style-type: none"> Define thyroid diseases <p>Explain the etiology, clinical features, investigation, management and complications of hypo/hyperthyroidism</p>	Lectures+ small group discussion	MCQs / OSCE
4	Adrenal Disorders	<ul style="list-style-type: none"> Define adrenal diseases <p>Explain the etiology, clinical features, investigation, management and complications of adrenal dysfunctions</p>	Lectures+ small group discussion	MCQs / OSCE

5	Parathyroid Disorders	<ul style="list-style-type: none"> • Define Parathyroid diseases <p>Explain the etiology, clinical features, investigation, management and complications of Parathyroid diseases</p>	Lectures+	MCQs /
6	Vitamin deficiencies (B,C,D)	<p>Explain the causes, clinical presentation investigations Management and Complications of common vitamin deficiencies</p>	Lectures+	MCQs /

UNIT; BLOOD DISORDERS

S.NO	CONTENT AREAS	LEARNING OBJECTIVES	Mode of teaching	Assessment tools
1	Classification of anemia/Iron deficiency Anemia	<p>At the completion of this unit, students will be able to:</p> <ul style="list-style-type: none"> • Define Anemia with values • Classify Anemia, functions of iron in the body, absorption of iron, daily recommended dose of iron, dietary sources of iron • Discuss causes, clinical features in Iron Deficiency Anemia treatment of IDA, Oral/parenteral iron therapy • Enlist the side effects of oral/parenteral iron therapy 	Lectures+ small group discussion	MCQs / OSCE
2	Megaloblastic anemia	<ul style="list-style-type: none"> • Explain the functions of B12/folate in the body, absorption of B12/folate, daily recommended dose and dietary sources of B12/folate • Describe the causes, clinical features, investigations and treatment of megaloblastic anemia 	Lectures+ small group discussion	MCQs / OSCE
3	Thalassemia	<ul style="list-style-type: none"> • Classify Thalassemia, 	Lectures	MCQs

		<ul style="list-style-type: none"> • Discuss the clinical presentation, investigations treatment and complications of thalassemia minor/major • Perform Genetic counselling to the parents. 		
4	Sickel cell anemia/ Aplastic anemia	<ul style="list-style-type: none"> • Discuss the Epidemiology, etiology/pathogenesis, clinical features, investigations, treatment, complications and prognosis of Sickle cell disease and aplastic anemia 	Lectures	MCQs
5	Acute/chronic Leukemia	<ul style="list-style-type: none"> • Differentiate b/w acute and chronic leukemia • Describe the Clinical presentation, examination findings, investigations, staging, complications of Leukemia • Relate the treatment (Chemo/stem cell transplant) for Leukemia 	Lectures+ small group discussion	MCQs / OSCE

6	Lymphoma	<ul style="list-style-type: none"> • Classify Hodgkin and Non-Hodgkin lymphoma • Discuss the clinical presentation, staging • Describe investigation, treatment options of Lymphoma 	Lectures+ small group discussion	MCQs / OSCE
7	Thrombocytopenia/ITP	<ul style="list-style-type: none"> • Define thrombocytopenia • Discuss the causes of Thrombocytosis • Explain the etiology, clinical presentation, investigations and treatment of Idiopathic thrombocytopenic purpura 	Lectures+ small group discussion	MCQs / OSCE
8	Bleeding disorders(VWD, hemophilia / Anti-coagulants	<ul style="list-style-type: none"> • Discuss the Etiology /Types, clinical presentation, investigations, management of active bleeding, long-term management, complications, genetic counselling/ counselling before surgical procedures of Hemophilia/ Willebrand disease • Describe names and functions common anticoagulants • Explain the monitoring, complication and 	Lectures+ small group discussion	MCQs / OSCE

		management of bleeding with use of anticoagulants		
9	Blood products & transfusion	<ul style="list-style-type: none"> • Indication of Blood transfusions/transfusion reactions 	Lectures	MCQs

UNIT; INFECTIOUS DISEASES

S.NO	CONTENT AREAS	LEARNING OBJECTIVES	Mode of teaching	Assessment tools
		At the completion of this unit, students will be able to:		
1	Malaria	<ul style="list-style-type: none"> • Explain the types, etiology, clinical features, Investigation, management, complications and prevention of malaria 	Lectures+ small group discussion	MCQs / OSCE

