# AYUB MEDICAL COLLEGE ABBOTTABAD

### **DEPARTMENT OF MEDICAL EDUCATION**



# CARDIOVASCULAR SYSTEM II MODULE

**3<sup>RD</sup> YEAR MBBS** 

BLOCK: I DURATION: 4 WEEKS SESSION:2024

**STUDENT NAME** 

#### DISCLAIMER

i

• Developing a study guide is a dynamic process and undergoes iteration according to the needs

and priorities.

- This study guide is subjected to the change and modification over the whole academic year.
  - However, students are advised to use it as a guide for respective modules.
  - It is to declare that the learning objectives (general and specific) and the distribution of

assessment tools (both theory and practical) are obtained from Khyber Medical University,

Peshawar. These can be obtained from:

https://kmu.edu.pk/examination/guidelines

• The time tables are for guiding purpose. It is to advise that final timetables are always displayed

over the notice boards of each lecture hall.

• Students are encouraged to provide feedback via coordinator.

Contents	
1 Module Committee:	3
2 What Is A Study Guide?	4
2.1 The study guide:	4
2.2 Module objectives	4
2.3 Achievement of objectives	4
3 Recommended List Of Icons	5
4 Organization of Module	7
4.1 Introduction:	7
4.2 Rational:	7
5 Learning Objectives	8
5.1 General Learning Outcomes	8
5.2 Specific learning Objectives	8
6 Examination and Methods of Assessment:	
6.1 PAPER I BLUEPRINTS THEORY	Error! Bookmark not defined.
6.2 OSPE	Error! Bookmark not defined.
7 Learning Opportunities and Resources	3
7.1 Books:	3
7.2 Website:	3
8 Timetables	5
9 For inquiry and troubleshooting	9
10 Course Feedback Form	10

ii

### 1 Module Committee:

s.no	Name	Department	Role
1.	Prof. Dr. Umar Farooq	CEO &	Dean
2.	Prof. Dr. Irfan U. Khattak	Directo	or DME
		Module Team	
3.	Dr. Salma Shazia.	Forensic medicine	Module Coordinator
4.	Dr.AnilaRiyaz	Pathology	Member
5.	Drfozia Jahangir.	Pathology.	Member
6.	DrHaq Nawaz	Pharmacology.	Member
7.	Dr Fahim	Pharmacology.	Member
8.	Dr Zainab Nazneen	Community medicine.	Member
9.	Dr Rashid Ali	Medicine.	Member
10.	Dr Saima Bibi.	Pediatrics.	Member
11.	Dr Imran shah	ENT.	Member
12.	DrHumera.	Anatomy	Member
13.	Dr Sarwat Abbasi.	Biochemistry.	Member
14.	Dr Sehar	Physiology.	Member
15.	Miss Ayesha Saleem	PRIME.	Member

### 2 What Is A Study Guide?

It is an aid to Inform students how student learning program of the module has been organized, to help students organize and manage their studies throughout the module and guide students on assessment methods, rules and regulations.

### 2.1 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 lectures, small group teachings.

### 2.2 Module objectives.

- Provides a list of learning resources such as books, computer-assisted learning programs, weblinks, and journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous on the student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's performance.

#### 2.3 Achievement of objectives.

Focuses on information pertaining to examination policy, rules and regulations.



### 3 Recommended ListOf Icons



Introduction To Case



For Objectives



**Critical Questions** 



Assessment



**Resource Material** 

### 4 Organization of Module

### 4.1 Introduction:

This module is based on the cardiovascular system. It starts with the basics from anatomy, physiology, biochemistry,followed by the pathological changes, sign and symptoms, treatment, prevention and medicolegal implications. It improves professionalism, self-management and communication skills among the students of 3<sup>rd</sup> year MBBS.

### 4.2 Rational:

After studying this module a student would be able to know about the basic anatomy, physiology and biochemistry of the heart and its related structures which will help them in identifying various diseases related to the CVS in adults and children, their treatment and prevention.



### 5 Learning Objectives

### 5.1 General Learning Outcomes

By the end of this module the students would be able to;

**Knowledge:** To have basic and clinical knowledge along with practical skills to the 3<sup>rd</sup> year MBBS students. The module is aligned to the general outcomes required at the exit level, and includes sessions on pathological mechanisms, preventive medicine, pharmacological aspects, communication skills, professionalism, self-management, medicolegal aspects, clinical application of knowledge and skills. The purpose is to facilitate the student learning.

