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# STUDY GUIDE

**KGMC**

GENERAL SURGERY MODULE

This Study guide of the  
.....outlines the key  
components and areas for the  
facilitation of the students.

**Department of Medical Education**

## Vision and Mission of KGMC

### Khyber Medical University: Vision



Khyber Medical University will be the global leader in health sciences academics and research for efficient and compassionate health care.

### Khyber Girls Medical College: Vision



Khyber Girls Medical College will promote health care leaders that are critical thinker, ethical, research oriented, culturally and professionally competent

### Khyber Girls Medical College: Mission



To develop competent health care leaders by ensuring appropriate policies, procedures which reflect ethical, cultural, community orientated and evidence based practices to achieve best possible health outcomes for society at large.

## Curriculum Committee KGMC

### Chair:

Professor Dr. Muhammad Noor Wazir, Dean KGMC.

### Co-Chair:

Dr. Sabina Aziz, Associate Dean KGMC.

### Clinical Sciences:

- Dr. Said Amin Department of Medicine KGMC/HMC.
- Dr. Sofia Iqbal, Department of Ophthalmology KGMC/HMC.
- Dr. Ghareeb Nawaz Department of ENT KGMC/HMC.
- Dr. Bushra Rauf Department of Gynae KGMC/HMC.
- Dr. Jamshed Alam Department of Surgery KGMC/HMC.
- Dr. Ambreen Ahmad, Department of Pediatrics KGMC/HMC.
- Dr. Ain-ul-Hadi Department of Surgery KGMC/HMC.
- Dr. Fawad Rahim Department of Medicine KGMC/HMC.

### Behavioral Sciences:

- Dr. Ameer Abbas Department of Psychiatry KGMC/HMC.

### Medical Education

- Dr. Naheed Mahsood, Department of Medical Education, KGMC.
- Dr. Naveed Afzal Khan, Department of Medical Education, KGMC.

### Basic Sciences:

- Dr. Khalid Javed Department of Pathology, KGMC.
- Dr. Zubia Shah Department of Physiology, KGMC.
- Dr. Amin-ul-Haq Department of Biochemistry, KGMC.
- Dr. Naheed Siddique Department of Forensic Medicine, KGMC.
- Dr. Shams Suleman Department of Pharmacology, KGMC.
- Dr. Raheela Amin Department of Community Medicine, KGMC.
- Dr. Shahab-ud-Din, Department of Anatomy, KGMC.

## **Module committee**

### **Module coordinator**

**Dr. Siddique Ahmad**

**Associate Professor Surgical “A” Unit MTI/HMC Peshawar**

### **Module Head of Assessment**

**Dr. Liaquat Ali**

**Associate Professor of Urology IKD MTI/HMC Peshawar**

### **Module Secretary**

**Dr. Jamshed Alam**

**Associate Professor Surgical “B” Unit MTI/HMC Peshawar**

### **Members**

**Dr. Muhammad Shah**

**Assistant Professor Surgical “C” Unit MTI/HMC Peshawar**

## **Outcomes of the curriculum:**

**PMDC** now called **PMC** is the main governing body of medical education in Pakistan producing seven star doctors. These competencies are

1. Knowledgeable
2. Skillful
3. Professional and a role model
4. Critical thinker
5. Researcher
6. Leader
7. Community health promoter

### **KNOWLEDGE**

By the end of five year MBBS program the KGMC student should be able to;

1. Acquire a high level of clinical proficiency in history taking, physical examination, differential diagnosis, and the effective use of medicine's evolving diagnostic and procedural capabilities including therapeutic and palliative modalities
2. Manage the common prevalent diseases in community
3. Identify the common medical emergencies
4. Develop plan for prevention of common community diseases
5. Formulate a referral plan
6. Compose a prescription plan

### **PSYCHOMOTOR**

By the end of five year MBBS program the KGMC student should be able to;

1. Demonstrate the ability to perform the disease specific relevant examination
2. Respond to common medical emergencies
3. Master the skill of first aid
4. Perform BLS
5. Apply the best evidenced practices for local health problems

## **AFFECTIVE**

By the end of five year MBBS program the KGMC student should be able to

1. Relate to patient and careers vulnerability
2. Demonstrate ethical self-management
3. Counsel and educate patients and their families to empower them to participate in their care and enable shared decision-making.
4. Display compassion with patient and colleagues
5. Demonstrate in clinical care an understanding of the impact of psychological, social, and economic factors on human health and disease

## **PM & DC CURRICULUM FOR UROLOGY**

Course Contents (Syllabus) Following basic syllabus is recommended: -

- To Attain Core Knowledge of & Apply Principles of Surgery as listed below:

### **Genito- Urinary Tract**

1. Common congenital anomalies.
2. Infection & its sequelae.
3. Calculus Disease and its sequelae.
4. Bladder pathologies.
5. Enlarged prostate.
6. Urogenital Trauma.
7. Neoplasms of Urinary Tract.
8. External Genitalia, Scrotal and testicular pathologies
  - a. Developmental abnormalities.
  - b. Scrotal swelling.
  - c. Testicular swelling.
  - d. Common Pelvic conditions.

## CURRICULUM OF UROLOGY FOR (KGMC)

### Genito- Urinary Tract

1. Common congenital anomalies.
  - a. Congenital Pelviureteric Junction Obstruction
  - b. Renal Fusion ( Horse shoe Kidney)
  - c. Vesicoureteric Reflux Disease
  - d. Posterior urethral valves
  
2. Infection & its sequelae.
  - a. Non specific UTI
  - b. Specific UTI e.g. Genitourinary Tuberculosis
  - c. UTI in Pregnancy
  
3. Calculus Disease and its sequelae.
  - a. Renal stones
  - b. Ureteric stones
  - c. Bladder stones
  
4. Bladder pathologies.
  - a. Specific Infections
  - b. Neurogenic bladder
  
5. Enlarged prostate.
  - a. BPH
  - b. Prostatitis
  
6. Urogenital Trauma.
  - a. Renal Trauma
  - b. Bladder Trauma
  - c. Ureteric trauma esp Iatrogenic Trauma
  - d. Urethral trauma
  - e. Genital Trauma

7. Neoplasms of Urinary Tract.
  - a. Renal cell carcinoma
  - b. Urothelial Carcinoma of Bladder
  - c. Adenocarcinoma Prostate
  - d. Testicular Tumor
8. External Genitalia, Scrotal and testicular pathologies
  - e. Developmental abnormalities.  
Hypospadias
  - f. Scrotal swelling.  
Hydrocele, Spermatocele, varicocele
  - g. Testicular swelling.  
Tumor  
Infections
  - h. Common Pelvic Conditions

## **MODULES FOR UROLOGY**

1. Dysuria and Fever
2. Blood in Urine
3. Flank Pain
4. Lower urinary tract symptoms and Bladder outlet Obstruction,
5. Scrotal Swelling
6. External genitalia deformity