2	Typhoid	<ul style="list-style-type: none"> Describe the etiology, transmission, clinical features, investigation, management, complications And prevention of typhoid 	Lectures+ small group discussion	MCQs / OSCE
3	Dengue Fever	<ul style="list-style-type: none"> Discuss etiology, clinical features, investigation, management, complications and prevention /mosquito control. 	Lectures+ small group discussion	MCQs / OSCE
4	Mumps/measles	<ul style="list-style-type: none"> Discuss etiology, clinical features, investigation, management, complications and prevention/vaccination of Mumps/Measles 	Lectures+ small group discussion	MCQs / OSCE
5	HIV	<ul style="list-style-type: none"> Explain the etiology, transmission, clinical features, investigation, management, complications (AID syndrome), prevention of Human deficiencies viruses (HIV) 	Lectures+ small group discussion	MCQs / OSCE
6	Diphtheria/Tetanus	<ul style="list-style-type: none"> Describe the etiology, clinical features, investigation, management, complications and prevention of 	Lectures+ small group discussion	MCQs / OSCE

		Diphtheria /Tetanus		
7	Shock(hypovolemic, septic, anaphylactic) /sepsis	<ul style="list-style-type: none"> • Discuss the types of shock <p>Explain causes, clinical features, investigation, management, and complications related with Shock,</p>	Lectures	MCQs
8	Hospital Acquired Infections(UTI, pneumonia)	<p>Name the common hospital acquired infections</p> <p>Explain transmission, risk factors, clinical features, investigation, management, and complications related with hospital acquired UTI and pneumonia</p>	Lectures	MCQs

CURRICULUM FOR CLINICAL ROTATION IN MEDICINE WARD

S.NO	CLINICAL SKILLS	Learning objectives By the end of rotation student should be able to;	TEACHING METHODOLOGY	ASSESSMENT TOOLS
1	History taking techniques	Take proper history from the patient Note down significant findings Present the case history in systemic manner	Small group discussion Bedside teaching	OSCE Ward test /viva Minicex
	General physical examination	Perform proper General physical examination. Take accurate vitals eg BP, Pulse, temp, R/R	Teaching on mannequin/ patients	OSCE Ward test /viva DOPs

		<p>Identify anemia, jaundice, clubbing, edema, tremors, any skin lesions and dehydration</p> <p>Detect any lymphadenopathy or thyroid enlargement</p> <p>Interpret the causes of positive findings</p>	<p>Bedside teaching</p>	
	Gastrointestinal history	<p>Take proper history of gastrointestinal complains eg; diarrhea, vomiting, abdominal pain</p> <p>Note down significant findings</p> <p>Present the case history in systemic manner</p>	<p>Small group discussion</p> <p>Bedside teaching</p>	<p>OSCE</p> <p>Ward test /viva</p> <p>Mini-cex</p>
	Gastrointestinal examination;	<p>Perform abdominal examination (Inspection, Palpation, Percussion, Auscultation)</p> <p>Note and interpret positive findings and present the case in systemic manner</p>	<p>Teaching on mannequin/ patients</p> <p>Bedside teaching</p>	<p>OSCE</p> <p>Ward test /viva</p> <p>DOPs</p>
	Respiratory system; history	<p>Take proper history of respiratory symptoms eg;</p>	<p>Small group discussion</p>	<p>OSCE</p> <p>Ward test /viva</p>

		<p>chest pain, cough, dyspnea</p> <p>Note down significant findings</p> <p>Present the case history in systemic manner</p>	<p>Bedside teaching</p>	<p>Mini-cex</p>
	Respiratory examination	<p>Perform respiratory examination (Inspection, Palpation, Percussion, Auscultation)</p> <p>Note and interpret positive findings and present the case in systemic manner</p>	<p>Teaching on mannequin/ patients</p> <p>Bedside teaching</p>	<p>OSCE</p> <p>Ward test /viva</p> <p>DOPs</p>
	CVS HISTORY	<p>Take proper history of cardiovascular symptoms eg; chest pain, cough, SOB</p> <p>Note down significant findings</p>	<p>Small group discussion</p> <p>Bedside teaching</p>	<p>OSCE</p> <p>Ward test /viva</p> <p>Mini-cex</p>

		Present the case history in systemic manner		
	CVS Examination	<p>Perform proper cardiovascular examination (Inspection, Palpation, Percussion, Auscultation)</p> <p>Demonstrate normal pulse rate, JVP</p> <p>Note and interpret positive findings and present the case in systemic manner</p>	<p>Teaching on mannequin/ patients</p> <p>Bedside teaching</p>	<p>OSCE</p> <p>Ward test /viva</p> <p>DOPs</p>
	CNS; History	<p>Take proper history of CNS symptoms eg; headache, fits, syncope/dizziness</p> <p>Note down significant findings</p> <p>Present the case history in systemic manner</p>	<p>Small group discussion</p> <p>Bedside teaching</p>	<p>OSCE</p> <p>Ward test /viva</p> <p>Mini-cex</p>