	Themes				
S. No.	Theme Title	Week No.			
Theme 1	Chest Pain	2 (1)			
Theme 2	blood pressure	1			
Theme 3	Shortness of brea	th2 (1)			

### 5.2 Specific learning Objectives

	Theme 1 (Chest pain)					
Subjects	Topics	Los	MI T	No. of hrs		
Anatomy	-	Describe surface anatomy of the heart and heart valves Describe the anatomy of coronary circulation Enumerate heart valves and describe their gross morphology	LGF	1		
Biochemistry	Lipoproteins and cholesterol	Classify and Describe types of lipoproteins	LGF	1		

		Summarize cholesterol synthesis		
Pathology	Atherosclerosis	Discuss the risk factors,	LGF	1
07		Morphology, pathological changes		
		and consequences of		
		Atherosclerotic plaque		
	Ischemia	Define Ischemia and infarction, and	LGF	1
	and	differentiate it from infarction		
	infarction	Discuss Classification and		
		pathophysiology of ischemic		
		heart disease		
		Discuss pathophysiology of		
		myocardial infarction		
Pharmacology	Antianginal drugs	Classify antianginal drugs	LGF	2
		Explain mechanism of action,	1	
		pharmacokinetics and adverse		
		effects of organic nitrates and		
		calcium channel blockers		
		Explain the rationale for use of $oldsymbol{eta}$ -		
		adrenergic blockers and sodium		
		channel blocker in the		
		management of angina pectoris		
	Lipid	Briefly describe the types of	LGF	2
	lowering	dyslipidemias		
	drugs	List the lipid lowering drug classes		
		Explain the mechanism of action,		
		effect on serum lipid profile and		
		adverse effects of each of the five		
		drug classes		
		Discuss drug-drug interaction of lipid		
		lowering drugs		
	Anticoagulan	Classify anticoagulant drugs	LGF	2
	t drugs	Discuss mechanism of action, uses of		
		Unfractionated heparin		
		Compare low molecular weight and		
		unfractionated heparin		
		Describe adverse effects of		
		heparin and treatment of heparin		
		overdose		
		Describe mechanism of action	1	
		and uses of direct Xa and IIa		
		inhibitors		
		Describe mechanism of action and	1	
		uses of warfarin		

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		Describe adverse effects of warfarin		
		and treatment of warfarin overdose		
		Compare heparin and warfarin in		
		terms of mechanism and onset of		
		action		
		Explain monitoring of anticoagulant		
		therapy		
		Describe important diet and drug		
		interactions of warfarin		
	Antiplatelet	Classify antiplatelet drugs	LGF	1
	and			
	thrombolytic	List indications of antiplatelet		
	drugs	therapy		
		Explain the mechanism of action		
		and adverse effects of each		
		antiplatelet drug group		
		Name thrombolytic drugs		
		and explain their mechanism		
		of action, uses and adverse		
		effects		
Forensic Medicine	Chest trauma	Describe heart injuries caused by	LGF	1
		regional injuries		
		Discuss chest wall injuries in general		
		Enumerate the complications of rib		
		fracture		
	Sudden death	Define sudden death	LGF	1
		Explain the causes of sudden death		
		Describe autopsy findings in sudden		
		death		
		Describe the medicolegal importance		
		of sudden death		
Communit	Non-	Define Cardiovascular disease (CVD)	LGF	1
У	communicabl			
Medicine	e diseases:			
	Cardiovascular	Elaborate the concept of CVD risk		
	diseases of public	stratification		
	health	Describe the epidemiology of		
	importance	cardiovascular diseases and		
		explain cardiovascular diseases of		
		Public Healthimportance		
		globally and in Pakistan		
		Explain the known risk factors of CVD		
		and cultural, racial and		
		gender difference in CVD prevalence		
1		P		

		and incidence		
	Hypertension	Describe the epidemiology of	LGF	1
		hypertension and its public Health		
		importance globally and in Pakistan		
General	Coronary	Discuss CAD risk factors and	LGF	1
Medicine/Cardiolog	Heart disease	strategies to reduce them	-	
У		Discuss strategies for primary and		
		secondary prevention of CHD		
		in outpatient setting	-	
		Define chronic stable angina, its	-	
		clinical signs and symptoms,		
		laboratory findings, imaging		
		techniques for assessment of itand		
		management protocols	-	
		Discuss coronary vasospasm and		
		angina with normal coronary		
	Acute	angiograms Define Acute coronary syndrome	LGF	1
	coronary		LGI	T
	syndrome	Explain the spectrum of illness in ACS	-	
		and relevant management		
		steps		
		Describe the clinical features and	-	
		steps of the management of		
		Myocardial infarction		
		Describe risk stratification in		
		myocardial infarction		
		Describe complications of acute MI		
	Hypertrophic	Discuss clinical features, imaging		
	cardiomyopath	protocols, risk stratification and		
	У	short/long-term		
		management of		
PRIME/MEDIC	Informed consent	Cardiomyopathy Obtaining informed consent from a	LGF	2
AL EDUCATION	intormed consent	patient before an invasive procedure		2
	Theme	II: Blood pressure		
Pathology	Blood pressure	Describe the mechanisms of blood	LGF	1
		pressure regulation Classify shock		
	Hypertension	Describe the causes,		
		Pathogenesis, morphology		

