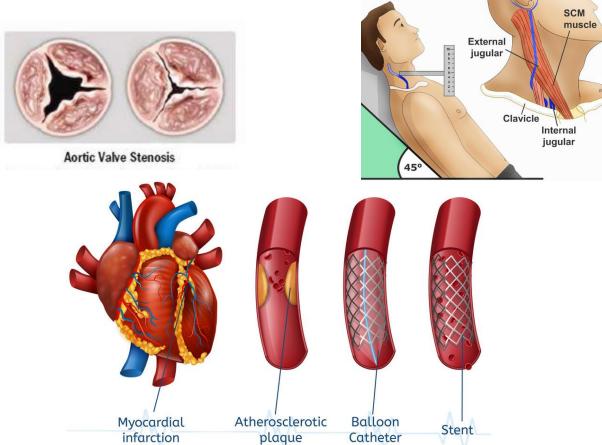


STUDY GUIDE

CARDIOVASCULAR SYSTEM II
MODULE

THIRD YEAR MBBS

Duration: 4 Weeks 24th Mar – 18th April 2020





LIAQUAT NATIONAL HOSPITAL AND MEDICAL COLLEGE

Institute for Postgraduate Medical Studies & Health Science



STUDY GUIDE FOR CARDIOVASCULAR SYSTEM II MODULE

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Module name: CVS II Year: **Three** Duration: 4 weeks (March- April 2020)

Timetable hours: Interactive Lectures s, Case-Based Integrated Learning (CBIL), Clinical Rotations, learning experience in LNH outreach centers, Laboratory, Practical, **Demonstrations, Skills, Self-Study**

MODULE INTEGRATED COMMITTEE

MODULE COORDINATOR:	Dr. Hafeez Ahmed (Cardiology)
CO-COORDINATORS:	Dr. Imran Sandeelo (Cardiology)Dr. Muhammad Suleman Sadiq (DHPE)

DEPARTMENTS' & RESOURCE PERSONS' FACILITATING LEARNING

BASIC HEALTH SCIENCES	CLINICAL AND ANCILLARY DEPARTMENTS
ANATOMY ● Professor Zia-ul-Islam	CARDIOLOGYDr. Faisal AhmedDr. Imran Sandeelo
FORENSIC MEDICINE • Professor Murad Zafar	 MOLECULAR PATHOLOGY Dr. Israr Nasir Dr. Sobia Rafiq
PATHOLOGYProfessor Naveen FaridiDr. Hanna Naqvi	
 PHARMACOLOGY Professor Nazir Ahmad Solangi Professor Tabassum Zehra 	
COMMUNITY MEDICINE ■ Dr. Saima Zainab	
DEPARTMENT of HEALT	TH PROFESSIONS EDUCATION
 Prof Nighat Huda Dr. So 	obia Ali • Dr. Afifa Tabassum

- Dr. Mehnaz Umair
- Dr. Muhammad Suleman Sadiq Hashmi

LNH&MC MANAGEMENT

- Professor Karimullah Makki, Principal LNH&MC
- Dr. Shaheena Akbani, Director A.A & R.T LNH&MC

STUDY GUIDE COMPILED BY: Department of Health Professions Education

INTRODUCTION

WHAT IS A STUDY GUIDE?

It is an aid to:

- Inform students how student learning program of the semester-wise module has been organized
- Help students organize and manage their studies throughout the module
- Guide students on assessment methods, rules and regulations

THE STUDY GUIDE:

- Communicates information on organization and management of the module.
 This will help the student to contact the right person in case of any difficulty.
- Defines the objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as Interactive Lectures s, small group teachings, clinical skills, demonstration, tutorial and case based learning that will be implemented to achieve the module objectives.
- Provides a list of learning resources such as books, computer assisted learning programs,
 web-links, journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous and semester examinations on the student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's achievement of objectives.
- Focuses on information pertaining to examination policy, rules and regulations.