### CORE COMPETENCY TABLE FOR UROLOGY KGMC

Parameter	Percentage	Characteristic	Example
<b>Very Essential</b>	20 %	The student after MBBS must be able to treat it as emergency	Initial Resuscitation of Trauma Bladder Decompression
<b>Essential</b>	55%	The student after MBBS must be able to diagnose and treat independently	Simple and Complicated UTI Medical management of BPH
<b>Important</b>	20%	The student after MBBS must be able to diagnose and refer the case to urologist	Uro-cancers Surgical management of Urolithiasis Iatrogenic trauma
<b>Rare</b>	5 %	Should know the disease	Rare syndromes and its relations

# UROLOGICAL COMPETENCIES FOR MBBS STUDENTS OF KGMC

## *BE ABLE TO DIAGNOSE AND MANAGE INDEPENDENTLY*

1. Urinary tract infections
2. Medical management of acute episodes of Urolithiasis
3. Assessment and Diagnosis of patient for BPH
4. Medical management of BPH
5. Emergency conservative treatment of patient of Blunt renal trauma
6. Bladder decompression by Urethral catheterization
7. Supra pubic catheterization

## BE ABLE TO MAKE A PROVISIONAL DIAGNOSIS AND REFER APPROPRIATELY

1. Urinary Bladder Tumor
2. Renal Tumor
3. Adenocarcinoma Prostate
4. Indications for surgical management of Prostate
5. Intervention for Urolithiasis
6. Acute Scrotum
7. PUJ Obstruction
8. Neurogenic bladder
9. Vesico ureteric reflux

## MODULE NO 1

**Theme:**

**Fever and Dysuria**Topic to be covered:

Non specific UTI

Recurrent UTI

Genitourinary

Tuberculosis

**MIT:**

SGD

Case base Discussion

Large Group Format

**Assessment:**

MCQ

TOACS

Plenary Theme	Learning Outcomes	Bloom's Taxonomy	Mode of Information transfer (MIT)	Contents	Evaluation
Fever and Dysuria	<p>At the end of this module, the student will be able to:</p> <ol style="list-style-type: none"> <li>1. Enlist Differential Diagnosis of fever with Rigors and chills associated with Dyscuria,</li> </ol> <p><b><u>Urinary Tract Infection</u></b></p> <ol style="list-style-type: none"> <li>2. Outline the prevalence and socioeconomic impact of adult UTI.</li> <li>3. List the important host and bacterial characteristics associated with a clinically important UTI.</li> <li>4. Name the most common gram negative and gram positive bacteria associated with adult UTI.</li> <li>5. List methods</li> </ol>	<p>Knowledge</p> <p>Knowledge</p> <p>Knowledge</p>	<p><b>Large group format</b></p> <p><b>Small group Discussions (SGDs)</b></p> <p><b>Case based Discussions</b></p>	<p>(Overview of UTI, Risk factors, Microbiology ,complicate and non complicated UTI, Stamey Classification, clinical features and management protocol</p> <ul style="list-style-type: none"> <li>• Interpretation s of urine RE, Radiological and laboratory investigatios</li> <li>• Stamey classification of recurrent infections</li> <li>• Causes of recurrent UTI with special emphasis on VUR, PUV</li> <li>• Urosepsis</li> <li>• Complications of UTI like pyonephrosis, Emphsematous pyelonephritis</li> <li>• UTI in Pregnancy</li> </ul>	<p>MCQs</p> <p>MCQs n TOACS</p> <p>MCQs n TOACS</p>

	<p>of urine collection and the advantages of each.</p> <p>6. Describe the different signs and symptoms associated with upper tract and lower tract adult UTIs.</p> <p>7. Interpret the findings of urin RE in UTI</p> <p>8. Describe the differences between complicated and uncomplicated adult UTI.</p> <p>9. List indications and use of imaging modalities in the diagnosis of adult UTI.</p> <p>10. Enumerate the 5 common congenital anomalies for recurrent UTI.e VUR,PUV, PUJO, Megaureters ,Meatal stenosis</p> <p>11. Outline treatment principles of both complicated</p>	<p><b>Psychomotor or domain</b></p> <p><b>Attitude</b></p>			
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	<p>and uncomplicated adult UTIs.</p> <p>12. Patient examination with PCN tube</p> <p>13. Care of catheters</p>				
<b>Plenary Title</b>	<b>Learning Outcomes</b>	<b>Bloom's Taxonomy</b>	<b>Mode of Information transfer (MIT)</b>	<b>Contents</b>	<b>Evaluation</b>
Specific UTI Genito-urinary TB	<p>The student must be able to:</p> <ol style="list-style-type: none"> <li>1. Discuss the raising prevalence of GUT</li> <li>2. Identify the salient clinical features of GU TB</li> <li>3. Enlist the radiological findings of contrast studies related to GU TB</li> </ol> <ul style="list-style-type: none"> <li>• Identify Sterile Pyuria and make DDs of Sterile Pyuria</li> <li>• Describe ATT Protocols</li> <li>• Enlist</li> </ul>	Knowledge	SGDs	<p>Emphasis on high prevalence of GUT in Pakistan</p> <p>Clinical features, Radiological findings, Role of AFB, sterile pyuria</p> <p>Updates on recent investigating modalities like Urinary PCR</p> <p>Different treatment regimens of ATT</p> <p>Indications of surgery in special scenario</p>	MCQs

	surgical indications for GU TB				
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**MODULE NO 2**

**Theme:** **Blood in Urine (Hematuria)**

**Topic to be covered:** Gravity of Hematuria Bladder Cancer Renal Tumor  
Genito urinary Trauma

Plenary Theme	Learning Outcomes	Bloom's Taxonomy	Mode of Information transfer (MIT)	Content	Evaluation
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**MIT:** SGD  
Case base Discussion  
Large Group Format

**Assessment:** MCQ  
TOACS



Blood in Urine	<p><u>At the end of one week of this module, the student will be able to:</u></p> <ol style="list-style-type: none"> <li>1. Identify the gravity of gross hematuria as salient feature of underlying malignancy</li> <li>2. Demonstrate difference between painless and painful hematuria</li> <li>3. Make at least 4 to 5 DDs</li> <li>4. Discuss the evaluation of hematuria</li> <li>5. Identify risk factors that increase the likelihood of finding malignancy during evaluation of hematuria</li> </ol>	Knowledge	<b>Small group Discussions (SGDs)</b>	<ul style="list-style-type: none"> <li>• Overview of Microscopic and Gross Haematuria</li> <li>• Importance of painful and painless haematuria</li> <li>• Differential Diagnosis keeping in mind the importance of gender, age, occupational hazard, shape of clots</li> </ul>	MCQs
	<p><b><u>Bladder Tumor (Urothelial Carcinoma)</u></b></p> <ol style="list-style-type: none"> <li>6. Identify specific risks especially smoking in development of Bladder cancer</li> <li>7. Differentiate between bladder cancer and upper tract TCC and RCC on history</li> <li>8. Plan the evaluation of Haematuria</li> <li>9. Discuss and interpret the Investigation for TCC</li> <li>10. Understand the importance of Cystoscopy in</li> </ol>	Knowledge	<b>Case based Discussions</b>	<ul style="list-style-type: none"> <li>• Taking History of Patients with Haematuria</li> <li>• Patient examination</li> <li>• Investigation and interpretation</li> <li>• Planning Management</li> </ul>	MCQs n TOACS MCQs n TOACS MCQs
				<b>SGD/ Case base Discussion</b>	<ul style="list-style-type: none"> <li>• Prevalence, etiology and pathogenesis of bladder cancers</li> <li>• Hallmark clinical features of Bladder cancer</li> <li>• Relation with smoking and occupational hazard</li> <li>• Relevant investigation for diagnosis</li> </ul>