	and complications		
	ofHypertension		
Shock	Describe the pathophysiology and	LGF	1
	types of shock		
	Describe the stages pf shock		
	Define sepsis and septic shock		
	Discuss causes, pathogenesis, and		
	laboratory findings in shock		
	Discuss Disseminated intravascular		
	coagulation in the context of		
	Sepsis		
	Describe classification and		
	pathophysiology of Hemorrhage		
Aneurisms	Discuss pathophysiology of	LGF	1
	hypertension in pregnancy		
	Describe the etiology,		
	morphology and		
	vascular aneurisms		
	Describe the causes, Pathogenesis		
	and types of Aortic Aneurysm		
Aortic dissection	Describe the pathogenesis,		
	morphology and clinical features of		
	Aortic Dissection		
Vasculitis	Define vasculitis		
	Classify vascilitides		
	Describe the immunological		
	mechanisms		
	of non-infectious		
	vasculitis		
	Describe the morphology and clinical		
	features of Giant cell		
	arteritis	LGF	1
	Describe the morphology and clinical	LOI	Т
	features of Takayasu		
	arteritis		
	Describe the morphology and clinical		
	features of Polyarteritis		
	nodosa		
	Describe the morphology and clinical		
	features of Kawasaki		
	disease		

	1		1	1
		Describe the morphology, serological		
		markers and clinical		
		features of Wegener granulomatosis		
		Describe the morphology and clinical		
		features of Thromboangitis		
		obliterans		
	Diseases of veins	Differentiate between		
		thrombophlebitis and		
		Phlebothrombosis		
		Describe the etiology and clinical		
		features of varicose veins		
		Enlist the benign and malignant		
		tumors of the arteries and veins		
Pharmacology	Antihypertensiv e drugs	Classify antihypertensive drugs	LGF	5
		Discuss role of diuretics in the		
		management of hypertension		
		Discuss the role of ACE inhibitors,		
		Angiotensin receptor-blocking		
		agents, Renin inhibitor in		
		hypertension		
		Explain the rationale for the use of		
		$\beta$ -blockers, $\alpha$ -adrenoceptor blocking		
		Hypertension		
		Describe the direct vasodilators		
		(mechanism of action anddrug		
		toxicity) in relation to		
		antihypertensive drug therapy		
		Describe the role of Calcium channel		
		blockers in hypertension		
General Medicine/Cardiolog	Hypertension	Define and classify hypertension	LGF	1
у		Discuss drug treatment protocols for		
•		hypertension		
		Describe the risk factors and		
		complications of hypertension		
		Describe the management of		
		hypertensive emergencies and		
		Urgencies		
Forensic medicine	Cardiac poisons	Classify Cardiac Poisons	LGF	2
	-	Describe the characteristic, clinical		
		signs/symptoms, treatment		
		-		

methylphenidate, cocaine and Ice Describe the characteristic, clinical signs/symptoms, treatment and medico legal aspects of OleanderLGF2PRIME/MEDIC A LEDUCATIONCounselling skills Develops counselling skills in professional lifeLGF1PhysiologyCardiac cycle Oliscuss physiology of heart sounds and mrmursLGF1PathologyCongestive heart failure CardiomyopathiesDescribe the types, etiology, pathogenesis, and clinical features of congestive heart failureLGF1PathologyCongenital heart diseaseDescribe the types, etiology, pathogenesis, and clinical features of causes, morphological changes and clinical features of CardiomyopathiesLGF1Valvular heart diseases heart and clinical features of Acric diseasesLGF1Valvular heart diseasesDescribe the Etiology, Pathogenesis and clinical features of Acric stenosis and Mitral RegurgitationLGF1Reumatic fever vacuar trisesDiscuss pathophysiology and aboratory findings in rheumatic feverLGF1Rehumatic heart diseaseDiscuss pathophysiology and and clinical features of Acric stenosis and Mitral RegurgitationLGF1Thrombosis and EmbolismDiscuss pathophysiology and aboratory findings in rheumatic feverLGF1Thrombosis pathogenetic mechanisms of vascular thrombosis pathogenetic mechanisms of vascular thrombosis pathogenetic mechanisms of vascular thrombosis pathogenetic mechanisms of vascular thrombosis pathogenetic mechanisms of vascular thrombosis<					
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stenosis and Mitral       Regurgitation         Rheumatic fever       Discuss pathophysiology and laboratory findings in rheumatic         Fever       Prever         Rheumatic       Discuss pathological changes and morphology of rheumatic heart disease         Thrombosis       Describe the mechanism and pathogenetic mechanisms of vascular thrombosis         Enlist hypercoagulable states       Define embolism			stenosis, Aortic regurgitation, Mitral		
Rheumatic feverDiscuss pathophysiology and laboratory findings in rheumatic FeverLGF1Rheumatic heart diseaseDiscuss pathological changes and morphology of rheumatic heart diseaseLGF1Thrombosis and EmbolismDescribe the mechanism and pathogenetic mechanisms of vascular thrombosis Enlist hypercoagulable states Define embolismLGF1			stenosis and Mitral		
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Iaboratory findings in rheumatic         Fever         Rheumatic       Discuss pathological changes and         heart disease       morphology of rheumatic heart         disease       Thrombosis         Describe the mechanism and       LGF       1         and Embolism       pathogenetic mechanisms of         vascular thrombosis       Enlist hypercoagulable states         Define embolism       Define embolism		Rheumatic fever		LGF	1
Fever       Rheumatic       Discuss pathological changes and         heart disease       morphology of rheumatic heart       disease         Thrombosis       Describe the mechanism and       LGF       1         and Embolism       pathogenetic mechanisms of       vascular thrombosis       Enlist hypercoagulable states       Define embolism					
Rheumatic heart diseaseDiscuss pathological changes and morphology of rheumatic heart diseaseImage: Comparison of the comparison					
heart disease       morphology of rheumatic heart         disease       Thrombosis         Describe the mechanism and       LGF       1         and Embolism       pathogenetic mechanisms of         vascular thrombosis       Enlist hypercoagulable states         Define embolism       Define embolism		Rheumatic			
disease       Image: Constraint of the mechanism and the mechanisms of the mechanisms of the mechanisms of the mechanisms of the mechanism and the mecha		heart disease			
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vascular thrombosis Enlist hypercoagulable states Define embolism		and Embolism	pathogenetic mechanisms of		
Enlist hypercoagulable states Define embolism			-		
Define embolism					
			Discuss types of embolism		