CURRICULUM FRAMEWORK

Students will experience integrated curriculum similar to previous modules of all 4 semesters.

INTEGRATED CURRICULUM comprises of system-based modules such as Infectious Diseases,

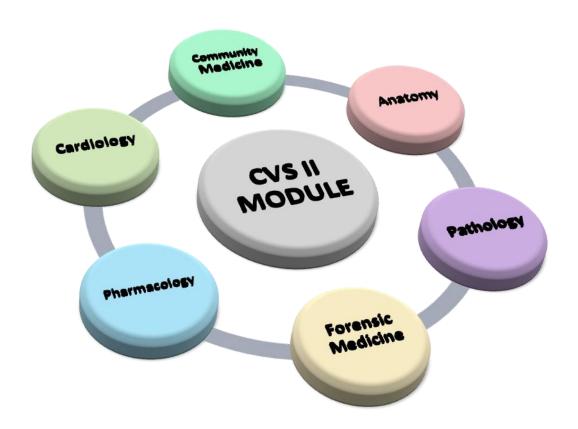
Hematology, Respiratory system-II and CVS-II which links basic science knowledge to clinical problems.

Integrated teaching means that subjects are presented as a meaningful whole. Students will be able to

have better understanding of basic sciences when they repeatedly learn in relation to clinical examples.

LEARNING EXPERIENCES: Case based Integrated discussions, skills acquisition in skills lab. computer-based assignments, learning experiences in clinics, wards, and outreach centers

INTEGRATING DISCIPLINES OF CARDIOVASCULAR SYSTEM II



LEARNING METHODOLOGIES

The following teaching / learning methods are used to promote better understanding:

- Interactive Interactive Lectures s
- Small Group Discussion
- Case- Based Integrated Learning (CBIL)
- Clinical Experiences
 - Clinical Rotations
 - o Experience in LNH outreach centers
- Practicals
- Skills session
- Self-Directed Study

INTERACTIVE LECTURES S: In large group, the Interactive Lectures r introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients' interviews, exercises, etc. Students are actively involved in the learning process.

SMALL GROUP SESSION: This format helps students to clarify concepts, acquire skills or desired attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from Interactive Lectures s, tutorials and self study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

CASE- BASED INTEGRATED LEARNING (CBIL): A small group discussion format where learning is focused around a series of questions based on a clinical scenario. Students' discuss and answer the questions applying relevant knowledge gained previously in clinical and basic health sciences during the module and construct new knowledge. The CBIL will be provided by the concern department.

CLINICAL LEARNING EXPERIENCES: In small groups, students observe patients with signs and symptoms in hospital wards, clinics and outreach centers. This helps students to relate knowledge of basic and clinical sciences of the module and prepare for future practice.

- CLINICAL ROTATIONS: In small groups, students rotate in different wards like Medicine, Pediatrics, Surgery, Obs & Gyne, ENT, Eye, Family Medicine clinics, outreach centers & Community Medicine experiences. Here students observe patients, take histories and perform supervised clinical examinations in outpatient and inpatient settings. They also get an opportunity to observe medical personnel working as a team. These rotations help students relate basic medical and clinical knowledge in diverse clinical areas.
- EXPERIENCE IN LNH OUTREACH CENTERS: Learning at outreach centers of LNH have been organized
 and incorporated as part of training of third year medicinal students. The objective of these visits is
 to provide clinical training experiences for students in primary care settings.

PRACTICAL: Basic science practicals related to pharmacology, microbiology, pathology, forensic medicine, and community medicine have been schedule for student learning.

SKILLS SESSION: Skills relevant to respective module are observed and practiced where applicable in skills laboratory.

SELF-DIRECTED STUDY: Students' assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.

