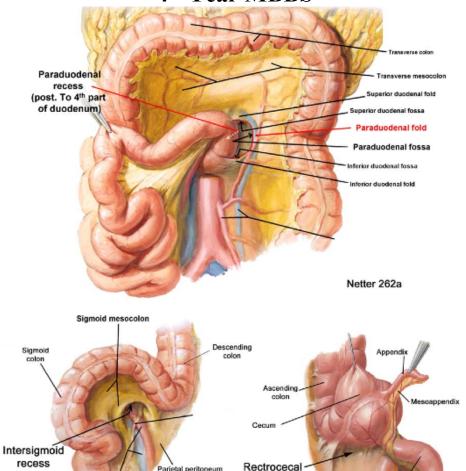
## AIK Medical College Muzaffarabad



### GIT-II (0306) 4<sup>th</sup> Year MBBS



**Module Duration: 2 Weeks** 

recess

Rectum

### **Department of Medical Education**

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#### **Module Team**

Patron in Chief	Prof. Dr. Jamshad Ali
Module Planner	Prof. Dr. Munir Sheikh
Module Coordinator	Dr. Syed Murtaza Gilani
Member/ DME	Dr. Ziyad Afzal Kayani
Member	Dr. Farooq Kiyani
Member	Dr. Adnan Mairaj
Member	Dr. Ali Arshad
Member	Dr. Mohsin Saeed Zia
Secretarial Support	Syed Danish Hussain Shah

#### **RATIONALE**

Gastrointestinal tract is marvel of human body created by Allah subhanawata'lah. It represents superb meaningful structures helping us in digesting, assimilating and nourishing each and every cell. The system also helps us in enjoying, satisfying and gratifying variety of delicious food. The system has many components of innate acquired immune defenses. On the other hand the system components may bethe target of many congenital, genetic and acquired disorders. The system provides a beautiful integration of various basic and clinical disciplines. Through horizontal and vertical integration one comprehends the utmost wisdom behind normal functioning of these organs as well as diseases, signs, symptoms afflicting them. This enables us to render the most appropriate management of various diseases.

The core contents of this module are organized into 8 themes and clinical cases have been provided to achieve our learning objectives logically, coherently and lucidly. Timeline and learning strategies are complemented. Basic pathology related to Digestive System had been taught in 3<sup>rd</sup> year. No attempt will be made to repeat in order to save time. The students may like to revise those topics if they need to do so.

#### **Organization of Module:**

The module is constructed on functional approach considering the entire digestive system as one unit avoiding repetitions. The module consists of seven themes, and three PBLs; each based on a real life situation. Each theme has its explicit Learning Objectives (LOs). The module will employ different modes of instruction, briefly described below. Major emphasis will be on real life patient examination, diagnosis, discussion investigation and management by the students and guided by the faculty.

Each theme in this module is augmented with clinical scenarios. The clinical presentation of themes will give you a clue that how a patient presents in a real life situation and to draw a conclusion from the information given by the patient and signs elicited by your clinical examination. All this information is included in the respective clinical cases. Your daily

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learning activities at the medical college and the hospital would be divided into different slots. Please refer to time table for more details regarding organization of learning activities.

#### **Teaching Strategies:**

The content of this module will be delivered by a combination of different teaching strategies. These include small group discussions (SGD), large group interactive sessions (LGIS), history taking, patient examination, laboratory investigations and tests interpretation, clinic pathological conferences (CPCs), discussions and journal club. Entire curriculum will be delivered by clinical case scenarios each covering a theme. Read the cases and the objectives of the theme which you are supposed to encounter next day, understand and explain the case to yourself and study the relevant information. The students will present clinical cases based on scenarios themselves and display the relevant radiological and pathological features. Following learning/teaching strategies will be used in GIT Module:

#### **Small Group Discussion (SGD):**

Main bulk of the course content will be delivered in small group sessions. Each theme has an associated case. The case will be centered around which learning will take place. Every group will have a facilitator assigned to it. The facilitator will be there to keep you on track, giving you maximum liberty to discuss and achieve the objectives as a group. Small groups will be followed by a wrap up session to standardize learning. Rest of the information will be in the schedule/ time table.

#### **Large Group Interactive Sessions (LGIS):**

LGIS will be employed at times to augment small groups. By and large they will be used to pass on general concepts regarding the theme. Large group instruction will be employed at times sparingly. Attend large group sessions with the following focus:

- > Identify important points.
- Ask questions on concepts not well understood in the text books.
- Measure your learning comprehension

#### **Clinico-Pathological Conferences:**

The students will be required to present cases related to the themes in groups. They will collect the information about the different facets of patient's disease and present to the whole class with the help of appropriate histopathological, radiological and clinical slides. It will be followed by question, answer and discussion.