Pharmacology       Drugs used       Define the different classes of the treatment of failure       LGF         Pharmacology       Drugs used       Define the different classes of the treatment of failure       LGF         Pharmacology       Drugs used       Define the different classes of the treatment of failure       LGF	1
Features of pulmonary embolism         Endocarditis       Discuss Etiology, Pathogenesis, Morphology, diagnosticcriteria, clinical features and complications of infective endocarditis       LGF         Pharmacology       Drugs used in heart failure       Define the different classes of the drug used in the treatment of heart failure       LGF         Endocarditis       Discuss the types of non-infected vegetation       Discuss the types of non-infected vegetation       LGF	1
EndocarditisDiscuss Etiology, Pathogenesis, Morphology, diagnosticcriteria, clinical features and complications of infective endocarditisLGFPharmacologyDrugs used in heart failureDefine the different classes of the drug used in the treatment of heart failureLGF	1
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Pharmacology       Drugs used       clinical features and complications of infective endocarditis         Discuss the types of non-infected vegetation       Discuss the types of non-infected vegetation         Pharmacology       Drugs used       Define the different classes of the drug used in the treatment of heart failure         Explain the pharmacological effects, clinical uses, adverse       Explain the pharmacological	
Pharmacology       Drugs used       Define the different classes of the drug used in the treatment of heart failure       LGF         Explain the pharmacological effects, clinical uses, adverse       Explain the pharmacological effects, clinical uses, adverse       LGF	
Pharmacology       Drugs used       Define the different classes of the drug used in the treatment of heart failure       LGF         Explain the pharmacological effects, clinical uses, adverse       Explain the pharmacological uses, adverse       Explain the pharmacological uses, adverse	
Pharmacology       Drugs used in heart failure       Define the different classes of the drug used in the treatment of heart failure       LGF         Explain the pharmacological effects, clinical uses, adverse       Explain the pharmacological effects, clinical uses, adverse       Explain the pharmacological effects, clinical uses, adverse	
Pharmacology       Drugs used in heart failure       Define the different classes of the drug used in the treatment of heart failure       LGF         Explain the pharmacological effects, clinical uses, adverse       Explain the pharmacological	
in heart failure Explain the pharmacological effects, clinical uses, adverse	
failureheart failureExplain the pharmacologicaleffects, clinical uses, adverse	2
Explain the pharmacological effects, clinical uses, adverse	
effects, clinical uses, adverse	
effects and drug interactions	
of digitalis glycosides	
Explain the signs symptoms and	
treatment of digoxin overdose	
Enlist positive inotropic drugs	
(other than digoxin) that are	
used in heart failure	
Classify the five major groups of	
diuretic drugs and relate them to	
their site of action	
Discuss the mechanism of	
action, clinical applications	
and adverse effects of	
carbonic anhydrase enzyme	
inhibitors, osmotic diuretics,	
thiazide diuretics, loop	
diuretics and potassium	
sparing diuretics	
Enlist potassium sparing and	
potassium losing diuretics	
Antiarrhythmi Classify antiarrhythmic drugs LGF	2
c drugs Describe the effect of different	
classes of antiarrhythmic drugs on	
membrane potential of	
cardiomyocytes	
Explain the mechanism	
of action of all the	
classes of	
antiarrhythmic drugs	
Discuss the adverse effects and	

		clinical uses of antiarrhythmic drugs		
		Discuss workup and management of pulmonary edema		
General Medicine/Cardiolog Y	Heart failure	Enlist and explain causes of heart failure Describe workup and management	LGF	1
	Disorders of	of heart failure Classify arrhythmias and heart blocks	LGF	1
	heart rate and rhythm	Describe the etiology, ECG findings and management of Atrial fibrillation Discuss types, workup and management of ventricular arrhythmias		
	Pulmonar y embolis m	Describe the etiology, clinical features and diagnostic workup of pulmonary embolism Discuss risk stratification and management of pulmonary embolism	LGF	1
	Pulmonary hypertensio n Myocarditis	Discuss cardiac causes of pulmonary hypertension and outline their management Discuss causes and management of		
	Pericardi al diseases	myocarditis Define and classify pericarditis Discuss clinical findings and treatment of pericarditis Describe the etiology and		
Pediatrics	Cyanotic and acyanotic congenital	the acyanotic and cyanotic heart disease conditions	LGF	1
	heart disease	Enumerate the various defects, involving both conditions		
	Rheumatic fever	Describe the etiology of rheumatic fever Describe Duckett Johns criteria for diagnosis of RF Discuss about primary and secondary prophylaxis of rheumatic heart disease	LGF	1

