





THE GASTROINTESTINAL
TRACT (GIT)

MODULE GUIDE – 2024-25

FIRST PROFESSIONAL M.B.B.S

BAQAI MEDICAL COLLEGE

BAQAI MEDICAL UNIVERSITY

51-Deh Tor, Gadap Road, Super Highway. P.O Box: 2407, Karachi-75340, Pakistan. Phone (092-21)34410-293 to 298, 34410-427 to 430. Fax: (092-21)34410-317, 34410-43. Email: info@baqai.edu.pk, Web: www.baqai.edu.pk/





LIST OF ABBREVIATIONS

BMC Baqai Medical College

BMU Baqai Medical University

CBL Case Based Learning

LGIF Large Group Interactive Format

LOs Learning Objectives

MCQs Multiple Choice Questions

MSK Musculoskeletal

OSCE Objective Structured Clinical Examination

OSPE Objective Structured Practical Examination

PEaRLS Professionalism, Ethics, Research, Leadership, Communication Skills

PW Practical Work

SDL Self Directed Learning

SGD / SGT Small Group Discussion / Small Group Teaching





TS Teaching Strategy

BAQAI MEDICAL UNIVERSITY VISION STATEMENT

To evolve as a nucleus for higher learning with a resolution to be socially accountable, focused on producing accomplished health care professionals for services in all spheres of life at the national and global level.

BAQAI MEDICAL UNIVERSITY MISSION STATEMENT

University is dedicated to the growth of competencies in its potential graduates through dissemination of knowledge for patient care, innovation in scholarship, origination of leadership skills, and use of technological advancements and providing.





BAQAI MEDICAL COLLEGE

MISSION STATEMENT

To produce medical graduates, who are accompushed and responsible individuals and have skills for problem solving, clinical judgment, research & leadership for medical practice at the international level and are also aware of the health problems of the less privileged rural and urban population of Pakistan.





GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

Write and report focused history, perform physical examination, formulate a diagnosis and management plan for common health problems.

Acquire professional behaviours that embodies lifelong learning, altruism, empathy and cultural sensitivity in provision health care service.

OUTCOMES OF THE M.B.B.S PROGRAM

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

Lead other team members as per situational needs for quality health service. review literature, conduct research and disseminate knowledge.

Identify problems, critically

Apply evidence-based practices for protecting, maintaining and promoting the health of individuals, families and community.

Utilize knowledge of basic and clinical sciences for patient care.





CURRICULUM COMMITTEE

Chairman Curriculum Committee

1. Prof. Dr Farrukh Naheed, Head, Department. of Obstetrics and Gynaecology

Co-Chairman Curriculum Committee

2. Dr Maeesa Sajeel, Associate Professor, Department of Pathology

Secretary of the Curriculum Committee

3. Dr Saadia Akram, Assistant Professor, Department of Gynaecology and Obstetrics

MBBS SPIRAL 1 HEAD:

PROF DR INAYAT ALI





1 ST YEAR MBBS (Coordinator)

DR TAYYABA KAZMI

TIMETABLE AND STUDY GUIDE TEAM

SUBJECT	TEAM MEMBERS
BIOCHEMISTRY	DR IFFAT Coordinator
ANATOMY	DR ANEELA
PHSIOLOGY	DR ALI
BICHEMISTRY	DR FARHAN
PHARMACOLOGY	DR HINA
PATHOLOGY	DR ROZEENA
FORENSIC MEDICINE	DR RAFEY
COMMUNITY MEDICINE	DR AMMARA
MEDICINE	DR MASOODA FATIMA/ DR SAIMA ASKARI
SURGERY	DR DANISH/ DR ABDULLAH
GYNAE/ OBS	DR NIKI-IAT ASHRAF





0110111	
RESEARCH	DR MARIA
PEARLS	DR MARIUM IBRAHIM
BEHAVIOR SCIENCES	DR AZRA SHAHEEN
ORTHOPEADICS	DR DANISH/ DR ABDULLAH
RADIOLOGY	DR MEHWISH

INTRODUCTION TO GASTROINTESTINAL TRACT MODULE GUIDE:

The gastrointestinal tract (GIT) is a part of the digestive system. The organs include mouth, pharynx (throat), esophagus, stomach, small intestine, large intestine, rectum and anus. Other organs include pancreas, liver and gall bladder. The food and liquid travel through when they are swallowed, digested, absorbed and leave the body as feces.

In this module, medical students will learn in detail the normal structure function and diseases of GIT





YEAR TO BE TAUGHT:

First Professional M.B.B.S.

PLACEMENT OF GIT MODULE:

Sixth





GIT MODULAR OUTCOMES



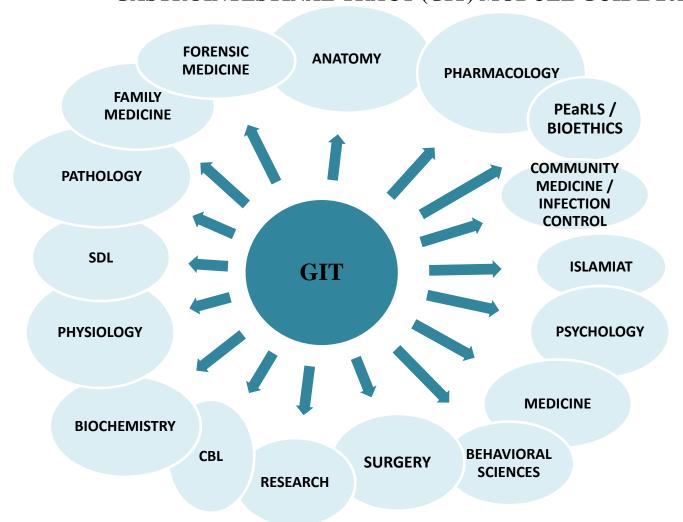


At the end of the GIT module, 1ST year MBBS students will be able to:

- Discuss the Embryology, Histology and Gross Anatomy of GI structures like esophagus, stomach, small intestine, large intestine, liver, gallbladder, and pancreas.
- Describe Physiological Mechanisms of GI motility, digestion, absorption and liver and pancreatic functions.
- Correlate the GIT structures with physiological and biochemical processes.
- Acquire a wider and more generally applicable knowledge of metabolism, infectious disease and pathology related to GI System.
- Understand the etiology, pathogenesis, clinical manifestations, complications and management of gastrointestinal disorders
- Identify common gastrointestinal diseases and disorders, such as gastroesophageal reflux disease (GERD), peptic ulcer disease, inflammatory bowel disease (IBD), and liver cirrhosis.











-

TOPIC AND OBJECTIVES	TEACHING STRATEGY	DURATION	LOCATION	FACILITATOR
 ANTEROLATERAL ABDOMINAL WALL By the end of lecture, student will be able to Describe the extent of anterolateral abdominal wall. Describe the components of anterolateral abdominal wall. Name the muscles, their attachments, actions and innervation of anterolateral abdominal wall. Describe the blood supply and innervation of anterolateral abdominal wall. 	Lecture	60 Mins	Lecture Hall 1	Dr Hina
 POSTERIOR ABDOMINAL WALL By the end of lecture, student will be able to Discuss the muscles involves in posterior abdominal wall. Describe the attachments, nerve supply and actions of muscles of posterior abdominal wall? Describe other structures present in the posterior abdominal wall. Describe formation, termination and tributaries of IVC. 	Lecture	60 mins	Lecture Hall 1	Dr Aneela





FORMATION OF GUT TUBE	Lecture	60 mins	Lecture Hall	Dr Tayyaba
By the end of lecture, student will be able to			1	
 Describe the formation of gut tube. 				
 Discuss the divisions of the gut tube. 				
 Describe the derivatives of endoderm and visceral 				
mesoderm.				
 Describe the molecular regulation of gut tube formation. 				
DEVELOPMENT OF ESOPHAGUS	Lecture	60 mins	Lecture Hall	Dr Tayyaba
By the end of lecture, student will be able to			1	
 Describe the derivatives of foregut? 				
 Describe the formation of esophagus in detail? 				
 Explain esophageal atresia? 				
 Describe tracheoesphageal fistula (TEF)? 				
Discuss congenital hiatal hernia?				
ORAL CAVITY AND ESOPHAGUS	Lecture	60 mins	Lecture Hall	Dr Aneela
By the end of lecture, student will be able to			1	
 Discuss the boundaries of oral cavity. 				
 Describe the oral mucosa and tongue. 				
 Describe the extent of esophagus. 				
Explain the constrictions of esophagus.				