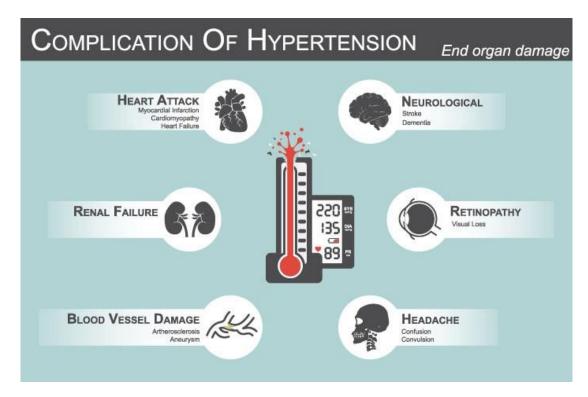
MODULE 4: CVS II

INTRODUCTION

Cardiovascular module(I) in Semester 2 covered basic medical sciences concepts for understanding the causes and treatment of diseases.

CVS (II) will now focus on common clinical presentations along with treatment options, relevant investigations and prevention. Students will have opportunities to relate their knowledge on the diseases such as congenital heart diseases, hyperlipidemia, hypertension, diseases of vessel wall, ischemic heart diseases, valvular heart diseases, arrhythmias, cardiac failure and infections. Sessions on preventive medicine and healthy life style will have significant importance. Students will be engaged in CVS history taking and physical examination both in adults and children to enhance the clinical examination skills of the students. The module will enable students to relate their theoretical learning through case-based learning, interactive Lectures, patient, simulated-based experiences and video-based learning.

Forensic Medicine, family medicine clinics and research will run parallel with the module.



http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/LearnHowHBPHarmsYourHealth/Health-Threats-From-High-Blood-Pressure_UCM_002051_Article.jsp#.WmwFXZKGPIU

COURSE OBJECTIVES AND STRATEGIES

At the end of the module the students will be able to:

ANATOMY

TOPICS & OBJECTIVES	LEARNING STRATEGY
1. Mark borders and areas of auscultation of the heart	
2. Discuss coronary circulation and its clinical importance	
3. Discuss the nerve supply with special reference to pain radiation	Interactive Lecture
4. Discuss the conducting system of heart and its blood supply	

CARDIOLOGY

TOPICS & OBJECTIVES	LEARNING STRATEGY
Rheumatic fever, Rheumatic heart disease & infective endocarditis	
1. Define Rheumatic fever.	
2. List the etiology of Rheumatic heart disease	
3. Discuss the pathogenesis of Rheumatic heart disease.	
4. List the clinical features Rheumatic heart disease	Interactive Lectures
5. Discuss the morphology of Infective endocarditis	Interactive Lectures
6. List the diagnostic criteria of Infective Endocarditis.	
7. Discuss types of non-bacterial thrombotic endocarditis and Libman Sacks disease	
Infective Endocarditis	
8. Define Infective endocarditis	
9. Classify Infective endocarditis	
10. Discuss the clinical features of Infective endocarditis	Interactive Lectures
11. List the causes of Infective endocarditis	
12. List the investigations related Infective endocarditis	
History, Examination, Lab Investigation And Epidemiology Related To CVS	
13.Demonstrate all the steps History Taking of Patient with Chest Pain and CVS examination	Small Group Discussion
ECG Interpretation:	
14. Interpret 12-lead electrocardiogram to determine the rate, rhythm, axis, intervals, and acute ischemic changes.	Interactive Lectures/Small
15. Discuss the complications of Myocardial Infarction	Group Discussion
Drug Therapy Of Acute Coronary Syndrome	
16. Discuss the management of ACS	
17. Discuss the basic and clinical pharmacology of different drugs used in ACS	Interactive Lectures
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18. Discuss the classification Drug therapy of ACS		
19. List the clinical pharmacology of different drug groups used in ACS		
Clinical Evaluation Of Chest Pain		
 20. On the basis of given scenarios: ✓ Differentiate between angina and acute myocardial infarction ✓ Justify selection of investigations ✓ Predict investigation findings. ✓ Discuss principles of management for angina/acute myocardial infarction ✓ Suggest preventive measures and life style modifications based on evidence 	Interactive Lectures	
Cardiac Failure		
21. Define cardiac failure		
22. List the causes of cardiac failure	Interactive	
23. Discuss the clinical features of cardiac failure	Lectures	
24. List the investigations related to cardiac failure		
25. Discuss the causes of congestive heart failure along with its effect on the left	Case-Based	
sided and right sided heart failure	Discussion	
Hypertension & Prevention		
26. Define & Classify hypertension		
27. Discuss the clinical features of hypertension	Case-Based	
3. List the causes of hypertension Discussion		
29. List the investigations related to hypertension		
Dyslipidemias And Its Clinical Value		
30. Define Dyslipidemias		
31. List the clinical features of dyslipidemias	Interactive Lectures	
32. List the causes of dyslipidemias 33. List the investigations related to dyslipidemia	_	
Arrhythmias		
34. Define Arrhythmias		
35. Classify Arrhythmias	Small Group Discussion	
36. Discuss the clinical features of Arrhythmias		
37. List the causes of Arrhythmias		
38. List the investigations related Arrhythmias		
Approach to patient with chest pain		
39. Classify chest pain		
40. List the risk factors of chest pain		
41. Discuss the clinical features of chest pain	Small Group	
42. List the investigations related to chest pain	Discussion	
43. Discuss the management plan of chest pain		