				and staging	
	<p>diagnosis and management of TCC</p> <p>11. Should be able Pass three way urethral catheter and start Irrigation</p> <p>12. Perform scrubbing and observe in Cystoscopy in OT</p> <p>13. Break bad News of Bladder cancer</p> <p>14. Council the patient for Catheterization and Cystoscopy</p> <p><u>Renal Tumor</u></p> <p>15. Identify the risk factors in etiology of Renal tumor</p> <p>16. Make DDs</p> <p>17. Identify the salient features of Renal tumor , Paraneoplastic conditions associated with RCC</p> <p>18. Should understand the importance of diagnostic modalities like USG, CT Scan etc</p> <p>19. Discuss treatment options</p> <p>20. Abdominal examination especially renal mass</p> <p>21. Scrubbing and observing Nephrectomy</p> <p>22. Break bad News</p>	<p><b>Skills</b></p> <p><b>Attitude</b></p> <p><b>Knowledge</b></p>		<ul style="list-style-type: none"> <li>• Management plan especially cystoscopy and TURBT</li> <li>• Formulation of proper referral plan</li> </ul> <p><u>Renal Tumor</u></p> <ul style="list-style-type: none"> <li>• Prevalence, etiology and pathogenesis of RCC</li> <li>• Hallmark clinical features of Renal tumor</li> <li>• Relation with smoking and familial</li> <li>• Relevant investigation for diagnosis and staging</li> <li>• Management plan</li> </ul>	<p>MCQs</p> <p>MCQs n TOACS</p> <p>MCQs n TOACS</p>

	<p>of Renal tumor 23. Council the patient for Radical Nephrectomy</p> <p><u>Urogenital trauma</u></p> <ol style="list-style-type: none"> <li>1. Discuss the importance of Haematuria in trauma especially renal and bladder trauma</li> <li>2. Differentiate between Haematuria and Bleeding per urethra</li> <li>3. Enumerate the relevant investigations and Radiological investigations</li> <li>4. Plan the general and specific management</li> <li>5. Identify serious patient in emergency room</li> <li>6. Perform Primary and secondary survey</li> <li>7. Able to demonstrate ABC of the patient / Simulator</li> <li>8. Council the patient for emergency nephrectomy</li> </ol>	<p><b>Psychomotor domain</b></p> <p><b>Attitude Domain</b></p> <p><b>Knowledge</b></p> <p><b>Psychomotor Domain</b></p> <p><b>Attitude</b></p>			
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**MODULE NO 3**

**Theme:** Flank pain

**Topic to be covered:** Urolithiasis

PUJ obstruction Renal Tumor

**MIT:** SGD

Case base Discussion

Plenary Theme	Learning Outcomes	Bloom's Taxonomy	Mode of Information transfer (MIT)	Contents to be taught	Evaluation
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Large Group Format

**Assessment:** MCQ

TOACS

Flank Pain	<p><u>At the end of one week of this module, the student will be able to:</u></p> <ol style="list-style-type: none"> <li>1. Understand the importance of Flank pain</li> <li>2. Make at least 3 differential diagnosis</li> <li>3. Enlist the investigation tools</li> <li>4. Interpret the investigations tools</li> </ol>	Knowledge	Small group Discussions (SGDs)	<p>Overview of different characteristic of flank pain How to differentiate between renal and non renal pain</p>	MCQs
	<p><b>UROLITHIASIS</b></p> <ol style="list-style-type: none"> <li>1. List the major risk factors for the most common types of kidney stones.</li> <li>2. Contrast differences between the clinical presentations of acute renal colic versus an acute abdomen.</li> <li>3. Name the five most common kidney stone chemical compositions and describe the recommended medical prophylaxis options for each of them.</li> <li>4. Describe the best imaging study to diagnose kidney and ureteral stones.</li> </ol>	Knowledge	Case based Discussions	<p>Taking History of Patients with Flank pain special emphasis on past, family, social, Personal and dietary history Patient examination Investigation and interpretation Planning Management Details of all relevant investigations especially USG, X Ray KUB, IVU,CTUrogram Management including expectant, medical and surgical Brief detail of commonly performed endoscopic and open surgical procedures</p>	<p>MCQs n TOACS</p> <p>MCQs n TOACS</p> <p>MCQs</p> <p>MCQs n TOACS</p> <p>MCQs n TOACS</p>

	<p>5. Describe three types of medications that are effective for relief of renal colic pain.</p> <p>6. List three clinical situations that warrant urgent surgical decompression of a ureteral stone.</p> <p>7. List two types of medications that may help medical expulsion therapy of a distal ureteral stone.</p> <p>8. List the three common surgical techniques to manage renal and ureteral stones that fail to pass with observation.</p> <p>9. Identify the factors that help predict the likelihood of spontaneous stone passage.</p> <p>10. Chart out the prevention of stones</p> <p>11. Observe and Assist USG Guided Percutaneous Nephrostomy Insertion</p> <p>12. Perform PCN Tube</p>	<p><b>Knowledge</b></p>	<p>SGD/ Case base Discussion</p>		<p>MCQs</p> <p>MCQs n TOACS</p> <p>MCQs n TOACS</p>
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	DJ stent removal				
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	<p>13. Counsel the patient for dietary modification in prevention of stone disease</p> <p><b><u>PUJ Obstruction</u></b></p> <ol style="list-style-type: none"> <li>1. Able to Differentiate clinically between urolithiasis and PUJO</li> <li>2. Enumerate 2 radiological investigation</li> <li>3. Discuss the findings of Renal scan</li> <li>4. Discuss Evaluation and Management plan</li> <li>5. Enlist different surgical options</li> <li>6. Assists in Pyeloplasty</li> </ol> <p><b><u>Renal Tumor</u></b></p> <ol style="list-style-type: none"> <li>24. Identify the risk factors in etiology of Renal tumor</li> <li>25. Make DDs</li> <li>26. Identify the salient features of Renal tumor , Paraneoplastic conditions associated with RCC</li> </ol>	<p><b>Attitude Domain</b></p> <p><b>Knowledge</b></p> <p><b>Psychomotor</b></p> <p><b>Knowledge</b></p>	<p>SGD/ Case base Discussion</p>	<p>Clinical features, Diagnosis and Management of PUJ obstruction</p> <p>Mentioned in Module 2</p>	
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	<p>27. Should understand the importance of diagnostic modalities like USG, CT Scan etc</p> <p>28. Discuss treatment options</p> <p>29. Abdominal examination especially renal mass</p> <p>30. Scrub and Assist in Radical Nephrectomy in OT so as to be able to identify renal vein, artery and ureter</p> <p>31. Break bad News of Renal tumor</p> <p>32. Council the patient for Radical Nephrectomy</p>	<p><b>Psychomotor</b></p>			
		<p><b>Attitude</b></p>			