INACI	JII) MODO	JLE GOID	L 2027-23
Practical	120 mins	Histology	Dr Aneela
		Laboratory	
Lecture	60 mins	Lecture Hall	Dr Inayat
		1	
	Practical	Practical 120 mins	Laboratory





GASTROTTESTINAL	1101 (5	11) 111020	DD GCID	2 202 1 20
 Explain mucosa, submucosa, muscularis and serosa/ 				
adventitia of esophagus?				
 Describe the esophageal glands in detail? 				
DEVELOPMENT OF STOMACH	Lecture	60 mins	Lecture Hall	Dr Tayyaba
By the end of lecture, student will be able to			1	
Describe the formation of stomach?				
 Describe the rotation of the stomach in embryo? 				
What is pyloric stenosis?				
STOMACH	Lecture	60 mins	Lecture Hall	Dr Hina
By the end of lecture, student will be able to			1	
What are the parts of stomach?				
Describe the attachments of stomach?				
 Describe the blood supply, innervation and 				
lymphatic drainage of stomach?				
What is pyloric stenosis?				
MOTOR FUNCTIONS OF STOMACH 1	Lecture	60 mins	Lecture Hall	Dr Saba Leeza
By the end of lecture, student will be able to			1	
 List & Define the Physiologic Division of Stomach. 				
 Explain the Arrangement of Smooth Muscles in 				
Stomach.				
 List & Explain the Motor Functions of the Stomach. 				





GASTROINTESTINAL	1101 (0	11) 11100	EEE GCIE	
 Describe Hunger Contractions & the Vomiting. 				
HISTOLOGY OF STOMACH	Lecture	60 mins	Lecture Hall	Dr Inayat
By the end of lecture, student will be able to			1	
 Describe the general histology of stomach? 				
 Explain mucosa, submucosa, muscularis and serosa of stomach? 				
Describe the cells of stomach in detail?				
STOMACH	Practical	120 mins	Histology	Dr Aneela
By the end of Practical, student will be able to			Laboratory	
 Identify and differentiate the slide under microscope 				
 Develop proficiency in using a light microscope to 				
observe tissue samples at various magnifications and				
focus levels.				
 Describe the general histology of stomach. 				
 Explain mucosa, submucosa, muscularis and serosa of 				
stomach.				
Describe the cells of stomach in detail.				
MOTOR FUNCTIONS OF STOMACH 2	Lecture	60 mins	Lecture Hall	Dr Adnan
By the end of lecture, student will be able to			1	





GASTRUINTESTINAL	INACI (G	(1) MODO	LE GUIDI	E 2024-23
 List the Motor Functions of Stomach 				
 Categorize the Factors that Affects Gastric Emptying 				
 List & Describe the Factors that Promotes Gastric 				
Emptying				
 List & Describe the Factors that Inhibit Gastric 				
Emptying				
DIGESTION AND ABSORPTION OF CARBOHYDRATES	Lecture	60 mins	Lecture Hall	Dr Farhan
By the end of lecture, student will be able to			1	
 List the principal carbohydrates present in the 				
foodstuffs which we take.				
 Describe the biochemical composition of saliva, with 				
special stress to pH range, activating factors and action				
of carbohydrate splitting enzymes which is α -amylase				
• Outline the characteristics of α -amylase and its mode of				
action on starch and glycogen				
 Describe the biochemical composition of gastric juice, 				
with special stress to pH ranges and enzymes present.				
GLYCOLYSIS (CARBOHYDRATE METABOLISM)	Lecture	60 mins	Lecture Hall	Dr Iffat
By the end of lecture, student will be able to			1	
Define Glycolysis				
Differentiate between aerobic and anaerobic glycolysis.				





<u>GASTROTTESTIME</u>		I) WIODC	DE GCIDI	1 1 0 1 1 1 2 0
Identify the biomedical importance of glycolytic				
pathway				
Describe the sequence of reactions involved in				
glycolytic pathway				
 Define substrate level phosphorylation. 				
 Name the end product formed in aerobic and anerobic 				
glycolysis.				
 Describe the regulation of glycolysis via substrates, end- 				
products and hormones				
Calculate the total and net number of ATPs produced of				
in aerobic and anaerobic glycolysis.				
List the fates of pyruvate.				
GUT WALL 1	Lecture	60 mins	Lecture Hall	Dr Saba Leeza
By the end of lecture, student will be able to			1	
 List the Parts & the Organs that are Associated with 				
G.I Tract.				
 List the Functions of different Parts of G.I Tract. 				
 Name the Layers of Gut with their role. 				
List & Describe the Electrical Activity / Membrane				
Potentials of G.I Tract.				
		-	-	





GIGIROI (IEGII (IE	`			
GLUCONEOGENESIS (CARBOHYDRATE METABOLISM:	Lecture	60 mins	Lecture Hall	Dr Iffat
By the end of lecture, student will be able to			1	
 Define gluconeogenesis. 				
 List the non-carbohydrate sources of glucose. 				
 Identify the importance of gluconeogenesis to occur in 				
the body.				
 Describe the reactions of gluconeogenesis. 				
Describe Cori cycle.				
List the fates of lactic acid.				
 Describe the regulation of gluconeogenesis 				
KREBS CYCLE (CARBOHYDRATE METABOLISM)	Lecture	60 mins	Lecture Hall	Dr Iffat
By the end of lecture, student will be able to			1	
 Describe the conversion of pyruvate into acetyl CoA in 				
mitochondria.				
 Identify that TCA cycle is a common and final pathway 				
for breakdown of acetyl CoA obtained from				
carbohydrates, proteins and lipids to CO ₂ and H ₂ O				
Describe the reactions of TCA cycle.				
Define "anaplerotic reactions"				
Identify the reaction of TCA cycle involved in substrate				
level phosphorylation.				





<u> </u>	110101 (311) 11102	CDD GCID.	B 202 : 20
 Identify that TCA cycle is "amphibolic" in nature. 				
 Describe the regulation of krebs cycle. 				
GUT WALL 2	Lecture	60 mins	Lecture Hall	Dr Saba Leeza
By the end of lecture, student will be able to			1	
 Name the Layers of GI wall 				
 Describe Basic electrical rhythm, slow wave & spike 				
potential				
 Identify the Cells responsible for pacemaker activity 				
in GIT & their location in small & large intestine				
 Difference between action potential of GI smooth 				
muscles & other muscles				
 Explain Factors increasing or decreasing frequency 				
of spike potential & Phenomenon of tone, a				
property of GI muscles.				
ENTERIC NERVOUS SYSTEM 1	Lecture	60 mins	Lecture Hall	Dr Adnan
By the end of lecture, student will be able to			1	
Define Enteric Nervous System				
 List the Divisions of Enteric Nervous System 				
• Mention Location of Meissner's & Myenteric Nerve Plexus				
in the Gut Wall				





Describe the Role of Enteric System in Control of G.I				
Functions				
ENTERIC NERVOUS SYSTEM 2	Lecture	60 mins	Lecture Hall	Dr Adnan
By the end of lecture, student will be able to			1	
List the types of plexus with their arrangement.				
Differentiate between Myenteric & Submucosal Plexus				
Name the neurotransmitters released from the enteric				
neurons				
List & define the GIT Reflexes				
GLYCOGENESIS GLYCOGEN METABOLISM	Lecture	60 mins	Lecture Hall	Dr Kehkashan
By the end of lecture, student will be able to			1	
 Identify that glycogen is the major storage form of 				
glucose in human beings Lecture Hall 1				
 Describe the reactions of glycogenesis. 				
 Describe the regulation of glycogen synthesis 				
GLYCOGENOLYSIS	Lecture	60 mins	Lecture Hall	Dr Kehkashan
By the end of lecture, student will be able to			1	
 Identify that glycogen breakdown is not the reversal of 				
glycogenesis.				
 Describe the reactions of glycogenolysis. 				
Describe the regulation of glycogenolysis				





AUTONOMIC CONTROL OF GIT	Lecture	60 mins	Lecture Hall	Dr Adnan
By the end of lecture, student will be able to	Lecture		1	Di Adridii
Define "Autonomic Nervous System" with its Characteristic			_	
Feature				
List the Divisions of Autonomic Nervous System				
Explain the Role of Autonomic Nervous System in				
Controlling G.I Functions				
DIGESTION OF LIPIDS IN STOMACH	Lecture	60 mins	Lecture Hall	Dr Farhan
By the end of lecture, student will be able to			1	
 List the principal lipids present in the foodstuff which 				
we take in normal diet				
 Outline the problems faced in digestion of lipids in GIT 				
and how it differs from carbohydrates				
 Identify the role of lingual and gastric lipase in stomach 				
 Recognize that fat in stomach delays gastric emptying 				
 Describe the role of GI hormone "enterogastroen" 				
 Defend that fats have high satiety value. 				
G.I REFLEXES 1	Lecture	60 mins	Lecture Hall	Dr M Ali
By the end of lecture, student will be able to			1	
Define "Reflex" & "Reflex Arc"				
List the Gastrointestinal Reflexes				





GIISTITOTIVIESTIVIES				I
 Categorize G.I Reflexes according to the Level of their 				
Integration.				
GASTRITIS	Lecture	60 mins	Lecture Hall	Dr Maeesa
By the end of lecture, student will be able to			1	
Define Gastritis				
 Describe its Etiopathogenesis 				
Describe its Morphology				
Classify its Types & Clinical Treatment				
Describe its Laboratory Tests & Treatment.				
GASTRIC FUNCTION TESTS-1:	Lecture	60 mins	Lecture Hall	Dr Iffat
By the end of lecture, student will be able to			1	
 Recall the constituents of gastric juice. 				
 Identify the clinical indications for performing, gastric 				
function tests				
 Describe the procedure of obtaining a sample of gastric 				
juice from the patients.				
 Classify gastric function tests. 				
 Outline the normal response of fractional test meal 				
analysis				
GASTROESOPHAGEAL REFLUX DISEASE	Lecture	60 mins	Lecture Hall	Dr Masooda
By the end of lecture, student will be able to			1	





GASIKOINESIINAL	1101 (0)	11) 111020	DD CID	2 202 1 20
Define the disease and describe its pathogenesis				
Discuss clinical features of the disease				
 Associate investigations to diagnose the disease 				
Summarise treatment plan of GERD				
GENERAL TOXICOLOGY	Lecture	60 mins	Lecture Hall	Dr Jan e Alam
By the end of lecture, student will be able to			1	
 Describe the Routes of Administration and Excretion of 				
Poisons				
Describe the Procedure of Gastric Lavage / Stomach				
Wash				
DEVELOPMENT OF DUODENUM	Lecture	60 mins	Lecture Hall	Dr Tayyaba
By the end of lecture, student will be able to			1	
 Describe the formation of duodenum? 				
 Describe the rotation of duodenum? 				
Discuss duodenal atresia.				
DEVELOPMENT OF MIDGUT	Lecture	60 mins	Lecture Hall	Dr Tayyaba
By the end of lecture, student will be able to			1	
 Discuss Omphalocele. 				
Describe Gastroschisis				
Explain Meckel's diverticulum.				
Describe volvulus.				