COMMUNITY MEDICINE

TOPICS & OBJECTIVES	LEARNING STRATEGY
Epidemiology of Cardiovascular Disease	
1. Discuss Epidemiology of Cardiovascular Diseases	
2. List the Risk Factors of Cardiovascular Diseases	Small Group
3. Identify New Emerging Cardiovascular Risk Factors	Discussion
4. List the preventive factors of Cardiovascular Diseases	
Hypertension & Prevention	
5. Define hypertension	Interactive Lectures
6. Classify Hypertension	/Case-Based
7. Discuss the rule of half in hypertension	Discussion
8. Discuss prevention of Hypertension	

PATHOLOGY

TOPICS & OBJECTIVES	LEARNING STRATEGY	
Valvular Heart Diseases		
1. Define Valvular heart diseases		
2. Classify Valvular heart diseases		
3. Discuss the clinical features of Valvular heart diseases	Interactive Lectures	
4. List the causes of Valvular heart diseases]	
5. List the investigations related Valvular heart diseases		
Rheumatic Heart Disease & Infective Endocarditis		
6. Define Rheumatic Heart Disease		
7. List the sign and Symptoms of Rheumatic Heart Disease		
8. Discuss the diagnostic criteria of rheumatic heart disease	Interactive Lectures	
9. Discuss the Control and prevention of rheumatic heart diseases	1	
Disease Of Vessel Wall. Hypertensive Vascular & Heart Disease		
10. Discuss vascular wall injury response		
11. List the causes, pathogenesis and morphology of hypertensive vascular injury	Interactive Lectures	
12. Classify hypertension		
Angina Pectoris, Myocardial Infarction & Ischemic Heart Disease		
13.Define Angina Pectoris		
14. Classify Angina pectoris		
15. List the risk factors Myocardial infarction	Interactive Lectures	
16. Discuss the pathogenesis of Myocardial infarction		
17. Discuss morphology of Myocardial Infarction		