#### Journal Club:

A research article will be insha Allah provided to the students requiring them to meticulously and critically analyze and highlight its weaknesses and strengths in terms of study design, material methods, results, discussion, conclusion and references

#### **Practical Skills:**

Selection of tests, collection of the specimen, history taking, physical examination and interpretation of specimens/test reports, microscopic slides, culture plates/media examination and radiological images.

#### **Self-Directed Learning (SDL):**

A task will be given in SDL regarding the theme to be discussed before PBL. This will help to prepare you a bit before the theme is under discussion. A few SDLs have been added in between to create an environment for you to search literature as well as to deduce and synthesize information from different sources to meet the learning objectives.

#### Assessment:

In this module, you will have formative and summative assessment. This will give you an idea about the format of the examination that you will go through at the end of the year. This will be followed by feedback on your performance in the exam. Marks obtained in the module examination will contribute 30% (internal assessment) towards end of year Professional University Examination. **There is no re-sit exam for module written assessment and block IPE** under any circumstances. If you miss them, your internal assessment will be recorded as zero. No excuse of any kind is permissible for absence in module or IPE assessment.

Table of Specifications (TOS) GIT II

	1	,
1	Dysphagia	20%
2	Dyspepsia	15%
3	Jaundice	10%
4	Acute abdomen	10%
5	Diarrhea	10%
6	Per rectal bleeding	15%
7	Emaciated lady	20%

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#### **Learning Objectives (LOs)**

#### 1. Dysphagia

At the end of the module students should be able to

- > Describe applied anatomy of mouth, salivary glands, pharynx and esophagus
- > Describe types of cleft lip, its complication and management
- > Describe diagnosis and management of mouth ulcers and stomatitis.
- Enumerate common tumors of oral cavity and give their management.
- > Describe the management of sialadenitis and sialolithiasis.
- Enumerate common salivary gland tumors and give their management.
- > Describe causes, complications and management of tonsillitis and pharyngitis
- > Describe various types of esophagitis, their causes and management of esophagitis.
- Describe pathophysiology of esophageal tumors.
- > Describe the pathophysiology of esophageal achalasia and its complications.
- > Describe the pathophysiology and complications of tracheoesophagial fistula
- Describe the principles of paedriatic surgery.

#### 2. Dyspepsia

At the end of the module students should be able to

- > Describe pathophysiology of gastritis, its morphological types and laboratory diagnosis.
- > Define Gastric atrophy and enlist its complications
- > Describe the pathophysiology of peptic ulcer disease and its complications
- > Draw microscopic picture of Peptic ulcer
- List causes of pyloric stenosis
- > Describe clinical presentations, complications and management of pyloric stenosis
- > Describe pathophysiology of duodenal atresia and its complications.
- > Differentiate between anorexia nervosa and bulimia nervosa
- > Describe various types, pathophysiology and stages of ca stomach

#### 3. Jaundice

At the end of the module students should be able to

- > Describe pathogenesis of cholelithiasis, its complications and management
- ➤ List causes of Liver cirrhosis
- > Describe complications and diagnosis of Liver cirrhosis
- List causes of hemochromatosis
- > Describe pathogenesis of hemochromatosis and its diagnosis.
- List causes of hemosiderosis
- Describe diagnosis and pathogenesis of hemosiderosis
- > Describe the causes, pathogenesis and diagnosis of Wilson's disease
- > Describe the causes, pathogenesis and diagnosis of porphyria
- Describe the etiology, pathophysiology and diagnosis of hyperbilirubinemia.
- Enumerate various types of choledochal cysts and their clinical presentations
- > Describe various types, epidemiology, control and preventive measures for Hepatitis
- List causes of malignant tumors of Liver
- Discuss the pathogenesis of malignant tumors of Liver
- Discuss clinical presentation, grading and staging of malignant tumors of Liver
- List causes of malignant tumors of Gallbladder
- Discuss the pathogenesis of malignant tumors of Gallbladder
- Discuss clinical presentation, grading and staging of malignant tumors of Gallbladder
- ➤ List causes of malignant tumors of Pancreas
- ➤ Discuss the pathogenesis of malignant tumors of Pancreas
- > Discuss clinical presentation, grading and staging of malignant tumors of Pancreas

#### 4. Acute Abdomen

At the end of the module students should be able to

- > Enlist causes of Intestinal obstruction.
- > Compare and contrast between surgical and medical causes of acute abdomen on the basis of their clinical presentation.
- > Describe the etiology and pathogenesis of acute pancreatitis.