GASTROINTESTINAL	INACI (U.	II) MODE	LE GUID	<u> </u>
Discuss apple peel atresia				
 GASTRIC FUNCTION TESTS-2: By the end of lecture, student will be able to Define Hypercholrhydria, Hypochlorhydria and achylia gastric. Discuss about hyperchlorhydria, hypochlorhydria and achylia gastric 	Lecture	60 mins	Lecture Hall 1	Dr Iffat
 List the stimulation tests performed to induce gastric acid production. Outline the interpretations of the results of stimulation tests. Discuss about tubeless gastric analysis and its importance 				
 G.I REFLEXES 2 By the end of lecture, student will be able to Explain the reflexes that occur entirely via enteric nervous system, Discuss the reflexes that are mediated via sympathetic ganglia, Discuss the reflexes that occur via spinal cord or brain stem, 	Lecture	60 mins	Lecture Hall 1	Dr Adnan





GIISTROITTESTITULE I	111101 (0)	11) 111020	DE CCIDA	2 202 1 20
 Describe the effects & causative factors of entero- 				
gastric reflex				
 Discuss the role of gastrocolic&duodenocolic 				
reflexes in movements of colon, colonoileal reflex &				
 Identify other reflexes i.e. peritoneo-intestinal, 				
reno&vesico-intestinal reflexes.				
DUODENUM	Lecture	60 mins	Lecture Hall	Dr Hina
By the end of lecture, student will be able to			1	
 Describe the parts of small intestine. 				
 Describe the parts of duodenum and their 				
important relations?				
 Describe blood supply, innervation and lymphatic 				
drainage of duodenum.				
Explain duodenal ulcer.				
ESOPHAGUS, STOMACH AND DUODENUM	Lecture	60 mins	Lecture Hall	Dr Abdullah
By the end of lecture, student will be able to			1	
 Recall the gross and microscopic anatomy and 				
pathophysiology of esophagus, stomach and duodenum				
 Discuss the clinical importance of gastritis and 				
Helicobacter pylori in upper Gl diseases				





IKACI (C	MODU (111	LE GUID.	L 2024-25
Lecture	60 mins	Lecture Hall	Dr Anila
		1	
Practical	120 mins	Histology	Dr Anila
		Laboratory	
	Lecture	Lecture 60 mins	Practical 120 mins Histology





	JII) MIOD	CLL GCID	U 2027-23
Lecture	60 mins		Dr Farhan
		1	
	Lecture		Lecture 60 mins Lecture Hall 1





Name the sugars absorbed by facilitated diffusion				
PEPTIC ULCER DISEASE (PUD)	Lecture	60 mins	Lecture Hall	Dr M Khan
By the end of lecture, student will be able to			1	
Define Peptic Ulcer				
 Describe its Etiopathogenesis 				
Describe its Morphology				
 Classify its Types & Clinical Features 				
 Describe its Laboratory Tests & Treatment. 				
MOVEMENTS OF SMALL INTESTINE 1	Lecture	60 mins	Lecture Hall	Dr M Ali
By the end of lecture, student will be able to			1	
 Types of movements of small intestine. 				
Their functions.				
 Different patterns of mixing contractions of small 				
intestine.				
 Role of enteric nervous system in small intestinal 				
movements &Peristaltic rush.				
MOVEMENTS OF SMALL INTESTINE 2	Lecture	60 mins	Lecture Hall	Dr Adnan
By the end of lecture, student will be able to			1	
 Role of CGRP (calcitonin gene receptor peptide) in 				
movements & its significance,				





GASTROINTESTINAL	\mathbf{U}		LE GUIDI	L 2027-23
 Hormonal control of propulsive movements of small 				
intestine i.e. hormones that stimulate & that inhibit				
movements				
 Movements of villi. 				
PEPTIC ULCER DISEASE	Lecture	60 mins	Lecture Hall	Dr Masooda
By the end of lecture, student will be able to			1	
 Define peptic ulcer and memorize its pathogenesis 				
as well as recognize its risk factors				
 Discuss clinical features of peptic ulcer disease 				
 Describe clinical manifestations of the disease 				
 Explain the diagnostic investigations and recite the 				
treatment options present to control the disease				
ESTIMATION OF TOTAL PROTEINS II	Practical	120 mins	Biochemistr	Dr. Farhan
By the end of Practical, student will be able to			У	
 Record the readings of transmittance and optical 			Laboratory	
density of stock standard solutions and sample with the				
use of spectrophotometer.				
 Calculate the concentration of stock standard solutions 				
of 'S' test tubes.				
 Draw the graph to obtain the concentration of total 				
proteins for the sample.				





GASTROINTESTINAL	1101 (0.	11) 111020	DE CCIDI	202120
 Define the terms hypoproteinemia and hyperproteinemia. Interpret the result of whether the working sample is hypoproteinemia/hyperproteinemia or within the normal range. Discuss a few clinical causes of hypoproteinemia and hyperproteinemia. 				
DEVELOPMENT OF LIVER AND GALL BLADDER	Lecture	60 mins	Lecture Hall	Dr Tayyaba
By the end of lecture, student will be able to			1	
 Describe the formation of liver? 				
 Describe the formation of gall bladder? 				
 Explain the molecular regulation of liver induction? 				
 Describe the accessory hepatic duct? 				
Explain duplication of gall bladder?				
 What is intra and extra hepatic billiary duct atresia? 				
DIGESTION AND ABSORPTION OF LIPIDS IN SMALL INTESTINE	Lecture	60 mins	Lecture Hall	Dr Farhan
By the end of lecture, student will be able to			1	
Recognize the factors that makes small intestine the				
major site for fat digestion.				
 Describe the role of the hormones: secretin and cholecystokinin 				
Describe the composition of bile				
·	1	1		1





GIISTROII (TESTII (ITE	- (-			
 List the lipolytic enzymes present in pancreatic juice along with their pH range, mode of action and activators List the products formed from hydrolysis of triglycerides. Point the percentage of lipids which is absorbed Describe the mechanism of absorption of TG products Identify that triglycerides are packaged in chylomicrons and transported to liver. 				
 LARGE BLOOD VESSELS OF GIT 1 By the end of lecture, student will be able to Describe abdominal aorta in detail Name the branches of abdominal aorta Explain the level of entrance and its termination in abdomen Describe celiac trunk its branches and area of supply? 	Lecture	60 mins	Lecture Hall	Dr Anila
 LARGE BLOOD VESSELS OF GIT 2 By the end of lecture, student will be able to Describe SMA its branches and area of supply? Describe IMA its branches and area of supply? 	Lecture	60 mins	Lecture Hall 1	Dr Anila





	1211201 (02			2 2 0 2 1 2 0
Describe portal vein its formation, course and				
termination?				
 What is aortic dissection and aortic aneurysm? 				
SMALL INTESTINE	Lecture	60 mins	Lecture Hall	Dr Sidra
By the end of lecture, student will be able to			1	
 Know the basic anatomy and physiology of small 				
intestine				
 Know the conditions that may affect small intestine 				
 Discuss the aetiology and pathology of common 				
small intestinal conditions				
 Describe the principles of investigations of small 				
intestine symptoms				
DIGESTION AND ABSORPTION OF PROTEINS:	Lecture	60 mins	Lecture Hall	Dr Farhan
By the end of lecture, student will be able to			1	
 List the principal proteins present in the foodstuffs 				
which we take in our diet				
List the proteolytic enzymes present in gastric juice				
Discuss in detail the pH range, activators of the				
enzymes, substrates on which they act and the				
products formed				
 List the proteolytic enzymes present in the pancreatic juice 				
juice				





GASTROTTESTINAL	1101 (0.	11) 111000	DE GCIDI	<u> </u>
 Discuss in detail the pH range, activators of the enzymes, substrates on which they act and the products formed List the proteolytic enzymes present in the intestinal juice Discuss in detail the pH range, activators of the enzymes, substrates on which they act and the products formed Point the site of absorption of amino acids Explain how absorbed products are carried to liver 				
SALIVA AND IT'S FUNCTIONS	Lecture	60 mins	Lecture Hall	Dr M Ali
By the end of lecture, student will be able to			1	
Locate the G.I Glands & their secretions				
 Summarize the types of salivary gland with their secretions 				
Describe the components & importance of saliva.				
Explain the mechanism of salivary secretion.				
Discuss the factor regulating salivary secretions				
DEGLUTITION	Lecture	60 mins	Lecture Hall	DR Adnan
By the end of lecture, student will be able to			1	
Define deglutition.				
 List the phases of deglutition. 				
 Locate the deglutition center in the brain. 				