18. List the clinical features and lab diagnosis of Myocardial Infarction.	
19. Discuss the complications of Myocardial Infarction	
Cardiomyopathies & Myocarditis	
20. Define cardiomyopathy	
21. Classify cardiomyopathies	
22. List the causes of cardiomyopathies	
23. List the conditions associated with cardiomyopathy	
24. Discuss the pathogenesis of cardiomyopathies	Small Group
25. Discuss the morphology of cardiomyopathies	Discussion
26. List the clinical features of cardiomyopathy	
Pericardial Diseases & Tumors Of Heart	
27. Define Pericardial diseases & tumors of heart	
28. Classify Pericardial diseases & tumors of heart	
29. List the etiological factors of Pericardial diseases & tumors of heart	Small Group
30. Discuss the Pathogenesis of Pericardial diseases & tumors of heart	Discussion
31. Discuss the morphology of Pericardial diseases & tumors of heart	
32. List the clinical features of pericardial diseases & tumors of heart	
Lab Investigations Of Hyperlipidemia And MI	
33. Discuss the findings of different lab investigations in hyperlipidemia and MI	Interactive Lectures
Aneurysms & Vascular Tumors	
34. Define Aneurysms & Vascular tumors	
35. Classify Aneurysms & Vascular tumors	
36. List the etiological factors of Aneurysms & Vascular tumors	Interactive Lectures
37. Discuss the Pathogenesis Aneurysms & Vascular tumors	interactive Lectures
38. Discuss the morphology of Aneurysms & Vascular tumors	
39. List the clinical features of Aneurysms & Vascular tumors	
Genomics (Molecular Pathology)	
40. Define Genomics	
41. Differentiate between genomics and genetics	
42. Differentiate between Genotype and Phenotype	Interactive Lectures
43. Discuss the importance of genomics in public health	
44. List the steps in genetic counseling	
Vasculitis	
45. Define Vasculitis	Small Group
46. Classify vasculitis.	Discussion
47. List the etiological factors of vasculitis	

3RD YEAR MBBS CVS II MODULE

48. Discuss the Pathogenesis vasculitis	
49. Discuss the morphology of vasculitis	
50. List the clinical features of various types of Vasculitis.	
Concepts of arteriosclerosis & atherosclerosis. Epidemiology & risk factors	
51. Discuss the epidemiology of Atherosclerosis	
52. List the risk factors of Atherosclerosis.	Interactive Lectures
52. List the risk factors of Atherosclerosis.53. Discuss in detail the pathogenesis, morphology and consequences of	Interactive Lectures

PHARMACOLOGY

TOPICS & OBJECTIVES	LEARNING STRATEGY
Drug Therapy Of Angina And MI	
1. Classify the antiAnginal drugs	
2. Discuss the basic & clinical pharmacology of anti Anginal drugs	Interactive Lectures
3. Discuss the treatment of IHD including its basic & clinical pharmacology	- Interactive Lectures
Drug Therapy Of CCF	
4. Define congestive cardiac failure	
5. List the drugs indicated in CCF	
6. Classify anti-congestive cardiac failure drugs	Interactive Lectures
7. List the pharmacokinetics and pharmacodynamics effects of anti-cardiac failure drugs	mice adding Leader es
Drugs Used In Treatment Of Cardiac Failure	
8. Classify drugs used for congestive cardiac failure (CCF)	
9. List the pharmacokinetic and pharmacodynamics properties of drugs of different classes used for treatment of CCF.	Interactive Lectures
Antihypertensive Drugs	
10. Define hypertension	
11. Classify the anti-hypertensive drugs	
12. Discuss the basic & clinical pharmacology of Antihypertensive Drugs	Case-Based Learning
13. Discuss the pharmacokinetic and Pharmacodynamics properties of drugs used	
for treatment of Hypertension (HTN)	
Drug Treatment Of Cardiac Arrhythmias	
14. Discuss the basic anti-arrhythmic drug classes.	
15. List the clinical pharmacological effects of anti-arrhythmic drugs	Interactive Lectures