## **MODULE NO 4**

**Theme:** **Difficulty in micturition & Urinary retention**

**Topic to be covered:** BPH  
Ca Prostate  
Bladder Stone  
Urethral stricture

**MIT:** SGD  
Case base Discussion  
Large Group Format

**Assessment:** MCQ  
TOACS



	<p>components of the history when interviewing a patient with BPH</p> <p>7. List the important</p>				
	<p>components of the physical exam of a patient with BPH</p> <p>8. Summarize the laboratory, radiologic, or urodynamic tests, if any, that should be ordered in a patient with BPH</p> <p>9. List the indications for treatment of BPH</p> <p>10. List the medical and surgical treatment options for BPH.</p> <p>11. Describe when a patient with BPH should be referred to a urologist</p> <p>12. Perform the DRE and differentiate between benign and abnormal prostate</p> <p>13. Scrubbing and Steralization</p> <p>14. Able to remove the catheter</p> <p>15. Structured</p>	<p><b>Knowledge</b></p>	<p>SGD/ Case base Discussion</p>	<p>MCQs</p> <p>MCQs n TOACS</p> <p>MCQs n TOACS</p>	
		<p><b>Psychomotor domain</b></p>			
		<p><b>Attitude</b></p>			

	<p>IPSS History</p> <p><b>Adenocarcinoma</b></p> <p><b>Prostate</b></p> <ol style="list-style-type: none"> <li>1. Identify and name the basic anatomic zones of the prostate gland, including</li> </ol>				
	<ol style="list-style-type: none"> <li>the locations where prostate cancer develops</li> <li>2. Describe the physiologic role of the prostate – “what does the prostate do?”</li> <li>3. Describe the distinctive epidemiological features of prostate cancer</li> <li>4. Understand the controversy surrounding the use of serum PSA as a screening tool for prostate cancer</li> <li>5. List the signs &amp; symptoms of prostate cancer</li> <li>6. Describe the natural history and the common patterns of progression of prostate cancer</li> <li>7. List the major components in the staging of prostate cancer</li> <li>8. Briefly describe the treatment</li> </ol>	<p><b>Knowledge</b></p>	<p>Case base Discussion</p>		



	<p>surgery</p> <p><u>Urethral Stricture</u></p> <ol style="list-style-type: none"> <li>1. Enumerate the etiology of urethral stricture</li> <li>2. Discuss the Clinical features</li> <li>3. Write investigations</li> <li>4. Pick the positive findings on RUG</li> <li>5. Construct the management plan in step ladder pattern</li> </ol>	<b>Knowledge</b>			
	<ol style="list-style-type: none"> <li>6. Scrubbing and Observe suprapubic catheterization</li> <li>7. Remove suprapubic catheter and apply ball dressing</li> <li>8. Counsel patient for urethropl</li> </ol>	<p><b>Skills</b></p> <p><b>Attitude</b></p>			