ESTIMATION OF ALBUMIN : GLOBULIN RATIO I	Practical	120 mins	Biochemistr	Dr. Farhan
By the end of Practical, student will be able to			У	
 State the normal range of Albumin: globulin ratio. 			Laboratory	
 Name the reagents to be used in the experiment. 				
 Read the instructions to prepare the stock standard 				
solutions of Albumin and the sample.				
 Describe the principle of the reaction taking place in the 				
experiment.				
Record the readings of transmittance and optical				
density of stock standard solutions and sample with the				
use of spectrophotometer.	_			
GASTRIC ACID SECRETION	Lecture	60 mins	Lecture Hall	Dr Saba Leeza
By the end of lecture, student will be able to			1	
 List the gastric gland, their secretions & functions 				
 Describe physiological arrangement of the gastric 				
(oxyntic) gland				
 Discuss the mechanism of HCl secretion 				
 Name the factors that affect the gastric acid 				
secretion				
 List & define the phases of gastric secretion 				
PEPTIC ULCER	Lecture	60 mins	Lecture Hall	Dr Qamar Azeez
By the end of lecture, student will be able to			1	





GASTROTTESTINAL	$\mathbf{m}(\mathbf{G})$	II) MIODO		
Define "Peptic Ulcer".				
 Describe Mucosal Barrier Preventing the Digestive 				
Action of Acids & Pepsin.				
 List the Factor that Result in Development of Peptic 				
Ulcer.				
 Mention Treatment to Cure a Person from Peptic 				
Ulcer				
PERFORATED PEPTIC ULCER:	Lecture	60 mins	Lecture Hall	Dr Abdullah
By the end of lecture, student will be able to			1	
 Summarize the basic anatomy and physiology of 				
stomach and duodenum				
 Describe the pathophysiology of development of peptic ulcer 				
 Enlist the causes of peptic ulcer 				
 Differences between duodenal ulcer and gastric ulcer 				
presentation.				
 Enumerate the risk factors for perforated peptic ulcer 				
 Explain the clinical presentation of patient with 				
perforated peptic ulcer				
SURGICAL ANATOMY OF SMALL INTESTINE	Lecture	60 mins	Lecture Hall	Dr Sidra
By the end of lecture, student will be able to			1	





GASTROTITESTINAL	1101 (3)	11) 111000	EE GCID	2 202 1 20
 Know the basic anatomy and physiology of small 				
intestine				
 Know the conditions that may affect small intestine 				
 Discuss the aetiology and pathology of common 				
small intestinal conditions				
 Describe the principles of investigations of small 				
intestine symptoms				
HISTOLOGY OF LIVER	Lecture	60 mins	Lecture Hall	Dr Inayat
By the end of lecture, student will be able to			1	
 Describe the general histology of liver. 				
 What is hepatic lobule, hepatic acinus and portal 				
lobule?				
 Describe the contents of portal triad? 				
 What is space of Disse and its contents? 				
LIVER	Lecture	60 mins	Lecture Hall	Dr Hina
By the end of lecture, student will be able to			1	
What are the lobes of liver?				
 Describe the ligamentous attachments of liver? 				
 Describe the peritoneal relations of liver? 				
 Describe the structures present within the hilum of 				
liver?				





GASTROINTESTINAL	INACI (G	II) MODO	LE GUID	E 2024-23
What is the accessory lobe of liver?				
What are hepatic segments?				
 Define hepatic cirrhosis? 				
What is CLD?				
LIVER	Practical	120 mins	Histology	Dr Anila
By the end of Practical, student will be able to			Laboratory	
 Identify and differentiate the slide under microscope 				
 Develop proficiency in using a light microscope to 				
observe tissue samples at various magnifications and				
focus levels.				
 Describe the general histology of liver. 				
 What is hepatic lobule, hepatic acinus and portal 				
lobule.				
 Describe the contents of portal triad. 				
What is space of Disse and its contents?				
FUNCTIONS OF LIVER 1	Lecture	60 mins	Lecture Hall	Dr Adnan
By the end of lecture, student will be able to			1	
 List the metabolic functions of liver. 				
 Identify the role of liver in storage of blood. 				
Discuss the role of liver in plasma protein synthesis.				





IMICI (G.	II) MIODO	DD GCID	
Lecture	60 mins	Lecture Hall	Dr Abis Owais
		1	
Lecture	60 mins	Lecture Hall	Dr Saba Abrar
		1	
Lecture	60 mins	Lecture Hall	Dr Rozina
		1	
	Lecture	Lecture 60 mins Lecture 60 mins	Lecture 60 mins Lecture Hall 1 Lecture 60 mins Lecture Hall





ESTIMATION OF ALBUMIN : GLOBULIN RATIO II	Practical	120 mins	Biochemistr	Dr. Farhan
By the end of Practical, student will be able to	Fractical	120 111113	V	Di. i ailiali
			y Laboratory	
Calculate the concentration of stock standard solutions of (C) to at table as			Laboratory	
of 'S' test tubes.				
Draw the graph to obtain the concentration of Serum				
Albumin for the sample.				
 Apply the formula of (Serum Total Proteins – Serum 				
Albumin) to obtain the value of Serum Globulin.				
Quote the value of Serum Total Proteins obtained from				
the previous practical.				
Calculate the Albumin: Globuli				
 Interpret the result of whether the ratio of the working 				
sample is above the range, below the range or within				
the normal range.				
 Discuss a few clinical causes of increased and decreased 				
Albumin:Globulin ratio.				
LIVER FUNCTION TEST 1	Lecture	60 mins	Lecture Hall	Dr Farhan
By the end of lecture, student will be able to			1	
 Discuss functions of liver such as metabolic functions, 				
secretory functions, excretory functions, hematologic				
functions, protective functions and storage functions				
Outline the interpretation of results of protein, albumin				
estimation and fibrinogen.				





UADINOINIEDIINAL	1101 (3	11)111020		
Relate the interpretation of the results of serum				
cholesterol with the degree of function of liver.				
 Describe the test prothrombin time and outline the 				
interpretation of the results.				
Identify the importance of estimation of ammonia to assess				
the degree of liver damage				
LIVER FUNCTION TEST 2	Lecture	60 mins	Lecture Hall	
By the end of lecture, student will be able to			1	
Explain the procedure of oral and IV hippuric acid test.				
 Identify the importance for assessing detoxification 				D. F. J
function of liver with hippuric acid test.				Dr Farhan
 Indicate the use of MEGX test for evaluating the 				
capacity of metabolising drugs by the liver.				
Recognize BSP retention test for estimating the				
excretory function of liver.				
 Explain the procedure of galactose tolerance test. 				
 Identify the importance of this test in assessing liver 				
dysfunction				
GALLBLADDER	Lecture	60 mins	Lecture Hall	Dr Hina
By the end of lecture, student will be able to			1	
What is gall bladder?				





GASTRUINTESTINAL	INACI (G	II) MIODU	LE GUIDI	L 2024-23
 Define the relations of gall bladder? 				
 Describe the parts of gall bladder? 				
 Describe the blood supply, innervation and 				
lymphatic drainage of gall bladder?				
What is portal triad?				
 Describe bile duct, its relations and opening? 				
HISTOLOGY OF GALL BLADDER	Lecture	60 mins	Lecture Hall	Dr Inayat
By the end of lecture, student will be able to			1	
 Describe the general histology of gall bladder? 				
 Explain mucosa, muscularis and serosa of gall 				
bladder?				
GALL BLADDER	Practical	120 mins	Histology	Dr Anila
By the end of Practical, student will be able to			Laboratory	
Identify and differentiate the slide under microscope				
 Develop proficiency in using a light microscope to 				
observe tissue samples at various magnifications and				
focus levels.				
Describe the general histology of gall bladder.				