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- > Describe Mesenteric cyst, Hirschprung's disease, volvulus and Intussusceptions in terms of their pathophysiology and clinical presentation.
- > Describe the principles of laparoscopic surgery along with its strength and weaknesses

#### 5. Diarrhea/Constipation

At the end of the module students should be able to

- > Define Celiac disease
- > Describe the etiology and pathogenesis of Celiac disease
- > Describe clinical presentation and management of Celiac disease
- Compare and contrast Celiac disease and Tropical spru.
- List the causes of Malabsorption,
- Discuss the pathogenesis of Malabsorption
- > Describe clinical presentation and management of Malabsorption
- Discuss water its sources, uses and health hazards related to polluted water
- > Discuss methods of purification of water and water sampling
- > Discuss epidemiology, control and prevention of cholera
- > Describe epidemiology, control and prevention of diarrhea
- > Discuss food poisoning and its prevention
- Relate antibiotic associated Diarrhea with clostridium Difficile in terms of its clinical presentation and lab diagnosis.
- > Describe the clinical presentation of allovitelline duct and its management
- > Describe the clinical presentation of duplication of gut and its management
- List types of malignant tumors of small intestine.
- > Discuss the pathogenesis of tumors of small intestine.
- > Discuss clinical presentation, grading and staging of malignant tumors of small intestine.

#### 6. Per Rectal Bleeding

At the end of the module students should be able to

- ➤ Define ulcerative colitis
- > Describe the etiology and pathogenesis of ulcerative colitis
- > Describe clinical presentation and management of ulcerative colitis
- > Draw the gross & microscopic picture of ulcerative colitis
- ➤ Define Crohn's disease
- ➤ Describe etiology and pathogenesis of Crohn's disease
- > Describe clinical presentation and management of Crohn's disease
- > Draw the gross & microscopic picture of Crohn's disease
- List causes of malignant tumors of Colon & Rectum.
- Discuss the pathogenesis of malignant tumors of Colon & Rectum.
- ➤ Describe morphology of malignant tumors of Colon & Rectum
- > Discuss clinical presentation ,grading and staging of malignant tumors of Colon & Rectum
- > Describe types of imperforate anus and its clinical presentation
- ➤ Discuss the etiology, pathogenesis, complications and management of Budd Chiari syndrome, angiodysplasia, and thromboembolism in relation to GIT.
- Describe the clinical presentation, investigations and surgical management of Ca colon

#### 7. Emaciated lady

At the end of the module students should be able to

- Describe balanced diet. Illustrate Nutritional requirements of an adult person.
- ➤ Define Adulteration of Food. Describe Nutritional assessment methods
- > Describe the epidemiology, prevalence and preventive measures of Typhoid fever/Paratyphoid Fever
- Enlist food borne Diseases
- Praw the life history of House Fly and explain health hazards associated with housefly
- Describe the epidemiology prevalence and preventive measures of Poliomyelitis
- Describe types, Epidemiology and prevention of Viral Hepatitis

#### PBL-1

Bashir is a 56-year-old man who presents to his physician for regular checkups. On his most recent examination, he is found to have a mild tenderness in right upper quadrant. His medical history is positive for type 2 diabetes, and he states

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that he rarely drinks alcohol. Her mother died at age 67 from complications of type 2 diabetes and his father died at age 64 from liver cancer. Due to his morbid obesity, it is difficult to assess the liver span. There are no signs of ascites. The physical examination, including the neurologic examination, is otherwise normal. The physician includes hepatocellular carcinoma (HCC) on his list of differential diagnoses.

The patient's complete blood cell count was within normal limits except for mild thrombocytopenia characterized by a platelet cell count of  $95,000/\mu L$ . Most parameters measured with the blood chemistry profile were normal. However, serum albumin was slightly below normal limits at 3.4~g/dL, liver function tests showed 3 times the normal levels of aspartate aminotransferase (AST) and alanine aminotransferase (ALT), and total bilirubin level was slightly elevated at 1.4~mg/dL. Prothrombin time/international normalized ratio (PT/INR) test and partial thromboplastin time (PTT) test results were within normal limits. The patient was found negative for any viral hepatitis. Triphasic contrast-enhanced computed tomography (CT) scan of the abdomen and pelvis was performed and showed a single large liver mass measuring 6 cm in diameter characterized by intense arterial enhancement followed by contrast washout in the delayed venous period. No vascular invasion was seen. CT scan of the chest was negative for any pathology.