**Module 5**

**Theme:** **Acute Scrotum/ Scrotal swelling**

**Topic to be covered:** Torsion testis  
Epidydmorchitis  
Hydrocele  
Testicular tumor  
Scrotal trauma  
Hernia

**MIT:** SGD  
Case base Discussion

**Assessment:** MCQ  
TOACS





## **Module 6**

**Theme:** **External Genitalia deformities**

**Topic to be covered:** Developmental anomalies

Hypospadias

Undescended testis

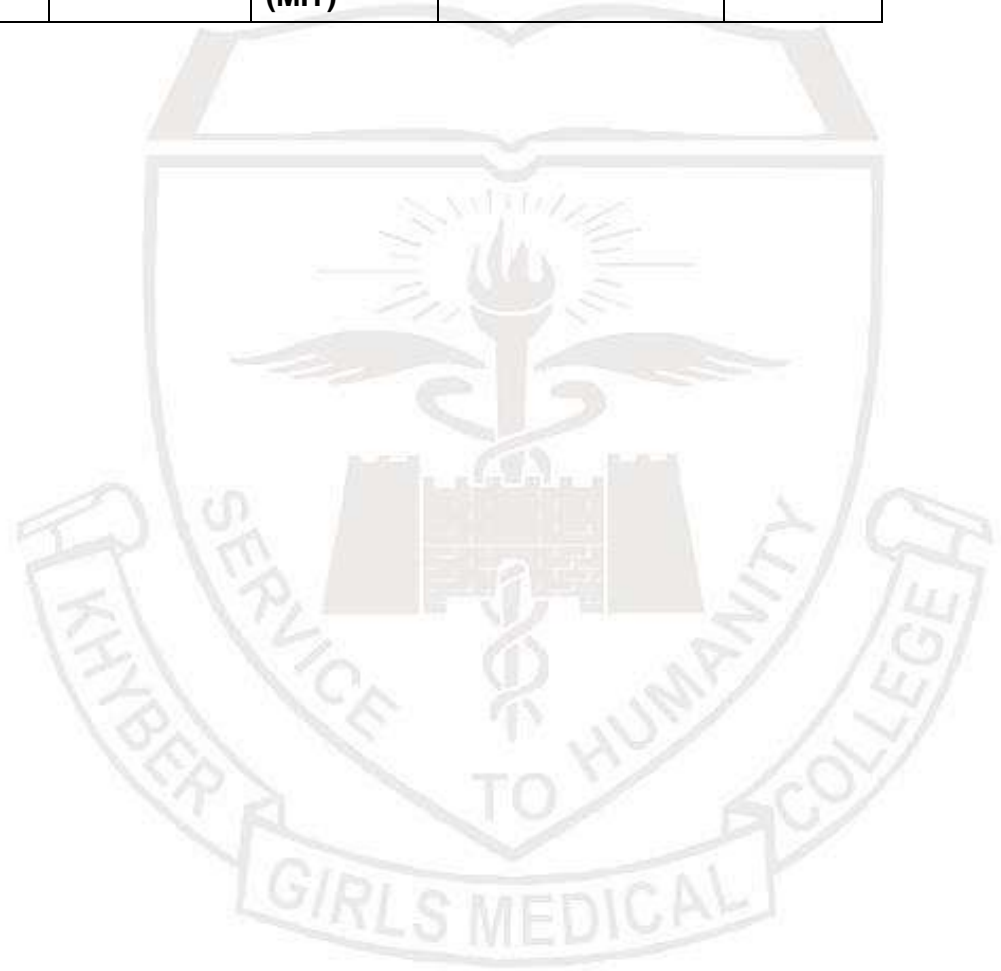
**MIT:** SGD

Case base Discussion

**Assessment:** MCQ

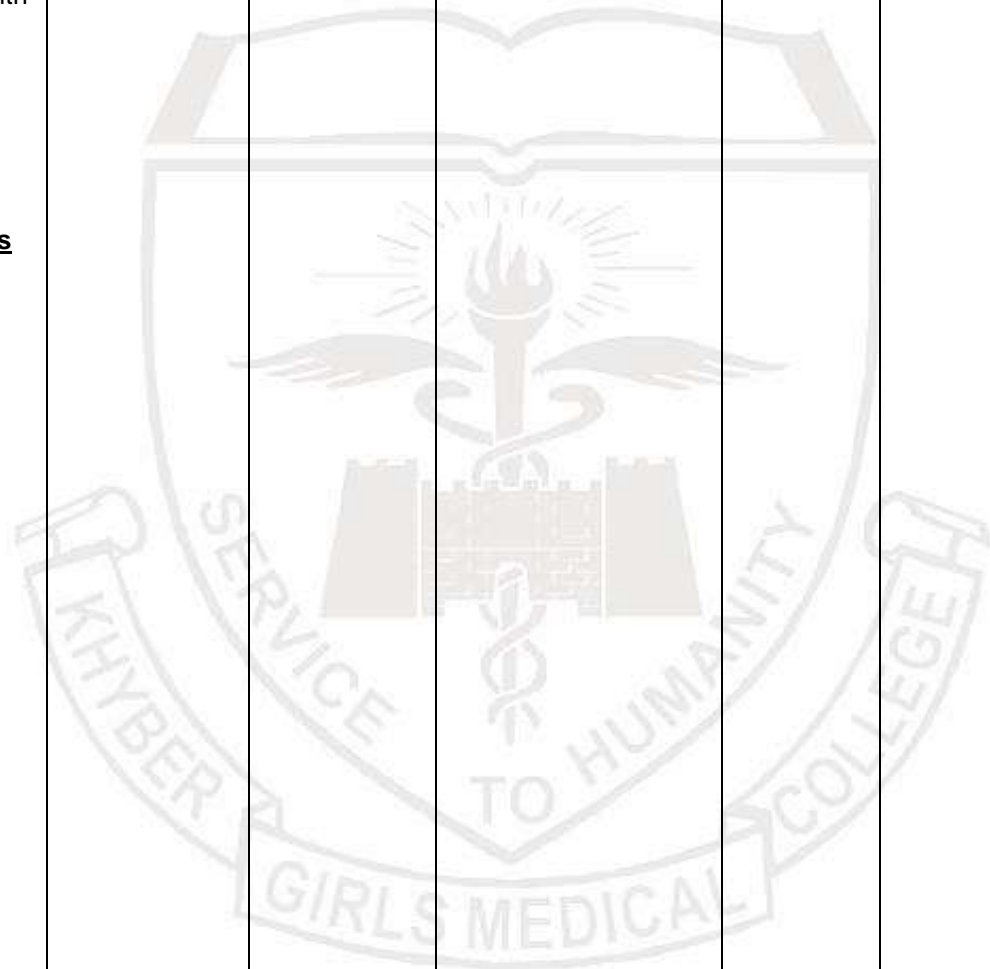
TOACS

Plenary Theme	Learning Outcomes	Bloom's Taxonomy	Mode of Information transfer (MIT)	Contents to be taught	Evaluation
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<p>Deformities of external genetelia</p>	<p>At the end of one week of this module, the student will be able to:</p> <ol style="list-style-type: none"> <li>Describe common deformities like UDT, Ectopic testis, hypospadias, epispadias</li> </ol> <p><b>Undescended Testis</b></p> <ol style="list-style-type: none"> <li>Distinguish clinically between cryptorchidism, Mal descended testis and ectopic testis</li> <li>Plan investigations for localizing the UDT</li> <li>Discuss the importance of UDT in relation with testicular tumors and Infertility</li> <li>Identify proper timings of surgical management of UDT</li> </ol>	<p><b>Knowledge</b></p>	<p>Case base Discussion</p>	<p>Activation of schema for embryological development of external Genetelia</p> <p>Role of School health services in detecting UDT</p> <p>Clinical features, and differentiating points between UDT and ectopic testis</p> <p>Emphasis on complication of UDT</p> <p>Radiological tools to detect UDT</p> <p>The importance of timings for surgery</p> <p>Importance self-examination after delayed orchiopexy</p>	<p>MCQ S TOAC S</p>
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	<p>5. Enumerate other anomalies associated with UDT</p> <p>6. Examine the child with UDT and look for ectopic sites</p> <p><b><u>Hypospadias</u></b></p>	<p><b>Skill</b></p>			
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	<ol style="list-style-type: none"> <li>1. Define the hyospadi as</li> <li>2. Enumerate the three salient features of Hyospadias</li> <li>3. Differentiate between hyospadias and epispadias</li> <li>4. Identify common anomalies associated with hyospadias</li> <li>5. Classify the hyospadi as</li> <li>6. Enumerate three aims of treating hyospadias</li> <li>7. Examine the patient of Hyospadi as</li> <li>8. Council mother for the orchiopexy of her child</li> </ol>	<p><b>Knowledge</b></p> <p><b>Skill Attitude</b></p>			
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## 6. LEARNING OUTCOMES

### 6.1 GENERAL OUTCOMES:

#### COGNITION

*By the end of this module final year students should be able to:*

- a. Identify and develop understanding of common surgical conditions. (C1)
- b. Describe the salient features of acute surgical presentations. (C2)
- c. Discuss the differential diagnosis. (C2)
- d. Interpret & analyze common surgical investigations. (C3)
- e. Formulate a management plan for common surgical presentations. (C6)
- f. Defend any non-surgical treatment options. (C5)
- g. Argue pre-operative patient optimization. (C5)
- h. State postoperative complications. (C1)

#### PSYCHOMOTOR

*By the end of this module final year students should be able to:*

1. Perform general, physical and systemic examination independently (P4)
2. Identify relevant signs to arrive at appropriate clinical diagnosis. (P4)
3. Perform relevant procedures under supervision. (E.g. NG insertion, Catheter insertion, I.v Cannula). (P3)
4. Observe standard steps of scrubbing. (P1)
5. Assist surgical procedures as directed by the respective consultant. (P2)



## AFFECTIVE

*By the end of this module final year students should be able to:*

1. Demonstrate empathy while communicating with patient (A 3)
2. Exhibit compassion while examining the patient (A 3)
3. Act as a responsible member of the clinical team (A5)
4. Explain in general terms to a patient the implications of a common surgical diagnosis (A2)
5. Have sufficient basic understanding of surgery to help with future career choice (A3)

## 6.2. SPECIFIC OUTCOME

### **SUB THEME: ABDOMINAL PAIN**

1. Identify the gross and special anatomical features of abdomen
2. Reproduce the applied patho-physiology related to various abdominal surgical conditions
3. Describe the clinical features of a patient presenting with acute abdomen due to different etiologies (intestinal obstruction, cholecystitis, pancreatitis, appendicitis etc.)
4. Interpret investigations of a patient with acute abdomen (hematological, biochemical, radiological and special)
5. Plan the pre and post-operative management of a patient with acute abdomen
6. Describe the main steps of common abdominal surgeries
7. Carry out abdominal examination independently
8. Scrub for theatre procedures following basic principles of sterilization and disinfection
9. Pass NG tube independently
10. imitate various steps of common abdominal procedures
11. Listen to the patient's concerns with respect

12. Respond to any queries that the patients or their relatives may have
13. Exhibit empathy whilst dealing with the patients and their relatives
14. Counsel and consent the patient for any interventions