PRIME/MEDIC	SWOT Analysis	Perform SWOT analysis for a	LGF	1	
AL EDUCATION		particular task			

	Practical/ Small Group Discussions								
Subjects	Topics	Hours	Los						
Pharmacology	Myocardial Infarction	02	Construct a prescription for a patient with Myocardial Infarction						
	Hypertension	02	Construct a prescription for a patient with Hypertension						
	Congestive Cardiac Failure	02	Construct a prescription for a patient with Congestive Cardiac Failure						
Pathology	Lipid Profile	02	Demonstrate Estimation of total cholesterol						
	Hemangioma	02	Identify the morphological changes occurring in hemangioma						
Forensic medicine	Cardiac toxins	02	Identify the following cardiogenic toxins: <ul> <li>Digitalis</li> <li>Cannabis</li> <li>Heroin</li> </ul>						

MIT:mode of information transfer. E.g. lecture, SGD, DSL, Practical, skill lab etc

<mark>S. No</mark>	Subject	Hours needed
1.	Anatomy	01
2.	Physiology	01
3.	Biochemistry	01
4.	Pathology	13
5.	Pharmacology	16
6.	Forensic medicine	04
7.	Community medicine	02
8.	General medicine / cardiology	06
9.	Pediatrics	02

10.	PRIME/MEDICAL EDUCATION	05
	Total	
	Practicals	
	Pharmacology	06
	Forensic Medicine	02
	Pathology	04



### 6 Examination and Methods of Assessment:

The year-3 will be assessed in 3 blocks.

- Block-1 (Foundation 2 and Infection and Inflammation modules) will be assessed in paper-G.
- 2) Block-2 (Multisystem, blood and MSK modules) will be assessed in paper-H.
- 3) Block-3 (CVS and Respiratory module) will be assessed in paper-I.
- 4) Each written paper consists of 120 MCQs.
- 5) Internal assessment will be added to final marks in KMU.
- 6) In OSPE, each station will be allotted 6 marks, and a total of 120 (+10% marks of internal assessment) marks are allocated for each OSPE/OSCE examination.
- 7) Practical assessment will be in the form of OSPE/OSCE which will also include embedded viva stations. The details of each section are given in the tables given below.

	Assessment Plan of 3 <sup>rd</sup> Year MBBS							
Theory paper	Modules	Theory marks	Internal assessment theory (10%)	OSPE/OSP E	Internal assessment OSPE/OSP E(10%)	Total Mark s		
Paper G	Foundation-II Inf.&Inflamm.I	120	14	120	14	268		
Paper H	Multisystem I Blood II MSK-II	120	13	120	14	267		
Paper I	CVS-II Respiratory-II	120	13	120	12	265		
Tot	tal Marks	360	40	360	40	800		

# Table-1: Total Marks Distribution 3<sup>rd</sup> Year MBBS

# Paper-I (CVS and Respiratory Module)

## MCQs

Subject	CVS	Respiratory module	Total MCQs
Pharmacology	12	5	17
Pathology	20	22	42
Forensic	4	9	13
medicine			
Community	2	6	8
medicine			
ENT	0	6	6
PRIME	2	1	3
Research	1	1	2
Medicine	13	2	15
Pediatrics	3	5	8
Anatomy	1	1	2
Physiology	1	1	2
Biochemistry	1	1	2
Total	60	60	120

## Table-6: OSPE

Subject	OSPE/OSC E	Viva stations	Total*
Pharmacology	5	2	7
Pathology	2	2	4
Forensic medicine	3	2	5
Community medicine	0	2	2
Medicine (history and physical examination)	1	0	1
Pediatrics (history and physical examination)	1	0	1
Total	12	8	20

\* A minimum of 20 stations will be used in final exams. Total marks will be 120 (6marks for each station).



### Learning Opportunities and Resources

### 7.1 Books:

1.ANATOMY:

- K.L. Moore, Clinically Oriented Anatomy
- Snell's regional anatomy.

7

• R J Last.