 Explain mucosa, muscularis and serosa of gall bladder. 				
SECRETION OF BILE	Lecture	60 mins	Lecture Hall	Dr Ruqqaya
By the end of lecture, student will be able to			1	
Define bile				
 List the components of biliary secretion. 				
 Discuss the role of liver & the gall bladder in the 				
formation of bile				
 Explain emptying of gall bladder 				
 List the functions of bile 				
FUNCTIONS OF BILE SALTS 1	Lecture	60 mins	Lecture Hall	Dr Adnan
By the end of lecture, student will be able to			1	
Define bile salts				
 Enlist the functions of bile salts 				
 Identify the factors that control the production and 				
circulation of bilirubin				
 Understand the pathological factors that can lead to 				
jaundice				
 Analyse how clinical examination and diagnostic 				
testing can identify the cause of jaundice				





	· ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `			
FUNCTIONS OF BILE SALTS 2	Lecture	60 mins	Lecture Hall	Dr Qamar
By the end of lecture, student will be able to			1	
Define "Bile".				
 Describe Functional Arrangement of Hepatocytes 				
Related to Bile Production.				
 List Stages of Biliary Secretions. 				
 Explain Formation & Functions of Bile Salts. 				
 Describe Enterohepatic Circulation of Bile Salts with 				
its Importance.				
SURGICAL ANATOMY OF GALLBLADDER, BILE DUCTS AND	Lecture	60 mins	Lecture Hall	Dr Danish
PANCREAS			1	
By the end of lecture, student will be able to				
 Know the surgical anatomy and physiology of 				
gallbladder, bile ducts and pancres				
 Describe the pathophysiology of gallstones 				
 Know the unusual disorders of biliary tree 				
 Discuss the investigations for gallbladder, biliary 				
tract diseases and pancreas				
 Discuss the assessment, and diagnosis of 				
pancreatitis				





COLEGE AND DANGERS	·		1	
SPLEEN AND PANCREAS	Lecture	60 mins	Lecture Hall	Dr Hina
By the end of lecture, student will be able to			1	
What are the relations of spleen?				
 Describe the attachments of spleen? 				
 Describe the blood supply, innervation and lymphatic 				
drainage of spleen?				
 What are the relations of pancreas and its parts? 				
 Describe the borders of pancreas with their relations? 				
 Describe the main pancreatic and accessory pancreatic 				
ducts with their openings in duodenum?				
PANCREATIC SECRETION	Lecture	60 mins	Lecture Hall	Dr Adnan
By the end of lecture, student will be able to			1	
 Define "Pancreas". 				
 List the Types of Pancreatic Secretions. 				
 Categorize Pancreatic Exocrine Secretion with their 				
Functions.				
 List Stimuli & Phases of Pancreatic Exocrine 				
Secretions.				
 Explain the Mechanism of Exocrine Secretions of 				
Pancreas.				
DERIVATIVES OF HINDGUT	Lecture	60 mins	Lecture Hall	Dr Tayyaba
By the end of lecture, student will be able to			1	





	3 1141101 (311) 11102	<u> </u>	<u> </u>
Describe the derivatives of hindgut?				
 Describe the formation of urorectal septum? 				
 Describe rectovaginal fistula? 				
 What is rectoanal fistula? 				
 Describe congenital megacolon? 				
LARGE INTESTINE I	Lecture	60 mins	Lecture Hall	Dr Anila
By the end of lecture, student will be able to			1	
 Describe the parts of large intestine and its 				
peritoneal relations?				
 What is appendices epiploici, tenia coli? 				
 Describe ascending colon relations? 				
 What are the relations of transverse colon? 				
 What is transverse mesocolon and greater 				
omentum?				
LARGE INTESTINE II	Lecture	60 mins	Lecture Hall	Dr Hina
By the end of lecture, student will be able to			1	
 Describe the relations of descending colon? 				
 Describe the relations of sigmoid colon? 				
 What are the recesses of sigmoid colon? 				
What is sigmoid mesocolon?				





		CLL GCID	
Lecture	60 mins	Lecture Hall	Dr Qamar Azeez
		1	
Lecture	60 mins	Lecture Hall	Dr Hina
		1	
Lecture	60 mins	Lecture Hall	Dr Inayat
		1	
	Lecture	Lecture 60 mins	Lecture 60 mins Lecture Hall 1





LARGE INTESTINE	Practical	120 mins	Histology	Dr Anila
By the end of Practical, student will be able to			Laboratory	
 Identify and differentiate the slide under microscope 				
 Develop proficiency in using a light microscope to 				
observe tissue samples at various magnifications and				
focus levels.				
 Describe the general histology of large intestine. 				
 Explain mucosa, submucosa, muscularis and serosa of 				
large intestine.				
 Describe the cells of large intestine. 				
SURGICAL ANATOMY OF LARGE INTESTINE	Lecture	60 mins	Lecture Hall	Dr Abdullah
By the end of lecture, student will be able to			1	
 Know the basic anatomy and physiology of large 				
intestine				
 Know the conditions that may affect the large 				
intestine				
 Discuss the aetiology and pathology of common 				
large intestinal conditions				
 Describe the principles of investigation of large 				
intestinal symptoms				





ACHALASIA AND MEGA COLON	Lecture	60 mins	Lecture Hall	Dr M Ali
By the end of lecture, student will be able to			1	
 List the esophageal motility disorders 				
 Define the achalasia. 				
 Describe the esophago-gastric junction. 				
 Describe the pathology, clinical presentation & 				
diagnosis of achalasia.				
 Describe the Megacolon (Hirschsprung's Disease) 				
INTRODUCTION TO MICRONUTRIENTS	Lecture	60 mins	Lecture Hall	Dr Nazia
By the end of lecture, student will be able to			1	
Define micronutrients				
 Differentiate between macronutrients and 				
micronutrients				
 Discuss the types of micronutrients 				
VOMITING AND DIARRHEA 1	Lecture	60 mins	Lecture Hall	Dr M Ali
By the end of lecture, student will be able to			1	
 Define the nausea , retching and vomiting 				
 Enlist the causes of vomiting. 				
 Describe the vomiting center. 				
 Describe the vomiting reflex. 				
Describe the antiperistalsis.				





GASTRUINTESTINAL I	INACI (G)		TE GOIDI	L 2024-23
 Describe the vomiting act 				
Define diarrhea				
 Describe the classification of diarrhea 				
 Describe the enteritis, ulcerative colitis & 				
psychogenic diarrhea				
PROTEIN CALORIE MALNUTRITION:	Lecture	60 mins	Lecture Hall	Dr Iffat
By the end of lecture, student will be able to			1	
 Outline the role of carbohydrates in diet 				
 Identify the requirement of carbohydrates in diet 				
 Outline the role of lipids in diet Define protein calorie 				
malnutrition				
Differentiate in a tabular form marasmus and				
kwashiorkor.				
ACUTE DIARRHEA & ITS MANAGEMENT	Lecture	60 mins	Lecture Hall	Dr Madiha
By the end of lecture, student will be able to			1	
 Diarrhea and it's classification 				
To apprehend different causative agents of Diarrhea				
 To describe the etiology & pathology of Diarrhea 				
 To recognize the clinical features & complications of 				
Diarrhea				
To make an accurate & clear cut diagnosis				





GIBTROTTESTICIE				
 To make proper evaluation of dehydration 				
 Explain adequate treatment & proper preventive 				
measures				
VOMITING AND DIARRHEA 2	Lecture	90 mins	Lecture Hall	Dr Qamar Azeez
By the end of lecture, student will be able to			1	
 Describe the antiperistalsis. 				
 Describe the vomiting act 				
Define diarrhea				
 Describe the classification of diarrhea 				
 Describe the enteritis, ulcerative colitis & 				
psychogenic diarrhea				
Iodine deficiency	Lecture	60 mins	Lecture Hall	Dr Nazia
By the end of lecture, student will be able to			1	
 Discuss Iodine deficiency disorder and its etiology. 				
 Explain the prevention and control of lodine 				
deficiency disorder				
OVERVIEW OF PHARMACOLOGY OF EMESIS:	Lecture	60 mins	Lecture Hall	Dr Sehrish
By the end of lecture, student will be able to			1	
 Recall the physiology of emesis. 				
 Discuss the pathophysiology of emesis. 				





Explain the mechanistic pharmacology of emesis.				
MALABSORPTION	Lecture	60 mins	Lecture Hall	Dr M Rizwan
By the end of lecture, student will be able to			1	
 Define Malabsorption 				
 Describe its Etiopathogenesis 				
 Describe its Clinical Features 				
MALABSORPTION SYNDROME	Lecture	60 mins	Lecture Hall	Dr Masooda
By the end of lecture, student will be able to			1	
 Explain the disorder with its pathogenesis 				
 List out the disease causing malabsorption 				
syndrome				
 Summarise clinical features of disorder 				
 Identify the laboratory test as well as radiological 				
test required to diagnose the disorder				
 Discuss treatment in accordance to diseases causing 				
the syndrome				
OVERVIEW OF PHARMACOLOGY OF DIARRHEA:	Lecture	60 mins	Lecture Hall	Dr Sehrish
By the end of lecture, student will be able to			1	
 Recall the physiology of diarrhea. 				
 Discuss the pathophysiology of diarrhea. 				