#### **SUB THEME: DYSPHAGIA**

1. Enlist different causes of dysphagia (including stricture, malignancy, achalasia etc.)
2. Describe the basic features of dyspepsia and dysphagia
3. State aetiopathology of upper GI bleed (including esophageal varices, peptic ulcer, carcinoma etc.)
4. Explain the etiology, risk factors and clinical presentation of a patient with upper GI malignancy (esophageal and gastric Ca)
5. Advise and interpret various blood, radiological (e.g. fluoroscopy) and special (e.g. endoscopy) investigations in a patient with upper GI pathology
6. Formulate a management plan for a patient with esophageal Ca including palliative and therapeutic modalities
7. Elicit succession splash
8. Prepare and position the patient for endoscopic examination
9. Listen to the patient's concerns with respect
10. Counsel and consent the patient for endoscopy

#### **SUB THEME: CHANGE IN BOWEL HABITS**

1. List the possible etiology of change in bowel habits and rectal bleeding
2. Explain the pathophysiology and types of common bowel diseases including Colorectal Ca, IBD, Hemorrhoids, Anal fissure, Fistula in ano.
3. Recognize the clinical presentation of bowel diseases including Colorectal Ca, IBD, Hemorrhoids, Anal fissure, Fistula in ano.
4. Reconstruct management plan for patients presenting with altered bowels or rectal bleeding
5. Discuss post operative complications of colonic surgeries
6. perform digital rectal examination on mannequins in skill lab
7. Apply stoma bag under supervision
8. Observe steps of hemorrhoidectomy

9. Consent the patient before Digital rectal exam
10. Counsel the patient and attendant regarding diagnosis and management of Colorectal Ca.

#### **Sub Theme: Abdominal lumps**

1. Classify abdominal and groin lumps including hernias, lymph nodes, malignancies, lipomas/ neurofibromas, aneurysms etc.
2. Explain applied anatomy of inguinal canal
3. Formulate management plan for a patient with abd hernias
4. Outline complications of hernia surgery
5. Enlist types of mesh and suture materials used in hernia surgeries
6. Perform clinical examination (eliciting signs such as ring occlusion and cough impulse) of a patient with abdominal / inguinal hernia independently
7. Observe different steps of open and laparoscopic hernia repair
8. Perform basic laparoscopic maneuvers on simulator
9. Consent a patient with abdominal hernia
10. Pay attention to post-operative complaints of a patient secondary to operative complications

#### **Subtheme: Lump Breast**

1. Know anatomy of breast including blood supply, venous drainage and lymphatic drainage.
2. List differential diagnosis of lump breast e.g. Ca breast, fibroadenoma, breast abscess
3. Recognize features of malignancy in patient with breast lump
4. Reconstruct management plan for patients presenting with breast lump
5. Advise & interpret various blood, radiological (U/S, mammography) & special investigation (CT, bone scan, FNAC/ trucut biopsy) including triple assessment.
6. Carry out breast & axillary examination independently
7. Scrub for theatre procedures following basic principles of sterilization and disinfection.
8. Listen to the patient concern with respect.
9. Exhibit empathy while dealing with the patient & relatives.
10. Counsel & consent patient for mastectomy

Subtheme: Neck swelling (Goiter)

By the end of this module a final year student should be able to

1. Explain applied anatomy of the thyroid, synthesis of thyroid hormones and pathophysiology of goiter.
2. Know the clinical features of hypo & hyper thyroidism.
3. Advise & interpret various blood (TFTs) radiological (x ray throat,, CT/MRI neck, U/S neck) and special investigations, (FNAC, thyroid scan, IDL)
4. Formulate a management plan for patients presenting with goiter and hypo or hyper thyroidism.
5. Assist in making patient position for thyroidectomy on the table.
6. Scrub for theatre procedures following basic principles of sterilization and disinfection.
7. Discuss post operative complications of thyroidectomy
8. Listen to the patients concern with respect.
9. Counsel & consent the patient for thyroidectomy.
10. Exhibit empathy while dealing with the patient & relatives.

**7. TABLE OF SPECIFICATIONS**

**MODULE: SURGERY**

**THEME: GIT**

7.1SUB THEME: ABDOMINAL PAIN

OUTCOMES	COGNITIVE						PSYCHOMOT OR				AFFECTIVE					MITs	Asses Tool	%age
	C 1	C 2	C 3	C 4	C 5	C 6	P 1	P 2	P 3	P 4	A1	A 2	A 3	A 4	A5			
Identify the gross and special anatomical features of abdomen		10															MCQs	

																	Lecture /SGD		
Reproduce the applied patho-physiology related to various abdominal surgical conditions	10																Lecture /SGD	MCQs	
Describe the clinical features of a patient presenting with acute abdomen due to different etiologies (intestinal obstruction, cholecystitis, pancreatitis, appendicitis etc.)		10															SGD (PBL)/ BST (CBL)	MCQs	
Interpret investigations of a patient with acute abdomen (hematological, biochemical, radiological and special)			10														TBL	MCQs OSCE	
Plan the pre and post-operative management of a patient with acute abdomen					10												SGD/	MCQs OSCE	
Describe the main steps of common abdominal surgeries		5															SGD (OT)	OSCE	
<i>Carry out abdominal examination independently</i>									8								BST Skills lab	OSCE	
<i>Scrub for theatre procedures following basic principles of sterilization and disinfection</i>									7								Demo	OSCE	
<i>assist NG tube under supervision</i>							5										Skill lab BST	OSCE	05
imitate various steps of common abdominal surgeries									5								Skill lab	OSCE	05
<i>Listen</i> to the patient's concerns with respect										5							Role play	OSCE	
<i>Respond</i> to any queries that the patients or their relatives may have											5						Bedside teaching,	OSCE	

																	Role play		
<i>Exhibit empathy whilst dealing with the patients and their relatives</i>																5		OSCE	
<i>Counsel and consent the patient for any interventions</i>																5	Role play	OSCE	
	55						25				20					100			

## 7.2. SUB THEME: DYSPHAGIA

OUTCOMES	COGNITIVE						PSYCHOMOTOR				AFFECTIVE					MITs	Asses Tool	
	C1	C2	C3	C4	C5	C6	P1	P2	P3	P4	A1	A2	A3	A4	A5			
Enlist different causes of dysphagia (incl stricture, malignancy, achalasia etc.)	5																SGD	MCQs
Describe the basic features of dyspepsia and dysphagia		10															PBL	MCQs
State aetiopathology of upper GI bleed (including oesoph varices, peptic ulcer, carcinoma etc.)	10																SGD	MCQ
Explain the etiology, risk factors and clinical presentation of a patient with upper GI malignancy (esophageal and gastric Ca)		10															Lec	MCQs
Advise and interpret various blood , radiological ( e.g. fluoroscopy) and special (e.g. endoscopy) investigations in a patient with upper GI pathology			10														TBL	OSCE

Formulate a management plan for a patient with esophageal Ca including palliative and therapeutic modalities					15														BST	MCQs SAQs
<i>Elicit succession splash</i>										10									BST Video	OSCE
Prepare and position the patient for endoscopic examination									10										BST Video	OSCE
<i>Listen</i> to the patient's concerns with respect												10							Role play	OSCE
<i>Counsel and consent the patient for endoscopy</i>													10						SGD, Role play, Video	OSCE
	60						20				20									