	HMF/cranial nerves Examination	<p>Perform proper high mental functions assessment and cranial nerve examination</p> <p>Note and interpret positive findings and present the case in systemic manner</p>	<p>Teaching on simulators/ patients</p> <p>Bedside teaching</p>	<p>OSCE</p> <p>Ward test /viva</p> <p>DOPs</p>
	Sensory/motor system examination	<p>Perform proper sensory /motor examination</p> <p>Note and interpret positive findings and present the case in systemic manner</p>	<p>Teaching on simulators/ patients</p> <p>Bedside teaching</p>	<p>OSCE</p> <p>Ward test /viva</p> <p>DOPs</p>
	Medical Instruments	<p>Identify common medical instruments (Naso-gastric tube, foley's catheter, IV cannula, LP needle, insulin syringe, airways)</p> <p>Describe indications,</p>	<p>Small group discussion</p>	<p>OSCE</p> <p>Ward test /viva</p>

		contraindication, complications and procedure of each instrument)		
	X ray Chest	Explain the chest x-ray findings Diagnose COPD, cardiomegaly, pleural effusion, pneumothorax, tuberculosis and pneumonia by Xray radiographs	Small group discussion	OSCE Ward test /viva
	Counselling techniques	Perform proper counselling for common medical condition eg; diabetes mellitus/diabetic foot ulcer, hypertension, obesity, thalassemia/ hemophilia, needle stick injury (HBV, HCV, HIV)	Teaching on simulators/ patients Small group discussion	OSCE Ward test /viva
	Data Interpretation; CBC/LFT/PT APTT, Thyroid profile/blood glucose/HbA1c	Interpret findings in common lab reports eg,CBC. LFT, TFT, clotting	Small group discussion	OSCE Ward test /viva

		profile, blood glucose, HbA1c		
	Picture Interpretation	Identify and diagnose certain diseases with scenarios/picture Cushing's disease, acromegaly Hypo/hyperthyroidism, SLE, RA, mumps	Small group discussion	OSCE Ward test /viva

ORIENTATION SESSION / RULES& REGULATION/ DRESS CODE

- Introduction to medicine departments and faculty
- Tour of medicine department and explaining work in medicine ward.
- **Explain rules and regulation** for clinical rotation;

Punctuality; Students are expected to arrive on time, any late more than 10 minutes will be marked as absent except for emergency)

Hand wash technique; Student are guided about proper disinfection. Mask, sanitizer and other COVID precautions must be followed.

All the students should be vaccinated for HBV and COVID

Students should bring their own medical instrument kit required for working in medicine department (BP apparatus, thermometer, torch, measuring tape, patellar hammer, tuning fork etc)

Dress code; students should wear neat, properly ironed surgical scrubs/clothes with lab coat, decent comfortable shoes, no slippers or high heels allowed. Hair should properly tied-up.

Student are expected to deal patients with empathy and show respect to seniors and colleagues.

SAMPLE OF CLINICAL ROTATION SCHEDULE

Rotation 1; Total duration; each 8-Weeks (every Thursday (11am -2.30pm) /Friday 10am-1.00 pm) =16 days

S.NO	DAY	TOPIC	TIMINGS
1	1	1.Orientation/describe rules regulation/ward tour 2.. Introduction to general medicine	1... (11-12.30) pm 2.. (12.45-2;30) pm
2	2	1.. Introduction to history taking techniques 2..Bedside history taking; under supervision	1...(10am-11) am 2... (11.15-1.00 pm)
3	3	1..History taking –II (symptomatology) 2...History taking; bedside practice	1... (11-12.15)pm 2...(12.30-2;30)pm
4	4	General physical examination; demonstration/discussion	1..10-11pm 2..11.15- 1.00pm)
5	5	1.. General physical examination; Practice 2...Group discussion on history taking and gen physical examination/quiz	1... (11-12.15)pm 2... (12.30-2;30)pm
6	6	1.. Gastrointestinal history –group discussion 2. Gastrointestinal history. Bedside practice	1..(10-11.30)am 2..(11.45-1.00) pm
7	7	1.. Gastrointestinal examination; Demonstration 2..GI examination. Bedside practice under supervision	1... (11-12.30)pm 2...(12.45-2;30)pm
8	8	1..Gastrointestinal examination;bedside practice	1..(10-11.30am) 2..(11.45-1.00 pm)