2.PHYSIOLOGY:

- Guyton.
- Hall ganong.
- 3. Biochemistry: text books of :
  - Harper.
  - Lipponcott.
  - Chatterjee.
- 4. Pharmacology.
  - Goodman and Gillman's, 13<sup>th</sup> edition.
  - Katzung pharmacology.14<sup>th</sup> edition.
  - Kripathi 8<sup>th</sup> edition.
  - Lipponcott. 6<sup>th</sup> edition.
- 5. Forensic medicine and toxicology.
- 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.
- 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).
- 6. Pathology.
  - Robbins Basic Pathology
- 7. Community medicine.
  - Community Medicine by Parikh
  - Community Medicine by M Illyas
  - Basic Statistics for the Health Sciences by Jan W Kuzma
  - Park K. Park's textbook for preventive and social medicine. 23<sup>rd</sup> ed. Bhanot publishers: Jabalpur;2015
- 8. Medicine.
  - Davidson's Principles and practice of medicine.
  - Kumar and Clarks, clinical medicine.
- 9. Ent.
  - Logan Turner's Diseases of Nose, Throat and ear. 10<sup>th</sup> edition.
  - Diseases of ear, nose and throat and head and neck surgery, 7<sup>th</sup> edition by Dhingra.
  - Oxford handbook of ENT and Head and Neck surgery 3<sup>RD</sup> Edition.
- 10. Pediatrics
  - Nelson's Textbook of pediatrics.
- 7.2 Website:

Community medicine.

Link for free download PDF: https://medicalstudyzone.com/download-parks-textbook-of-preventive-and-social-medicine-25th-edition-pdf-

free/#Download\_Park8217s\_Textbook\_of\_Preventive\_and\_Social\_Medicine\_PDF\_free
1. Ansari I. Textbook of Community Medicine

- WHO link for COVID 19: <u>https://www.who.int/emergencies/diseases/novel-coronavirus-</u> 2019?adgroupsurvey={adgroupsurvey}&gclid=Cj0KCQiA5OuNBhCRARIsACgaiqWRf0GVqPOJh 4TfnsKjoLx9pTR0ThMqVVQl1eFaZWA2vxooqACgdMwaAtcmEALw\_wcB
- 3. McIntosh K. <u>https://www.uptodate.com/contents/covid-19-epidemiology-virology-and-prevention</u>

FORENSIC MEDICINE.

• <u>https://worldofmedicalsaviours.com/textbook-of-forensic-medicine-and-toxicology-by-nagesh-kumar-rao-pdf-free-download/</u>

### 8 Timetables

### AYUB MEDICAL COLLEGE, ABBOTTABAD

Department of Medical Education

Class Session 2024

### CVS II, Week 01: Theme 01 (Chest Pain)

Days/	0.0.00	0. 40.004		11 AM – 12	42 42 45 514			PRACT	TICAL								
Date	8 – 9 AM	9 – 10 AM	10 – 11 AM	PM	12 – 12.45 PM		1:15 –	2 PM	2 – 3 PM								
Mon	Gross Anatomy of heart, valves & coronary arteries Anatomy L1 (LH-3) Dr. Gul-e- Shahwar	Events in cardiac cycle & physiology of heart sounds & murmurs Physiology L- 1 Dr. Muhammad Orakzai	HOSPITAL/CLINICAL TEACHING		-		rcle ogy HOSPITAL/CLINICAL (LH-3) Dr. Asma rs v L- Asma ris i		HOSPITAL/CLINICAL TEACHING Cholesterol Biochemistry L1 (LH-3) Dr. Asma Rafique B: Ford C: Pha D: Con		-		cle pgy HOSPITAL/CLINICAL TEACHING Y L- ad		A: Path B: Forer C: Pharr D: Com	nsic Mea macolog	
Tue	Chest trauma Forensic Medicine L1 (LH-3) Dr. Salma shazia	Atherosclero sis <b>Pathology L1</b> (LH-3) Dr. Shabana	HOSPITAL/CLINICAL TEACHING		Antianginal drugs Pharmacology L1 (LH-3) Dr. Wajid Ali	PRAYER BREAK	B. Patho C: Forer	A: Community Medicine B. Pathology C: Forensic Medicine D: Pharmacology									
Wed	Antianginal drugs Pharmacol ogy L2 (LH-3) Dr. Wajid Ali	Anticoagulant drugs <b>Pharmacolo</b> gy L3 (LH-3) Prof. Sumbal Tariq	HOSPITAL/CLINICAL TEACHING		Anticoagulants drugs <b>Pharmacology</b> L4 (LH-3) Prof. Sumbal Tariq		Commu on counse skil <b>PRIM</b> (Surger (LH- Dr. Fii	/ elling ls <b>ME</b> r <b>y) L1,</b> -3)	SDL								
Thurs	A. Pharmad	nity Medicine	HOSPITAL/CLINICAL TEACHING		Antiplatelet & Thrombolytic drugs <b>Pharmacology</b> L5 (LH-3) Prof. Sumbal Tariq		Inforr Cons <b>PRIN</b> (Surger (LH- Dr. Yo	ned ent <b>VIE</b> ( <b>y) L2,</b> (3)	Lipid lowering drugs <b>Pharmacol</b> ogy L6, (LH-3) Dr. Faheem								
Fri	A. Forensic B. Pharmad	nity Medicine	Lipid Coronary lowering Heart drugs Disease Pharmacol Medicine L1 ogy L7 (LH-3) (LH-3) Dr. Fakhar Dr. Faheem		Acute Coronary syndrome <b>Medicine L2</b> (LH-3) Dr. Salim Awan	J	2:45 – 1 1:30 umma Prayer		:30 – 3:00 SDL								