Explain the mechanistic pharmacology of diarrhea.				
INFLAMMATORY BOWEL DISEASES By the end of lecture, student will be able to • Define Ulcerative Colitis & Crohn's Disease • Describe their Etiopathogenesis • Describe their Morphology • Compare their Clinical Features & Complications • Describe their treatment options	Lecture	60 mins	Lecture Hall	Dr Munazza
SURGICAL ANATOMY OF SMALL INTESTINE By the end of lecture, student will be able to • Know the basic anatomy and physiology of small intestine • Know the conditions that may affect small intestine • Discuss the aetiology and pathology of common small intestinal conditions • Describe the principles of investigations of small intestine symptoms	Lecture	60 mins	Lecture Hall 1	Dr Sidra
Vitamin A & C Deficiency By the end of lecture, student will be able to List the sources and functions of Vitamin A & C	Lecture	60 mins	Lecture Hall	Dr Nazia





110101 (JII) MOD	CLL GCID	L 2027 25
Lecture	60 mins	Lecture Hall	Dr Abdul Ghaffar
		1	
Lecture	60 mins	Lecture Hall	Dr Danish
		1	
	Lecture	Lecture 60 mins	Lecture 60 mins Lecture Hall





			U 2027-23
Lecture	60 mins	Lecture Hall	Dr Aneela
		1	
Lecture	60 mins	Lecture Hall	Dr Danish
		1	
		Lecture 60 mins	Lecture 60 mins Lecture Hall 1 Lecture 60 mins Lecture Hall





ANAL CANAL	Lecture	60 mins	Lecture Hall	Dr Hina
By the end of lecture, student will be able to			1	
 What are the peritoneal relations of anal canal? 				
 Describe the dentate/ pectinate line? 				
 Describe the differences in the anal canal above and 				
anal canal below the dentate line?				
 Describe the blood supply, innervation and 				
lymphatic drainage of anal canal?				
What are hemorrhoids?				
What is anal fissure and abscess?				
ANUS	Practical	120 mins	Histology	Dr Anila
By the end of Practical, student will be able to			Laboratory	
 Identify and differentiate the slide under microscope 				
 Develop proficiency in using a light microscope to 				
observe tissue samples at various magnifications and				
focus levels.				
 Describe the general histology of anus 				
Discuss the epithelium of anal canal				
Describe the transition of epithelium at rectoanal				
junction				





IMACI (O		CLL GCID	D 2027-25
Lecture	60 mins	Lecture Hall	Dr Qamar Azeez
		1	
ı			
Lecture	60 mins	Lecture Hall	Dr Danish
		1	
	Lecture	Lecture 60 mins Lecture 60 mins	Lecture 60 mins Lecture Hall





UADINOINIEDIINAL	110101 (0	11) 111020	EE GCIE	2 2 0 2 1 2 0
 Define and classify haemorrhoids. 				
 Enlist the risk factors for haemorrhoids 				
PERITONEUM	Lecture	60 mins	Lecture Hall	Dr Hina
By the end of lecture, student will be able to			1	
Define peritoneum?				
 What is parietal and visceral peritoneum? 				
 Describe the terms intraperitoneal, extraperitoneal, 				
retroperitoneal and subperitoneal visceras with examples?				
 Describe the modifications of peritoneum? 				
What is greater and lesser sac?				
 Define the lesser sac and describe its boundaries? 				
 What is epiploic foramen and describe its 				
boundaries?Describe the mesentry in detail?				
 Describe the ligaments of stomach? 				
 Describe the ligaments of liver? 				
 Describe the ligaments of spleen? 				
 What is peritoneal adhesions? 				
Define ascites?				
RECTUS SHEET, INGUINAL CANAL:	Lecture	60 mins	Lecture Hall	Dr Hina
By the end of lecture, student will be able to			1	
 Define the rectus sheet. 				





	II) MIODC	LL GCID	
Lecture	60 mins	Lecture Hall	Dr Hina
		1	
Lecture	60 mins	Lecture Hall	Dr Azra Shaheen
		1	
Lecture	60 mins	Lecture Hall	Dr Azra Shaheen
		1	
	Lecture	Lecture 60 mins Lecture 60 mins	Lecture 60 mins Lecture Hall 1 Lecture 60 mins Lecture Hall





BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE FIRST PROFESSIONAL M.B.B.S. GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

	,	

REFERENCE BOOKS AND OTHER READING RESOURCES:

Gross Anatomy	Snell's anatomy by regions 10 th edition								
	BD Chaurasia's Handbook of GENERAL ANATOMY								
	Netter Atlas of Human Anatomy								
Embryology	Langman's Embryology								
Histology	Laiq Hussain Histology								
Physiology	Guyton and Hall. Textbook of Medical Physiology, 13 th Edition.								
	Ganong's Review of Medical Physiology, 24th Edition.								
Biochemistry	Lippincot Illustrated Review Biochemistry								
	Textbook of Medical Biochemistry M.N.Chatterjee and Rana shinde								
Pathology	Robin`s Basic Pathology-10 th Edition								
Pharmacology	Essential:								
	Bertram G. Katzung. Basic and Clinical Pharmacology, 14th Edition. 2017.								
	Katzung and Trevor's pharmacology Examination and Board Review 11 th Edition 2015.								





	Recommended:
	Lippincott's illustrated review of Pharmacology . 6th Edition. 2015.
Islamiat	
	Hameed ullah Muhammad, "Emergence of Islam", IRI,
	Islamabad, "Muslim Conduct of State" and "Introduction to Islam".
	 Hussain Hamid Hassan, "An Introduction to the Study of Islamic Law" leaf Publication Islamabad, Pakistan. Abdul Qayyum Natiq, "Sirat-E-Mustaqim.
	 Farkhanda Noor Muhammad, "Islamiat". Dr. Muhammad Zia-ul-Haq, "Introduction to Al Sharia Al Islamia" Allama Iqbal Open University, Islamabad (2001).
Community Medicine	Ilyas M, Public Health and Community Medicine, 7 th Edition, Karachi, Pakistan, Time Publisher, 2007.
	Maxcy-Rosenau-Last, public Health and Preventive Medicine, 13 th Edition, USA, Prentice-Hall International Inc, 1992.
	K.Park, Preventive and Social Medicine, 20 th Edition, Jabalpur (India), M/s Banarsidas Bhanot, Publisher, 2009.
Medicine	Davidson`s Principles and Practice of Medicine-22 nd Edition
Clinical Examination	Talley and O'Connor's Clinical Examination-6 th Edition
Surgery	Bailey And Love Short Practice Of Surgery, 27th Edition





GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

	Snell's anatomy by regions 10 th edition
Research	Introduction to Research in Health Sciences- Stephen Polgar, Shane A. Thomas. Biomedical Research Proposal Writing- Syed Sharaf Ali Shah, Zarfshan Tahir, Rozina Karmaliani. Epidemiology - Leon Gordis; Fifth Edition.
PEARLs	https://www.mededportal.org/publication/10610/
PAEDS	Nelson Textbook of Pediatric 21 st edition.
	Textbook of Paediatrics (PPA) Fifth edition. Basis of Pediatrics (Pervez Akbar Khan) 10 th edition

ASSESSMENT METHODS:

THEORY:

- **Essay Questions- Short Essay Questions (SEQs)** are used to assess objectives covered in each module.
 - 6 SEQs are given (no choice).
 - Time duration 90 minutes.
 - Students write their answer in an answer sheet.
- **ACQs** (Multiple Choice Questions) are used to assess objectives covered in each module.
 - A BCQ has a statement or clinical scenario followed by four options (likely answer).
 - Students after reading the statement/scenario select ONE, the most appropriate response from the given list of options.
 - Correct answer carries one mark, and incorrect 'zero mark'. There is no negative marking.





BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE FIRST PROFESSIONAL M.B.B.S. GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

• Students mark their responses on specified computer-based/OMR sheet designed for BMC, BMU.

SPE/OSCE: Objective Structured Practical/Clinical Examination:

- Each student will be assessed on the same content and have same time to complete the task.
- Comprise of 12-25 stations.
- Each station may assess a variety of clinical tasks; these tasks may include history taking, physical examination, skills and application of skills and knowledge.
- Stations are observed, unobserved, interactive and rest stations.
- Observed and interactive stations will be assessed by internal or external examiners.
- Unobserved will be static stations in which there may be an X-ray, Labs reports, pictures, clinical scenarios with related questions for students to answer.
- Rest station is a station where there is no task given and in this time student can organize his/her thoughts.

INTERNAL EVALUATION:

- Students will be assessed to determine achievement of module objectives through the following: o **Module Examination:** will be scheduled on completion of each module. The method of examination comprises theory exam which includes BCQs and OSPE (Objective Structured Practical Examination).
- > Graded Assessment of students by Individual Department: Quiz, viva, practical, assignment, small group activities such as CBL, online assessment, ward activities, examination, and Practical journals.
- Marks of both modular examination and graded assessment will constitute 20% weightage which will be added to Annual Examination.

FORMATIVE ASSESSMENT:

• Individual department may hold quiz or short answer questions to help students assess their own learning.





BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE FIRST PROFESSIONAL M.B.B.S. GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

• The marks obtained are not included in the internal evaluation.