FORENSIC MEDICINE

TOPICS & OBJECTIVES	LEARNING STRATEGY	
Traumatology – I		
1. What is Injury, Hurt, Wound, Assault and Battery?		
2. Classification of Injuries	Interactive Lectures	
3. Blunt weapon injuries- Abrasions, Bruises		
Traumatology- II		
4. Lacerated wounds, types, mechanism of production and medico legal significance	Interactive Lactures	
5. Sharp weapon injuries- Incised wounds, stab wounds with medico legal significance	- Interactive Lectures	
How To Write Medico-Legal Report		
6. Write the medico-legal report of injured person.	Small Group Discussion	
Traumatology- III		
7. Qisas and Diyat Act with interpretation of injuries accordingly	Interactive Lectures	
Firearm Injuries –I		
8. Ballistics, types of ballistics		
9. Parts of a firearm weapon		
10. Cartridges of different firearms and types of projectiles i.e. pellets, bullets	Interactive Lectures	
11. Types of gun powder		
12. Mechanism of fire in firearm weapons	1	
Firearm linjuries – II		
13. Characteristic features of wound of entry and exit of firearms		
14. Estimation of distance of fire	Interactive Lectures	
15. Fabricated firearm injuries		
16. Postmortem findings in cases of firearm injuries		
Poisoning – Metallic Poisons		
17. Describe the signs, symptoms, diagnosis, treatment and postmortem findings of acute and chronic poisoning by the metallic poisons Copper and Mercury.	Small Group Discussion	
Poisoning – Non-Metallic Poisons		
18. Describe the signs, symptoms, diagnosis, treatment and postmortem findings of acute and chronic poisoning by the non-metallic poisons Phosphorous and Iodine.	Small Group Discussion	

House Hold Poisons				
19. Describe the signs, symptoms, diagnosis, treatment and postmortem findings of poisoning by common household poisons including domestic household poisons and garden poisons.	Small Group Discussion			
Special Trauma				
 ✓ Blast injuries ✓ Types of explosives used ✓ Types of injuries ✓ Role of Forensic expert in blast injuries 	Interactive Lectures			
Causes Of Deaths Due To Trauma				
 ✓ Causes of death due to wounds ✓ Immediate causes ✓ Delayed causes 	Interactive Lectures			

Apart from attending daily scheduled sessions, students should engage in self-study to ensure that all the objectives are covered



LEARNING RESOURCES

SUBJECT	RESOURCES		
COMMUNITY MEDICINE	1. Preventive and Social Medicine by K Park 2. Community Medicine by M Illyas 3. Basic Statistics for the Health Sciences by Jan W Kuzma		
FORENSIC MEDICINE	 TEXT BOOKS Nasib R. Awan. Principles and practice of Forensic Medicine 1st ed. 2002. Parikh, C.K. Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology. 7th ed.2005. REFERENCE BOOKS Knight B. Simpson's Forensic Medicine. 11th ed.1993. Knight and Pekka. Principles of forensic medicine. 3rd ed. 2004 Krishan VIJ. Text book of forensic medicine and toxicology (principles and practice). 4th ed. 2007 Dikshit P.C. Text book of forensic medicine and toxicology. 1st ed. 2010 Polson. Polson's Essential of Forensic Medicine. 4th edition. 2010. Rao. Atlas of Forensic Medicine (latest edition). Rao. Practical Forensic Medicine 3rd ed ,2007. Knight: Jimpson's Forensic Medicine 10th 1991,11th ed.1993 Taylor's Principles and Practice of Medical Jurisprudence. 15th ed.1999 CDs: Interactive Lectures s on Forensic Medicine. Atlas of Forensic Medicine. WEBSITES: www.forensicmedicine.co.uk 		
GENERAL MEDICINE	1. Hutchison's Clinical Methods, 23 rd Edition 2. MacLeod's clinical examination 13th edition 3. Davidson's Principles and Practice of Medicine 4. Kumar and Clark's Clinical Medicine 5. HCAI guidelines CDC 6. WHO TB guidelines		
PATHOLOGY/MICROBIOLOGY	1. Robbins & Cotran, Pathologic Basis of Disease, 9th edition. 2. Rapid Review Pathology, 4th edition by Edward F. Goljan MD		