#### Practical Detail:

Pharmacology:Construct a prescription for a patient with myocardial infarction

Pathology: Lipid profile

Forensic Medicine:Identify the following cardiogenic toxins : digitalis, oleander, cannabis, heroin Community Medicine:copy checking, practice session, research

Module Coordinator

### AYUB MEDICAL COLLEGE, ABBOTTABAD

Department of Medical Education

Class Session 2024 CVS II, Week 02: Theme 02 (Blood Pressure)

Days			10 – 11			12:45	PRA	TICAL								
/ Date	8 – 9 AM	9 – 10 AM	AM	11 AM – 12 PM	12 – 12.45 PM	-1:15	1:15 – 2 PM	2 – 3 PM								
Mon	Cardiovascular diseases of public health importance <b>Community</b> <b>Medicine L1</b> (LH-3) Dr. Awais	Sudden death Forensic Medicine L2 (LH-3) Dr. Omair	HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICAL TEACHING		Ischemia & infarction <b>PathologyL2,</b> (LH-3) Dr. Fozia		A: Patho B: Forer Medicin C: Pharr D: Comr Medicin	sic e nacology nunity
Tue	Blood pressure & hypertension <b>Pathology L3</b> (LH-3) Dr. Shabana	Antihypertensiv e drugs Pharmacology L8 (LH-3) Dr. Adeel Alam	HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICAL TEACHING		shock <b>Pathology L4,</b> (LH-3) Dr. Fozia	teak	A: Comr Medicin B. Patho C: Foren Medicin D: Pharr	e logy sic						
Wed	Hypertension + Hypertropic cardiomyopath y Medicine L3 (LH-3) Dr. Fakhar	Cardiac Poisons Forensic Medicine L3 (LH-3) Dr. Sadia Habiba	HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICAL TEACHING		Antihypertensiv e drugs <b>Pharmacology</b> L9 (LH-3) Dr. Adeel Alam	PRAYER BREAK	BLO	H- DCK AM						
Thur s	A. Pharmacolog B. Community F C. Pathology Forensic Medicine	Medicine	HOSPITAL/CLINICAL TEACHING		Aneurysms & aortic dissection Pathology L5 (LH-3) Dr. Fozia		Positive attitude process <b>PRIME</b> (Surgen ) L3 (LH-3) Dr. Faza e Junaic	SDL								
Fri	A. Forensic Med B. Pharmacolog	Pharmacology Community Medicine		Vasculitis, disease of veinsAntihypertens ive drugsPharmacolog y L10PathologyL6 (LH-3)Dr. ShabanaAntihypertens ive drugsDr. Shabana		12:45 – JUMN PRAY	MA	30 – 3:00 SDL								

#### Practical Detail:

Pharmacy: :Construct a prescription for a patient with angina pectories

Pathology: Malaria

Forensic Medicine: Thanatology) + Injuries Community Medicine: BHU + EPI center

Module Coordinator

### AYUB MEDICAL COLLEGE, ABBOTTABAD Department of Medical Education

### Class Session 2024 CVS II, Week 03: Theme 03 (Shortness of Breath)

Days				11:00 -		12:45		PRACTIC	AL		
/ Date	8 – 9 AM	9:00 – 10:00	10:00 - 11:00	12:00	12:00 – 12:45	-1:15	1:15 -	- 2:00	2:00 – 3:00		
Mon	GANTT Chart Communit y Medicine L4 PRIME (LH- 3) Dr. Rizwana	SWOT Analysis PRIME (C.Med)-L5 (LH-3) Dr. Sobia	HOSPITAL/CLINICAL TEACHING		•		Congestive heart failure Pathology L7 (LH-3) Dr. Fozia		C: Phar	msic Me macolog munity	
Tue	Cyanotic &acyanotic congenital heart disease Peads-L1 (LH-3) Dr. Saima Bibi	Cardiomyopathie s Pathology L8 (LH-3) Dr. Fozia	HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICALheart failureMHOSPITAL/CLINICALPharmacologBTEACHINGy L-11C		Medici B. Path C: Fore				
Wed	Congental heart disease Pathology L-9 (LH-3) Dr. Shabana	Valvular heart disease PathologyL-10 (LH-3) Dr. Shabana	HOSPITAL/CLINICAL TEACHING		Drugs for heart failure Pharmacolog y L12 (LH-3) Prof. Sumbal Tariq		Heart F Medici (LH-3) Dr. Nig Jamal	ne L4	SDL		
Thurs	Pharmacolog Community Pathology Forensic Me	Medicine	HOSPITAL/CLINICAL TEACHING		Diuretics Pharmacolog y L-13 (LH-3) Dr. azfar kamal	PRAYER BREAK	Diureti Pharma y L-14 (LH-3) Dr. azfa kamal	acolog	SDL		
Fri	PRACTICAL Forensic Me Pharmacolog Community Pathology	gy	AntiarrhythmiRheumatic drugsc FeverPharmacologyPeads-L2L15(LH-3)(LH-3)Dr.TousifDr. Saad MuftiAhmed		SDL	12:45 - Jumma Prayer		1:30 – SDL	3:00		

Practical Detail:

Pharmacology: Construct a prescription for a patient with hyper tension (pharmacy lab)

Pathology: Hemangioma. Forensic Medicine:Practice session/copy checking/presentations.