### 7.3. SUB THEME: ALTERED BOWEL HABITS

OUTCOMES	COGNITIVE						PSYCHOMOTOR				AFFECTIVE					MITs	Asses Tool	
	C1	C2	C3	C4	C5	C6	P1	P2	P3	P4	A1	A2	A3	A4	A5			
List the possible etiology of change in bowel habits and rectal bleeding	10																Lecture	MCQs SAQs
Explain the pathophysiology and types of common bowel diseases including Colorectal Ca, IBD , Hemorrhoids, Anal fissure, Fistula in anon.		10															Lecture/SGD	MCQs SAQs
Recognize the clinical presentation of bowel diseases including Colorectal Ca, IBD, Hemorrhoids, Anal fissure, Fistula in ano.	10																SGD/ PBL/ TBL/CBL/BST	MCQs SAQs EMQs
Reconstruct management plan for patients presenting with altered bowels or rectal bleeding					10												SGD/ PBL/ TBL	MCQs SAQs EMQs
Discuss post-operative complications of colonic surgeries		10															BST	MCQs SAQs
perform digital rectal examination on mannequins in skill lab										10							Skill lab Simulators Video	OSCE
Apply stoma bag under supervision									10								Skill lab Simulators	OSCE



Observe steps of hemorrhoidectomy								10										OT Video	OSCE
Consent the patient before Digital rectal exam																	10	Role play	OSCE
Counsel the patient and attendant regarding diagnosis and management of Colorectal Ca.																	10	Bedside teaching, Role play	OSCE
<b>TOTAL</b>	50							30				20					100		

#### 7.4 SUB THEME: ABD & GROIN LUMPS

OUTCOMES	COGNITIVE						PSYCHOMOTOR				AFFECTIVE					MITs	Asses Tool	
	C1	C2	C3	C4	C5	C6	P1	P2	P3	P4	A1	A2	A3	A4	A5			
Classify abdominal and groin lumps including hernias, lymph nodes, malignancies, lipomas/neurofibromas, aneurysms etc.			10														PBL	MCQs SAQs
Explain applied anatomy of inguinal canal		10															SGD	MCQs SAQs
Formulate management plan for a patient with bad hernias					10													MCQs SAQs EMQs
Outline complications of hernia surgery	10																SGD	MCQs SAQs EMQs
Enlist types of mesh and suture materials used in hernia surgeries	10																TBL	MCQs
Perform clinical examination (eliciting signs such as ring occlusion and cough impulse) of a patient with abdominal / inguinal hernia independently										15							BST	OSCE

Observe different steps of open and laparoscopic hernia repair								10										OT	OSCE
Perform basic laparoscopic maneuvers on simulator												10						Skills lab	OSCE
Consent a patient with abdominal hernia																05		Role play	OSCE
Pay attention to post-operative complaints of a patient secondary to operative complications																	10	Role play	OSCE
TOTAL																			

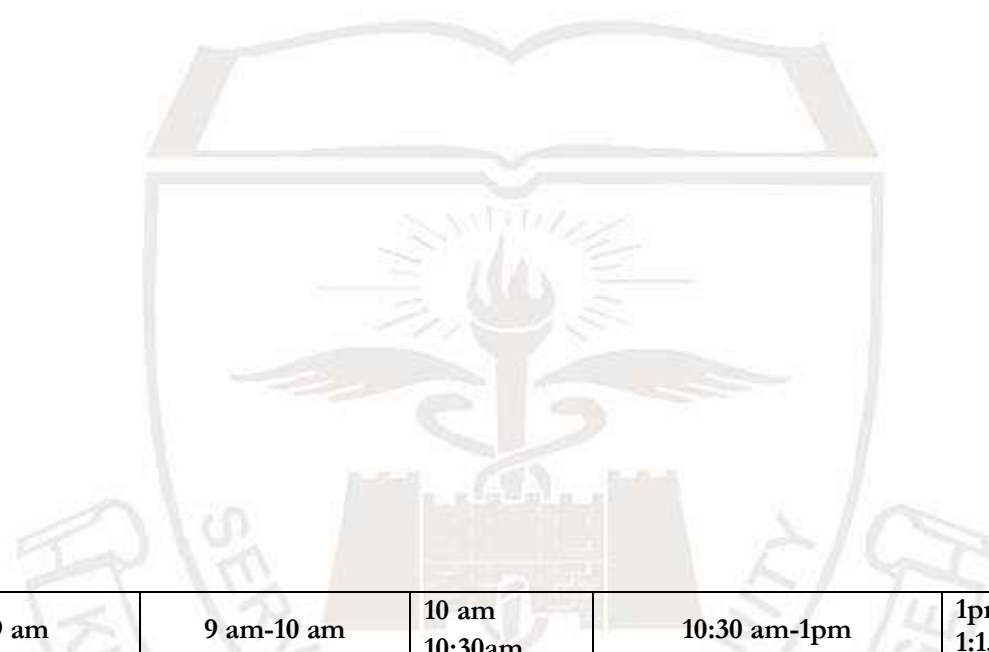
## 8. WEEKLY TIME TABLES

### 8.1 1ST WEEK TIME TABLE; ABDOMINAL PAIN

Timings	8 am-9 am	9 am-10 am	10 am 10:30am	10:30 am-1pm	1pm 1:15pm	1:15pm-2:15pm
Monday	<b>PBL 1</b> 60 year old male presents to ER with complaints of abdominal pain and distention. Discuss differential diagnosis and management.  Moderator: Assist Prof M Shah Venue: Surgical auditorium		<b>Break</b>	<b>BST</b> History taking  Mod : Dr. Shehla Ven :Surg ward	<b>Prayers</b>	<b>LECTURE</b> Anatomy of digestive system including but not limited to ; Abdominal quadrants GI tract (vascular &Nerve supply) Mod: Dr. Shabnam Gul Ven: Lecture Hall
Tuesday	<b>LECTURE</b> Pathophysiology of GI diseases: acute abdomen as a result of hollow viscus perforation. Infective &	<b>SDL</b> Venue: Library		<b>BST</b> Clinical examination related to acute abdomen Mod: Associate Prof. FarrukhUzair Ven: Surgical Ward		<b>LECTURE</b> Pathophysiology Hepato biliary diseases (Jaundice) Spleen Mod: Prof. Physiology Ven:Lecture Hall