		GASINO		SIINAL INA		<u>) WIO</u>	DULE GUIDE 2	<u>U24-23</u>
DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00:-11:00	1:00- 1:30	1:30-3:00	3:00-4:30
MONDAY 7-10-24				RESPIRATO	ORY MODULE EXAM	1		
TUESDAY 8-10-2024	ANATOMY Anterolateral Abdominal Wall DR HINA	ANATOMY Posterior Abdominal Wall DR ANEELA		EMBRYO Formation of Gut Tube DR TAYYABA	SDL		EMBRYO Development of Esophagus DR TAYYABA	ANATOMY Oral Cavity and Esophagus DR ANEELA
WEDNESDAY 9-10-2024	B. SCIENCES MS AZRA SHAHEEN	HISTO Histology of Oral Cavity & Esophagus DR INAYAT		ANATOMY Development of Stomach Dr. Tayyaba	SDL		ANATOMY Stomach DR. HINA	PHYSIO Motor Functions Of Stomach 1 (DR. SABA LEEZA)
THURSDAY 10-10-2024	HISTO HISTOLOGY OF STOMACH DR INAYAT	PHYSIO Motor Functions Of Stomach 2 (DR. ADNAN)		BIOCHEM Digestion and Absorption DR. FARHAN	SDL		BIOCHEM Glycolysis (Carbohydrate Metabolism) DR IFFAT	PHYSIO Gut Wall- 1 (DR. SABA LEEZA)
FRIDAY 11-10-2024	BIOCHEM GLUCONEOGENESIS DR IFFAT	PEARLS		BIOCHEM Krebs Cycle (Carbohydrate Metabolism)	ISLAMIAT MS UZMA		SDL	PHYSIO Gut Wall-2 (DR. SABA LEEZA)





BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE FIRST PROFESSIONAL M.B.B.S. GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

			/	
		DR IFFAT		

GIT MODULE WEEK 1

BAQAI MEDICAL COLLEGE

1ST Professional MBBS GIT MODULE WEEK 2





	JA:	STROINTES	LINA	L IKACI	.(GH) M	<u>UDUI</u>	LE GUIDE 2	<u> </u>
DAYS	8:30-9:30	9:30-10:30	10:30-1 11:00	11:00-12:00	12:00:-1:00	1:00-1:30	1:30-3:00	3:00-4:30
MONDAY 14-10-2024	PHYSIO Enteric Nervous System 2 M ALI	BIO Glycogenesis Glycogen Metabolism-1 DR KAHKASHAN		PRACTICAL PHYSIO: ACTIVITY DR SABA LEEZA BIO: ESTIMATION O PROTEIN Dr Farhan ANA: HISTO of esopha DR ANEELA	OF TOTAL		BIO Glycogenolysis DR KAHKASHAN	PHYSIO Autonomic Control Of GIT DR ADNAN
TUESDAY 15-10-2024	BIO Digestion Of Lipids In Stomach DR FARHAN	SDL		PRACTICAL PHYSIO: ACTIVITY DR SABA LEEZA BIO: ESTIMATION O PROTEIN Dr Farhan ANA: HISTO of esoph DR ANEELA	OF TOTAL		PHYSIO G.I REFLEXES 1 DR M ALI	PATHO Gastritis DR MAEESA
WEDNESDAY 16-10-2024	BIO GASTRIC FUNCTION TESTS- 1 DR IFFAT	MEDICINE GASTROESOPHAGEAL REFLUX DISEASE		PRACTICAL PHYSIO: ACTIVITY DR M ALI BIO: ESTIMATION (PROTEIN Dr Farhan ANA: HISTO of esoph DR ANEELA	OF TOTAL		SDL	FORENSIC MEDICINE General Toxicology DR JAN E ALAM
THURSDAY 17-10-2024	ANATOMY DEVELOPMENT OF DUODENUM DR TAYYABA	SDL		ANATOMY DEVELOPMENT OF MIDGUT DR TAYYABA	BIO GASTRIC FUNCTION TESTS- 2 Dr Iffat		PHYSIO G.I REFLEXES 2 DR ADNAN	ANATOMY DUODENUM DR HINA
FRIDAY 18-10-2024	SURGERY ESOPHAGUS, STOMACH AND DUODENUM DR ABDULLAH	BIOETHICS		ANATOMY HISTOLOGY OF SMALL INTESTINE DR INAYAT	ISLAMIAT Ms Uzma		SDL	ANATOMY JEJUNUM AND ILEUM DR ANEELA





BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE FIRST PROFESSIONAL M.B.B.S. GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

BAQAI MEDICAL

COLLEGE

1ST Professional MBBS GIT MODULE WEEK 3





BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE FIRST PROFESSIONAL M.B.B.S. GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

DAYS	8:30-9:30	9:30-10:30	10:30 - 11:00	11:00-12:00	12:00:-1:00	1:00-1:30	1:30-3:00	3:00-4:30
MONDAY 21-10-2024	BIO Digestion & Absorption Of Carbohydrates In Small Intestine Dr Farhan	SDL		PRACTICAL PHYSIO: Activity Dr Sa BIO: Estimation of total pr Dr Farhan ANA: Histo of stomach D	otein graph /calculation		PATHO Peptic Ulcer Disease Dr Muhammad Khan	PHYSIO Movements Of Small Intestine I Dr M Ali
TUESDAY 22-10-2024	PHYSIO Movements Of Small Intestine II Dr Adnan	MEDICINE Peptic Ulcer Disease Dr Masooda		PRACTICAL PHYSIO: Activity Dr Sa BIO: Estimation of total pr Dr Farhan ANA: Histo of stomach Dr	otein graph /calculation		SDL (1;30-2:30)	CBL (2;30-4:30)
WEDNESDAY 23-10-2024	ANATOMY Development Of Liver And Gall Bladder Dr TAYYABA	SDL		PRACTICAL PHYSIO: Activity Dr Sal BIO: Estimation of total p Dr Farhan ANA: Histo of stomach D	rotein graph /calculation		ANATOMY Formative Assessment Dr Aneela/dr Hina	BIO Digestion And Absorption Of Lipids In Small Intestine Dr Farhan
THURSDAY 24-10-2024	ANATOMY Large Blood Vessels Of GIT Celiac Trunk Dr Aneela	SURGERY Small Intestine DR SIDRA		RESEARCH Ms Maria	SDL		BIO Formative Assessment Dr Iffat	ANATOMY Inferior Vena Cava & Portal Vein Dr Hina
FRIDAY 25-10-2024	BIO Digestion And Absorption Of Proteins Dr Farhan	PEARLS		SDL	ISLAMIAT MS Uzma		PHYSIO Formative Assessment Dr M Ali	ANATOMY LRC Dr Aneela





GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

-		011011101	- 1	DIII WILL IIWIC	- (0 - 1) 1 (1 0)	<u> </u>	D CLDD IV	. 20
DAYS	8:30-9:30	9:30-10:30	10:30 - 11:00	11:00-12:00	12:00:-1:00	1:0 0- 1:3 0	1:30-3:00	3:00-4:30
MONDAY 28-10-2024	PHYSIO Saliva DR. M.ALI	SDL		PRACTICAL PHYSIO: ACTIVITY DR. SABA LEEZA BIO: Estimation of A/G ratio graph/calculation Dr Farhan ANA: DUODENUM Dr Aneela			BIOETHICS	PHYSIO Deglutition DR. ADNAN
TUESDAY 29-10-2024	PHYSIO Gastric secretion DR. SABA LEEZA	PHYSIO Peptic ulcer DR. Qamer Aziz		PRACTION PRACTION PHYSIO: ACTIVITY' DISTRICT PHYSIO: ACTIVITY' DISTRICT PHYSION PHYSION PRACTICAL PRACTICAL PHYSION PRACTICAL PHYSION	R. SABA LEEZA to graph/calculation		SURGERY Gastritis & peptic ulcer disease Dr Abdullah	ANATOMY LRC Dr Hina
WEDNESDA Y 30-10-2024	BIO FORMATIVE ASSESSMENT Dr Iffat	PEARLS DR. TALAL		PRACTICAL PHYSIO: ACTIVITY, DR. M.ALI BIO: Estimation of A/G ratio graph/calculation Dr Farhan ANA: DUODENUM Dr Hina			SURGERY Surgical Anatomy And Physiology Of Small Intestine Dr.SIDRA	PHYSIO QUIZ DR. M.ALI
THURSDAY 31-10-2024	SURGERY Infective Diseases Of Small Intestine: Dr.SIDRA	RESEARCH Ms Maria		ANATOMY Large Blood Vessels Of GIT Celiac Trunk Dr Aneela SDL			ANATOMY Histology Of Liver DR INAYAT	ANATOMY Liver Dr Hina
FRIDAY 1-11-2024	DIABETI	C WALK		PHYSIO Functions Of Liver 1 DR ADNAN ISLAMIAT MS Uzma			SURGERY Applied Surgical Anatomy Of Liver Dr ABID OWAIS	PHYSIO Functions Of Liver 2 DR. SABA ABRAR

BAQAI MEDICAL COLLEGE 1ST Professional MBBS GIT MODULE WEEK 4





BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE FIRST PROFESSIONAL M.B.B.S. GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