		2. Gastrointestinal examination; group discussion /presentation/quiz	
9	9	1.. Respiratory system history taking.. group discussion 2.. Respiartory history..bedside practice	1..11-12.30pm 12.45-2;30pm
10	10	1.. Respiratory examination; demonstration 2.. Respiratory examination;bedside practice under supervison	1..(10-11.30am) 2..(11.45-1.00 pm)
11	11	1. Respiratory examination; practice 2. Respiratory examination; group discussion/ presentation/quiz	1..11-12.30 2,,,12.45-2.30
12	12	1.. Counseling technique- 2.. Practice of common counselling topics eg DM, HTN, Needle injury, smoking cessation	1..(10-11.30am) 2..(11.45-1.00 pm)
13	13	1.Practice session of counselling with patients	1. 11-12.30 2,,,12.45-2.30
14	14	1. HMF/cranial nerves examination demonstration 2. HMF/cranial nerves examination; practice	..(10-11.30am) 2..(11.45-1.00 pm)
15	15	1. HMF/cranial nerves examination; practice/discussion 2. Revision and guidance on ward test	1..11-12.30pm 2...12.45-2;30pm
16	16	Ward test (OSCE)	10am-1 pm

MEDICINE WARD ROTATION 2

Total duration; 8-9 Weeks(every Thursday/Friday)=16- 18 day

<u>S.no</u>	<u>Day</u>	<u>Topic</u>	<u>Timings</u>
1	1	1.CV5 HISTORY; Discussion 2..CV5 HISTORY; bedside Practice	1..11-12.30pm 2...12.45-2.30pm
2	2	1.CV5 Examination; Demonstration 2.CV5 Examination; bedside Practice under supervision	1..10-11.30am 2..11.45-1.00 pm
3	3	1.CV5 examination; bedside practice 2. CV5 examination discussion /presentation/quiz	1.11-12.30pm 2,,12.45-2;30pm
4	4	1..CNS; History; Discussion 2. CNS HISTORY; bedside Practice	1..10-11.30am 2..11.45-1.00 pm
5	5	1.. Examination of Sensory/motor /coordination system; Demonstration 2. Examination of Sensory/motor/coordination system; bedside Practice under supervision	1.,(11-12.30pm 2, (12.45-2;30pm
6	6	1. Examination of Sensory/motor system; bedside Practice 2. Examination of Sensory/motor system; discussion, presentation /quiz	1..10-11.30am 2..11.45-1.00 pm
7	7	1,,Discussion on identification of common medical Instruments 2,,Identification of common medical Instruments;practice	1,,11-12.30pm 2,,,12.45-2;30pm
8	8	1,Common medical Instruments;practice/demonstration of its procedure/quiz	1,,10am – 11.30 am 2,,11.45-1pm

		2,history and examination ;bedside practice	
9	9	1., Data Interpretation/LFT/PT APTT/TFT/FBS/RBS/HbA1c ;group discussion 2., Data Interpretation; practice	1,,11-12.30pm 2,,12.45-2;30pm
10	10	1,,,Data Interpretation; practice on sample questions/quiz 2,, ,history and examination ;bedside practice	1,,10am – 11.30 am 2,, 11.45-1 pm
11	11	1,,,Discusion ;Interpretation of X ray Chest- 2,, Interpretation of X ray Chest-practice	1,,11-12.30pm 2,,12.45-2;30pm
12	12	1,,,X ray Chest -practice/quiz 2,, history and examination ;bedside practice	1,,10am – 11.30 am 2,, 11.45-1 pm
13	13	1,,,Picture Interpretation-discussion 2,, Picture Interpretation-practice	1,,11-12.30pm 2,,12.45-2;30pm
14	14	1,,Picture Interpretation-practice/quiz 2,, history and examination ;bedside practice	1,,10am – 11.30 am 2,, 11.45-1 pm
15	15	1,,Revision of clinical examinations 2,,Revision of xray chest ,instrument etc	1,,11-12.30pm 2,,12.45-2;30pm
16	16	Ward test (OSCE)	10-1pm

Recommended books;(latest edition)

- **Davidson's Principles and Practice of Medicine**
- **MacLeod's clinical examination 13th edition**
- **Bedside techniques of clinical examination edition 4**

Additional learning resources

<https://www.medscape.com>

<https://www.uptodate.com/login>

PATIENT FLOW CHART IN MEDICINE WARD

RECEPTION DESK

↓↓

OPD COUNTER/ER COUNTER

↓↓

ASSESSMENT BY RESIDENTS/CONSULTANTS

↓↓

DECISION ABOUT ADMISSION OR OUT-PATIENT MANAGEMENT

↓↓

WARD RECEPTION

↓↓

INITIAL ASSESSMENT BY DUTY NURSE/HOUSE OFFICER

↓↓

DETAILED ASSESSMENT/MAKING WORKING DIAGNOSIS BY
RESIDENTS IN CONSULTATION WITH FACULTY

↓↓

Daily assessment of patient's condition/review of treatment

↓↓

Discharge and follow up /referral

THE END