	WEBSITES: 1. http://library.med.utah.edu/WebPath/webpath.html 2. http://www.pathologyatlas.ro/
PEDIATRICS	TEXT BOOK: 1. Textbook of Pediatrics by PPA, preface written by S. M. Haneef 2. Basis of Pediatrics (8 th Edition Pervez Akbar)
PHARMACOLOGY	TEXT BOOKS Lippincot Illustrated Pharmacology Basic and Clinical Pharmacology by Katzung

ADDITIONAL LEARNING RESOURCES

Hands-on Activities/ Practical	Students will be involved in Practical sessions and hands-on activities that link with the CVS II module to enhance learning.
<u>Labs</u>	Utilize the lab to relate the knowledge to the specimens and models available.
<u>Skills Lab</u>	Provides the simulators to learn the basic skills and procedures. This helps build confidence when approaching patients in real settings.
<u>Videos</u>	Familiarize the student with the procedures and protocols to assist patients.
<u>Computer</u>	To increase knowledge and motivation of students through the available
<u>Lab/CDs/DVDs/Internet</u>	internet resources and CDs/DVDs. This will be an additional advantage to
Resources:	meaningful learning.
Self Learning	Self Learning is when students seek information to solve cases, read through different resources and discuss among peers, and with the faculty to clarify the concepts.

ASSESSMENT METHODS:

- Best Choice Questions(BCQs) also known as MCQs (Multiple Choice Questions)
- Objective Structured Practical/Clinical Examination (OSPE or OSCE)

BCQs:

- A BCQ has a statement or clinical scenario of four options (likely answers).
- Correct answer carries one mark, and incorrect 'zero mark'. There is NO negative marking.
- Students mark their responses on specified computer-based sheet designed for LNHMC.

OSCE:

- All students rotate through the same series of stations in the same allocated time.
- At each station, a brief written statement includes the task. Student completes the given task at one given station in a specified time.
- Stations are observed, unobserved, interactive or rest stations.
- In unobserved stations, flowcharts, models, slide identification, lab reports, case scenarios may be used to cover knowledge component of the content.
- Observed station: Performance of skills /procedures is observed by assessor
- Interactive: Examiner/s ask questions related to the task within the time allocated.
- In Rest station, students in the given time not given any specific task but wait to move to the following station.

Internal Evaluation

- Students will be assessed comprehensively through multiple methods.
- 20% marks of internal evaluation will be added to JSMU final exam. That 20% may include class tests, assignment, practicals and the internal exam which will all have specific marks allocation.

Formative Assessment

Individual department may hold quiz or short answer questions to help students assess their own learning. The marks obtained are not included in the internal evaluation

For JSMU Examination Policy, please consult JSMU website!

More than 75% attendance is needed to sit for the internal and final examinations

LNH&MC EXAMINATION RULES & REGULATIONS

- Student must report to examination hall/venue, 30 minutes before the exam.
- Exam will begin sharp at the given time.
- No student will be allowed to enter the examination hall after 15 minutes of scheduled examination time.
- Students must sit according to their roll numbers mentioned on the seats.
- Cell phones are strictly not allowed in examination hall.
- If any student is found with cell phone in any mode (silent, switched off or on) he/she will be not be allowed to continue their exam.
- No students will be allowed to sit in exam without University Admit Card, LNMC College ID Card and Lab Coat
- Student must bring the following stationary items for the exam: Pen, Pencil, Eraser, and Sharpener.
- Indiscipline in the exam hall/venue is not acceptable. Students must not possess any written material or communicate with their fellow students.

SCHEDULE:

WEEKS	3 RD YEAR	MONTH
WEEK 1-5.5	INFECTIOUS DISEASES MODULE	2 nd Dec 2019
		7 th Jan 2020
WEEK 1-4.5	HEMATOLOGY MODULE	8 th Jan 2020
		4 th Feb 2020
WEEK 1-4.5	RESPIRATORY MODULE	6 th Feb 2020
		21 st March 2020
WEEK 1-4	CVS MODULE	24 th March 2020*
		18 th April 2020*
LNF	HMC MID-TERM EXAM	April*

^{*}Final dates will be announced later