BAQAI MEDICAL COLLEGE 1ST Professional MBBS GIT MODULE WEEK 5

DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00:-1:00	1:00- 1:30	1:30-3:00	3:00-4:30
MONDAY 4-11-2024	PATHO Hepatitis Dr Rozina	SDL		PRACTICAL PHYSIO: ACTIVITY DR BIO: Estimation of A			SURGERY Liver Trauma	BIO Liver Function Test I Dr Farhan
4-11-2024		ANATOMY		ANA: LIVER Dr An	eela		DR.ABID OWAIS	ANATOMY
TUESDAY 5-11-2024	BIO Liver Function Test II Dr Farhan	Development of gall bladder & Pancreas DR TAYYABA		PRACTICAL PHYSIO ACTIVITY Dr S. BIO: Estimation of A, ANA: LIVER Dr A			SDL	Gall bladder Dr Hina
WEDNESDAY 6-11-2024	ANATOMY Model LRC Dr Hina/Dr Aneela	B.SCIENCES DR AZRA		PRACTICAL PHYSIO: ACTIVITY Dr Estimation of A/G rati			SDL	PHYSIO Secretion Of Bile Dr. Ruqaya
THURSDAY 7-11-2024	PHYSIO Functions Of Bile Salts 2 DR ADNAN	PHYSIO Functions Of Bile Salts 1 Dr. Qamer Aziz		SDL	SURGERY Surgical Anatomy Of Gallbladder DR DANISH		BIO Formative Assessment Dr Iffat	ANATOMY pancreas Dr HINA





GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

FRIDAY 8-11-2024	ANATOMY Histology of gall bladder &Pancreas DR INAYAT	SURGERY Surgical Anatomy Of Pancreas & Its Investigations Dr. Abdullah		SDL	ISLAMIAT MS Uzma		SURGERY Features And Diagnosis Of Pancreatitis DR. DANISH	PHYSIO Pancreatic Secretion DR ADNAN
---------------------	--	--	--	-----	---------------------	--	---	--------------------------------------

BAQAI MEDICAL COLLEGE

1ST Professional MBBS GIT MODULE WEEK 6

DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00:-1:00	1:00-1:30	1:30-3:00	3:00-4:30
MONDAY 1111-24	SURGERY Congenital Abnormalities And Injuries To Pancreas DR. BASHEER AHMED	ANATOMY Derivatives Of Hindgut DR. TAYYABA		PRAC PHYSIO:ACTIVITY Dr Mcqs discussio ANA: Histology of Ga DR.AI		SDL	ANATOMY Large Intestine I DR ANEELA	
TUESDAY 12-11-24	SDL	CBL (9:00-10:30) HEPATITIS		PRACTICAL PHYSIO:ACTIVITY Dr Saba Leeza BIO: Mcqs discussion DR IFFAT ANA: Histology of Gall bladder& Pancreas DR.ANEELA			ANATOMY Large Intestine II DR HINA	PHYSIO Movements of colon I Dr. Qamer Aziz
WEDNESDAY 13-11-24	ANATOMY Large Intestine III DR HINA	ANATOMY Histology Of Large Intestine DR INAYAT		PRACTICAL PHYSIO:ACTIVITY Dr Saba Leeza BIO: Mcqs discussion DR IFFAT ANA: Histology of Gall bladder& Pancreas DR HINA			SDL	PHYSIO Movements of colon II Dr. Saba Abrar
	SURGERY Basic Anatomy And	PEARLS		BIO Introduction To	PHYSIO Achalasia And Mega		SDL	BIO FORMATIVE





GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

Principles Of vestigation Of Large ntestinal Symptoms DR. ABDULLAH	DR SAIMA QAMER	Nutrition DR IFFAT	Colon I Dr. M. Ali		ASSESSMENT Dr Farhan
ntestinal Symptoms	DR SAIMA OAMER	DR IFFAT	Dr. M. Ali		Dr Farhan
ntestinal Symptoms	DR SAIMA OAMER				
DR. ABDULLAH	DR SAIMA OAMER				1
	DI SAIMA QAMEN				
COMMUNITY	PHYSIO		ISLAMIAT	SDL	PHYSIO
MEDICINE	Achalasia And Mega	ANATOMY			
Introduction To	Colon II	FORMATIVE			VOMITING &
Micronutrients	Activity	ASSESSMENT			DIARRHEA I
DR NAZIA JAMEEL	Dr. Saba Abrar	DR ANEELA	MS Uzma		Dr. M. Ali
	MEDICINE Introduction To Micronutrients	MEDICINE Achalasia And Mega Introduction To Colon II Micronutrients Activity	MEDICINE Achalasia And Mega ANATOMY Introduction To Colon II FORMATIVE Micronutrients Activity ASSESSMENT	MEDICINE Achalasia And Mega ANATOMY Introduction To Colon II FORMATIVE Micronutrients Activity ASSESSMENT	MEDICINE Achalasia And Mega ANATOMY Introduction To Colon II FORMATIVE Micronutrients Activity ASSESSMENT

BAQAI MEDICAL COLLEGE

1ST Professional MBBS GIT MODULE WEEK 7

DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00:-1:00	1:00-1:30	1:30-3:00	3:00-4:30
MONDAY 18-11-24	BIO Protein Calorie Malnutrition Dr IFFAT	PAEDS ACUTE DIARRHEA Dr Madiha Abid		PRACTICAL PHYSIO: ACTIVITY Dr Saba Leeza BIO :Discussion DR Histology of large in DR.ANEELA	IFFAT ANA:		SDL	PHYSIO VOMITING & DIARRHEA II Prof Dr. Qamer Aziz





GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

	G 1.			$\mathbf{OI}(\mathbf{OII})$. 20
TUESDAY 19-11-24	COMMUNITY MEDICINE Iodine Deficiency Dr Nazia Jameel	PHARMA Overview of pharmacology of emesis Dr Sehrish	Overview of narmacology of emesis ACTIVITY Dr Saba Leeza BIO: Discussion DR IFFAT ANA: Histology of large intestine				PATHO Malabsorption Dr Muhammad Rizwan
WEDNESDAY 20-11-24	MEDICINE Malabsorption Syndrome Dr Masooda	PHARMA Overview of pharmacology of diarrhea Dr Sehrish/Dr Hina Masood	PRACTICAL PHYSIO:ACTIVITY Dr Saba Leeza BIO: Discussion I Histology of large HINA			SDL	ANATOMY Large Blood Vessels Of GIT DR HINA
THURSDAY 21-11-24	PATHO Inflammatory Bowel Diseases Dr Munazza Rashid	SURGERY Etiology And Investigations Of Small And Large Bowel Obstruction Dr. Sidra	COMMUNITY MEDICINE Vitamin A & C Deficiency Dr Nazia Jameel	ANATOMY LRC EMBRYO PRESENTATION DR ANEELA		SDL	ANATOMY FORMATIVE ASSESSMENT DR HINA
FRIDAY 22-11-24	SURGERY Aetiology And Pathology Of Common Large Intestinal Conditions DR. ABDUL GHAFFAR	SDL	SURGERY Surgical Anatomy And Aetiology Of Acute Appendicitis DR.DANISH			ANATOMY Rectum DR ANEELA	PHYSIO FORMATIVE ASSESSMENT Dr Saba Leeza

BAQAI MEDICAL COLLEGE

1ST Professional MBBS

GIT MODULE WEEK 8





					(-) -		GCIDE 2021 2	
DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00:-1:00	1:00- 1:30	1:30-3:00	3:00-4:30
MONDAY 25-11-24	SURGERY Clinical Signs And Differential Diagnosis Of Acute Appendicitis DR.DANISH	SDL		PRACTICAL PHYSIO: ACTIVITY Dr Saba Leeza BIO:ACTIVITY DR FARHAN ANA:Histology of Anus DR.ANEELA			SURGERY The Rectum DR. DANISH	ANATOMY Anal Canal Dr.Hina
TUESDAY 26-11-24	PHYSIO Defecation I Dr.Saba Abrar	SURGERY Surgical Aspects Of Anal Diseases DR.DANISH		PRACTICAL PHYSIO: ACTIVITY Dr Saba Leeza BIO: ACTIVITY DR FARHAN ANA: Histology of Anus DR.ANEELA			SDL	Embryo Presentation Dr Aneela
WEDNESDAY 27-11-24	ANATOMY Peritoneum Dr.Hina	PHYSIO Defecation II Prof Dr. Qamer Aziz		PRACTICAL PHYSIO: ACTIVITY Dr Saba Leeza BIO: ACTIVITY DR FARHAN ANA: Histology of Anus DR HINA			SDL	ANATOMY Rectus Sheet,Inguinal Canal Dr.Aneela
THURSDAY 28-11-24	PHYSIO Formative Assessment Dr.Sobia	BIO ETHICS		ANATOMY LRC Dr. Hina / Dr.Aneela			SDL	ANATOMY Rectus Sheet,Inguinal Canal With Hernias Dr.Hina
FRIDAY 29-11-24	BIO Review class Dr.Iffat			SDL	ISLAMIAT MS Uzma		ANATOMY Review class Dr. Hina/Dr.Aneela	PHYSIO Review class Dr.Sobia





BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE FIRST PROFESSIONAL M.B.B.S. GASTROINTESTINAL TRACT (GIT) MODULE GUIDE 2024-25

BAQAI MEDICAL COLLEGE

1ST Professional MBBS

GIT MODULE EXAM

DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00:-1:00	1:00- 1:30	1:30-3:00	3:00-4:30
MONDAY 2-12-24				GIT MC	DULE EXAM			

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