#### PBL-2

Thirty six year old Rukhsana mother of six children from Chori village presented with progressive pallor and weakness for last six months. She lost ten Kg of weight and now she is feeling so week that she is unable to take care of her family. Her husband is local woodcutter and hardly managing enough money to take care of her family. Their diet mostly comprises of wheat, maize and vegetables. On examination she is greatly emaciated, very pale with koilonychias and angular chilosis. Her pulse is 80/min, B.P 100/60 mm of Hg, weight 38 kg, height is 5.5 feet with marked wasting of muscles. Her Blood CP shows HB 7 gm/dl, MCV 56 fl, Albumin 2.9mg/dl and Alkaline phosphates 700 unit/l.

#### RESOURCE FOR LEARNING

#### **Reference Books**

- 1. ROBBINS BASIC PATHOLOGY 8<sup>TH</sup> ED
- 2. ROBBINS AND CORTAN PATHOLOGY BASIS OF DISEASE WITH SEARCHABLE FULL TEXTONLINE  $8^{\mathrm{TH}}$  ED
- 3. ROBBINS AND CORTAN ATLAS OF PATHOLOGY 2<sup>ND</sup> ED.
- 4. ROBBINS AND COTRAN REVIEW OF PATHOLOGY 3<sup>RD</sup> ED
- 5. BRS PATHOLOGY
- 6. MEDICAL MICROBIOLOGY BY JAWETZ, MELNICK & ADELBERG'S  $25^{TH}$  EDITION
- 7. CLINICAL PHARMACOLOGY BY KATZUNG
- 8. RANGE AND DALE'S PHARMACOLOGY WITH ONLINE ACCESS  $7^{TH}$  ED
- 9. MCQS IN PHARMACOLOGY WITH EXPLANATORY ANSWER
- 10. PARIKH FORENSIC MEDICINE.
- 11. PUBLIC HEALTH & COMMUNITY MEDICINE BY MUHAMMAD ILYAS.
- 12. PREVENTIVE&SOCIAL MEDICINE BY K. PARK/JE PARK
- 13. PARK BOOK OF COMMUNITY MEDICINE

#### Web Links

Following online medical dictionaries can be referred www.nlm.nih.gov www.medterms.com www.bloodmed.com www.online-medical-dictionary.org www.medscape.com www.ipathology.com www.cdc.com

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## AJK Medical College, Muzaffarabad Schedule for GIT-II – 4<sup>th</sup> Year MBBS

#### Week-1

TIME	Monday	Tuesday	Wednesday	Thursday	Friday
8:00am- 9:00am	LGIS Introduction to GIT Module Module Team	LGIS Water purification on small and large scales Brig® Ahmed Khan/Dr. Uzma Hafeez	SGD Tumors of oral cavity & Salivary gland	LGIS Cholelithiasis and cholecystitis Prof.Dr. Sarosh	LGIS Management of Acid Peptic Disease Prof.Dr.Javaid Rathor
9:00am- 10:00am	LGIS Mouth ulcer & Stomatitis Dr. Maj. Shahid	LGIS Water Sampling and Surveillance Dr.Uzma Hafeez/ Dr. Murtaza Gillani	tumors Prof.Dr. Sarosh & Team-3 Wrap-up Prof.Dr. Sarosh	LGIS Management of Acute Diarrhea Dr. Tahir Aziz	LGIS Water Related diseases Prof.Brig®. Ahmed Khan /Dr.Murtaza Gilani
10:30am- 11:30pm					Tea Break LGIS Stress related GIT symptoms Dr. Ayesha
11:30pm- 12:30pm	CLINICAL ROTATION	CLINICAL ROTATION	CLINICAL ROTATION	CLINICAL ROTATION	LGIS Enteric fever & its Prevention Prof.Brig®. Ahmed Khan /Dr. Zehra Batool
12:30 pm 1:30pm					SDL
•		Lunch &	Real Prayer Break		
2:00pm- 3:00pm	PBL-1A Prof.Dr. Munir and team	LGIS Achalasia, esophageal tumors Prof.Dr. Anwar	LGIS  Obstructive jaundice Dr. Adnan Mehraj	SGD Gastritis & Peptic	
3:00pm- 4:00pm	<u>LGIS</u> Cirrhosis <b>Dr.Wafa</b>	LGIS Water sources/uses/ pollution & its Hazards /water quality criteria Prof.Brig®. Ahmed Khan	LGIS Hyperbilirubinemia Dr.Wafa	ulcer Prof. Dr. Anwar & Team-3 Wrap-up Prof.Dr. Anwar	SDL