Community Medicine:Practice session/copy checking/ research

Module Coordinator

### AYUB MEDICAL COLLEGE, ABBOTTABAD

Department of Medical Education

Class Session 2024

### CVS II, Week 04: Theme 03 (Shortness of Breath) + Respiratory II, Week 01: Theme 01 (Cough with sputum,

and fever)

Days/ Date	8:00 - 9:00	9:00 - 10:00	10:00 - 11:00	11:00 - 12:00	12:00 - 12:45	12:45- 1:15	1:15 -	TICAL 2:00 – 3:00	-								
Mon	Rheumatic fever & Rheumatic heart disease Pathology L-11 (LH-3) Dr. Fozia	Disorders of heart rate and rhythm Medicine L5 (LH-3) Dr. Saleem Awan	HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICAL TEACHING		HOSPITAL/CLINICAL TEACHING		Antiarrhythmic drugs Pharmacology L16 (LH-3) Dr. Saad Mufti		2:00 A: Path B: Fore Medicin C: Pharma D: Commu Medicin	nsic ne acology unity	
Tue	Anatomy of Respiratory System Anatomy L1 (LH-3) Dr. Obaid Kazmi	Mechanism of Ventilation Physiology L1 (LH-3) Dr. Izhar	HOSPITAL/CLINICAL TEACHING		Hypo/Hyperventilation Biochemistry L1 (LH-3) Dr. Maria	PRAYER BREAK	A: Comi Medicin B. Patho C: Forer Medicin D: Pharma	ne plogy nsic ne									
Wed	Thrombosis and embolism Pathology-L12 (LH-3) Dr. Shabana	Asphyxia Forensic Med L1 (LH-3) Dr. Salma Shazia	HOSPITAL/CLINICAL TEACHING		Endocarditis Pathology-L13 (LH-3) Dr. Fozia		SI	DL	SI								
Thurs	A. Pharmacology B. Community Medic C. Pathology Forensic Medicine	ine	HOSPITAL/CLIN	ICAL TEACHING	Hypertension Community Med: L-2 Dr. Awais (LH-3)		SI	DL									
	PRACTICA E. Forensic Medicir		Social Pulmonary					12:45- 1:30	1:3	0-3:00							
Fri	F. Pharmacology G. Community Med Pathology		determinantsembolism &of heathhypertension,CommunityMyocarditisMed& PericarditisFamilyMedicine L6Medicine L-1(LH-3)		SDL	Jumma Prayer		SDL									
			Dr. Ashfaq (LH-3)	Dr. Adnan													

Practical Detail:

Pharmacology:Construct a prescription for a patient suffering from CCF (Pharmacy Lab.)

Pathology: Cardiac enzymes.

Forensic Medicine:Copy checking.

Community Medicine:mask wearing.

### 9 For inquiry and troubleshooting



Please contact *To be added* 

10 Course Fe	edback Form						
CourseTitle:							
Semester/Module Dates:							
Please fill the short questionnaire to make the	ne course better.						
Please respond below with 1, 2, 3, 4 or 5, wh	here 1 and 5 are explained.						
THE DESIGN OF THEMODLUE							
A. Were objectives of the course clearto you?	Y N						
$B. \  \   \  \   \  \   \  \   \  \   \  \ $							
l.Stronglydisagree	5. Stronglyagree						
C. The lecture sequence was well-planned							
l.Stronglydisagree	5. Stronglyagree						
D. The contents were illustrated with							
l. Toofewexamples	5. Adequateexamples						
E. The level of the coursewas <b>l.Toolow</b>	5. Toohigh						
F. The course contents compared with yourexpectat	•						
l.Tootheoretical	5. Tooempirical						
G. The course exposed you to new knowledge and pro-							
l.Stronglydisagree	5. Stronglyagree						
H. Will you recommend this course to yourcolleagues	s?						
l. Notatall	5. Verystrongly						
THE CONDUCT OF THEMODLUE							
${\rm A.}~$ The lectures were clear and easy tounderstand							
l.Stronglydisagree	5. Stronglyagree						
B. The teaching aids were effectively used							
l.Stronglydisagree	5. Stronglyagree						
C. The course material handed out wasadequate							
l.Stronglydisagree	5. Stronglyagree						
D. The instructors encouraged interaction and wereh							
l.Stronglydisagree	5. Stronglyagree						
<ul><li>E. Were objectives of the courserealized? Y</li><li>N</li><li>F. Please give overall rating of thecourse</li></ul>							
90% - l00% ( )	60% - 70% ( )						
80% - 90% ( )	50% - 60% ( )						
70% - 80% ()	below50% ( )						
Please comment on the strengths of the cour	se and the way it was conducted.						

Please comment on the weaknesses of the course and the way it was conducted.

Please give suggestions for the improvement of the course.

Optional - Your name and contact address:

Thank you!!