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# AJK Medical College, Muzaffarabad Schedule for GIT-II – 4<sup>th</sup> Year MBBS Week-2

TIME	Monday	Tuesday	Wednesday	Thursday	Friday	
8:00am- 9:10am	LGIS Epidemiology & prevention of Diarrheal Diseases Prof. Ahmed Khan/ Dr. Uzma	LGIS Epidemiology and prevention of Poliomyelitis Prof.Brig® Ahmed Khan/Dr.Murtaza Gilani	LGIS Epidemiology and preventive strategies of entrobius vermicularis, Ascaris lumbriocoid & encylostoma duodenale Dr. Uzma, Sarwat, & Sammia Manzoor	LGIS Epidemiology and preventive strategies of various types of tape worms, anoebiasis and giardiasis. Dr. Zahra Batool/ DrMurtaza Gillani	LGIS Water Disinfection Dr. Uzma Hafeez/Dr. Sarwat,	
9:10am- 10:00am	LGIS Ca Stomach Dr. Anwar Ul Haque					
		Tea Break10	0:00 to10:30			
10:30am- 12:30pm	Clinical rotation	Clinical rotation	Clinical	Clinical		
12:30am- 1:30pm	Chincal I otation	Chilical Fotation	rotation	rotation		
Lunch & Prayer Break						
2:00pm- 4:00pm	PBL 1-B Prof.Dr.Munir					

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# AJK Medical College, Muzaffarabad Schedule for GIT-II –4<sup>th</sup> Year MBBS Week-3

Time	Monday	Tuesday	Wednesday	Thursday	Friday	
8:00a m- 10:00a m	Holiday	y <u>Holiday</u>	LGIS Hemorrhoids & Anal Tumors Prof.Dr. Anwar	LGIS Acute Abdomen Dr.Adnan Mehraj	SGD Epidemiology,prev ention and control of Hepatitis	
9:00a m- 10:00a m			Practical Horrock's Apparatus Team-4 (CM&PH)	LGIS Tumors of Gall Bladder & liver Prof.Dr.Anwar	Faculty of Community Medicine Wrap up Dr.Murtaza Gilani	
10:30a m- 12:30p m			CLINICAL ROTATION	CLINICAL ROTATION	LGIS Hemosiderosis, Wilson disease, porphyria Dr. sobia irum PBL 2-A Dr.Javaid Rathore	
1		Lunch	& Prayer Brea	k		
2:00p m- 3:00p m			LGIS Tumors of small intestine Prof.Dr. Anwar ul Haque	LGIS Balance Diet Brig® Dr. Ahmed Khan /Dr.Uzma Hafeez	DCA	
3:00p m- 4:00p m		<u>Holiday</u>	SGD Chronic Pancreatitis & Carcinoma Pancreas Dr. Sarosh & Team-3 Wrap-up Dr. Sarosh Majid	LGIS Inflammatory Bowel Disease & Hirschsprung's Disease Dr. Anwar/Dr.Khalid	Water - born diseases	

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## AJK Medical College, Muzaffarabad Schedule for GIT-II 4<sup>th</sup> Year MBBS

#### Week-4

TIME	Monday	Tuesday	Wednesday	Thursday	Friday	
8:00am - 9:00am	Written Assessment (SPS-II & RES-III Modules) Time (8:00 to 11:00 am)	LGIS Tumors of Large Intestine Dr. Anwar ul Haque	LGIS Intestinal obstruction Dr.Adnan Mairaj	LGIS Ca. colon Dr. Anwar ul Haque	LGIS Malabsorption syndrome Dr. Abdul Ghaffar Nagi	
9:00am -11:00 am		LGIS Cholera and Food Poisoning Dr.Samia	LGIS House Fly Related Health Hazards Brig® Dr. Ahmed Khan	LGIS  Surgical Infections Prof. Dr. Nizam ud din	LGIS Nutritional assessment Prof. Brig® Ahmed/ Dr. Uzma Hafeez	
11:15a m- 1:30p m	CLINICAL ROTATION	CLINICAL ROTATION	CLINICAL ROTATION	CLINICAL ROTATION	LGIS Clostridium Difficile Diarrhea Dr. Munir Ahmed Sheikh	
Lunch & Prayer Break						
2:00p m- 4:00p m	PRACTICAL Pathology	PRACTICAL Pathology	PRACTICAL Pathology	PBL 2-B Dr.Javaid Rathore and Team	SDL	

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Inquires & trouble shooting

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