	Inflammatory bowel conditions Mod: Prof. Physiology Ven: Lecture Hall				
Wednesday	<b>SGD</b> Management of patient with acute abdominal conditions Intest obstruction Inf bowel disease Appendicitis Mod: Associate Prof. AinulHadi Ven: Surgical Auditorium			<b>BST</b> management of intestinal obstruction, inf bowel disease, appendicitis Mod: Associate Prof. Rashid Aslam Ven: Surgical Ward	<b>SDL</b> Venue: Library
Thursday	<b>SGD</b> Management of patient with acute abdomen Cholecystitis Ca GB Pancreatitis Mod: Associate Prof. Rashid Aslam Ven: Surgical Auditorium			<b>DOPS</b> Scrub and sterilization techniques  Mod: AP Muhammad Shah Ven: OT Complex	<b>TBL</b> Preoperative preparation of a patient with acute appendicitis Mod: AP Talal Raza Ven: OT Complex
Friday	<b>DOPS</b> NG tube insertion,, Catheterization <b>DRE</b>  Ven: Skill lab			<b>DOPS</b> Steps of appendectomy  Ven: OT	<b>FRIDAY PRAYERS</b>
Saturday	<b>Role play</b> Counsel and consent Mod: Muhammad Shah Venue: Surgical ward			<b>SGD</b> Overview of abdominal pain Mod: Prof. Shahzad A.K Ven: Surgical Auditorium	<b>Q&amp;A session</b> Mod: AP Muhammad Shah Ven: Surgical Auditorium

GIRLS MEDICAL



8.2. WEEK 2: DYSPHAGIA

Timings	8 am-9 am	9 am-10 am	10 am 10:30am	10:30 am-1pm	1pm 1:15pm	1:15pm-2:15pm
Monday	<b>PBL 1</b> 70 year old male presents to OPD with complaints of vomiting and heart burn. Discuss differential diagnosis and management.  Moderator: Assist Prof M Shah Venue: Surgical auditorium		<b>Break</b>	<b>BST</b> History taking  Mod : AP Talal Ven :Surg ward	<b>Prayers</b>	<b>LECTURE</b> Anatomy of upper G.I Tract including esophagus and stomach Mod: Dr. Shabnam Gul Ven: Lecture Hall
Tuesday	<b>LECTURE</b> Pathophysiology of upper GI diseases Mod: Prof. of Physiology	<b>SGD</b> Dysphagia as a result of achalasia, stricture, PUD & Malignancy		<b>BST</b> Clinical examination related to Dysphagia  Mod : SPR Shehla		<b>SGD</b> Clinical presentation of different upper G.I diseases presented with vomiting and Dysphagia.

	Ven: Lecture Hall	Mod: Dr. Hadi Ven: Surgical Auditorium		Ven :Surg ward		Mod: Dr. Farrukh Ven: Surgical Auditorium
Wednesday	<b>LECTURE</b> Management of patient with Dysphagia keeping in mind malignancies, achalasia, strictures Mod: Prof Shehzad A. Khan Ven: Surgical Auditorium			<b>BST</b> Management of Dysphagia Mod: Dr. Hadi Ven: Surgical Ward		<b>DOPS</b> OGD Mod: Dr. Shehla Ven: Endoscopic Suite
Thursday	<b>LECTURE</b> Management of patient with Dyspepsia keeping in mind peptic ulcer disease hiatal hernia, GERD Mod: AP Muhammad Shah Venue: Surgical Auditorium			<b>BST</b> Management of Dyspeptic conditions Mod: Associate Prof. Rashid Ven: Surgical Ward		<b>SGD</b> Nutritional assessment of Ca esophagus patient Mod: Dr. Shehla Ven: Surgical Auditorium
Friday	<b>SGD</b> Diagnostic and therapeutic uses of endoscopy Mod: AP Talal Raza Ven: Surgical Auditorium			<b>DOPS</b> OGD Ven; Endoscopic Suite		<b>FRIDAY PRAYERS</b>
Saturday	<b>Role play</b> Counsel and consent patient for OGD Mod: Dr. Shehla Venue: Surgical Auditorium			<b>SGD</b> Review of upper GI surgical conditions Mod: Prof. Shehzad A K Venue: Surgical Auditorium		<b>Q&amp;A session</b> Mod: Prof. Shehzad A K Venue: Surgical Auditorium

### 8.3. WEEK 3: ALTERED BOWEL HABITS

Timings	8 am-9 am	9 am-10 am	10 am 10:30am	10:30 am-1pm	1pm 1:15pm	1:15pm-2:15pm
Monday	<b>PBL 1</b> 55 year old female present 1 year history of alternating diarrhea & constipation, weightloss and rectal bleeding Discuss differential diagnosis and management.			<b>BST</b> History taking Mod : Dr. Shehla Ven :Surg ward		<b>LECTURE</b> Patho/ Physisio Colorectal ca Tumor staging Mod: prof. Physiology

	Moderator: Assist Prof M Shah Venue: Surgical auditorium		<b>Break</b>		<b>Prayers</b>	Ven: Lecture Hall
Tuesday	<b>LECTURE</b> Basic principles of oncological management Mod: Dr. Rashid Aslam ven: Surgical Auditorium	<b>SDL</b> Venue: Library		<b>BST</b> General Physical & Abdominal Examination  Mod : Dr. Talal Ven :Surg ward		<b>SGD</b> Radiology: Features of abdominal pathology on MRI, CT, X ray & USS Mod:Asso. Pro. Mehreen Ven: Radiology department
Wednesday	<b>SGD</b> Benign conditions with rectal bleeding Mod: Dr. Shehla Venue: Sur Ward			<b>BST</b> Stoma examination and application of stoma bags Mod: Dr. Muhammad Shah Venue: Surgical Ward		<b>SDL</b> <b>Venue: Library</b>
Thursday	<b>SGD</b> Interpretation of blood and radiological investigation Moderator: Dr. Farrukh Venue: Sur Auditorium			<b>DOPS</b> Scrub & Sterilization techniques following basic principles Mod: Prof. Shehzad A K Venue: OT complex		<b>Role play</b> Consent and counseling a patient with colorectal malignancy Mod: Dr. Hadi Ven: Surg Ward
Friday	<b>LECTURE</b> Benign condition of rectal bleed Mod: Dr. Farrukh Ven: Surg Auditorium			<b>DOPS/ VIDEOS</b> Steps of hemorrhoidectomy Mod: Rashid Aslam Ven: Demonstrator room		<b>FRIDAY PRAYERS</b>
Saturday	<b>DOPS</b> Steps of operation Hemicolectomy, Ant resection, APR Mod; Shehzad A K Ven: Ot complex			<b>SGD</b> Review of lower GI pathologies Mod: Prof Shehzad A K Ven: Surgical Complex		<b>Q&amp;A session</b> Mod: Dr. Yousaf Jan Ven: Surgical Auditorium

8.4. WEEK 4: GROIN LUMPS

Timings	8 am-9 am	9 am-10 am	10 am 10:30am	10:30 am-1pm	1pm 1:15pm	1:15pm-2:15pm
Monday	<b>PBL 1</b> Young male patient presented with a swelling in right groin. Discuss differential diagnosis highlighting salient features of all possible etiologies  Moderator: Assist Prof M Shah Venue: Surgical auditorium		<b>Break</b>	<b>BST</b> History taking of abdominal lump  Mod : Dr. Shehla Ven :Surg ward	<b>Prayers</b>	<b>LECTURE</b> Anatomy of inguinal canal, femoral canals and its contents. Mod: Dr. Shabnam GUL Ven: Lecture Hall
Tuesday	<b>LECTURE</b> Pathophysiology of hernia and lymph nodes enlargement Mod:Prof. Physiology ven:Lecture Hall	<b>SDL</b> Venue: Library		<b>BST</b> Clinical examination of abdominal and growing lumps  Mod : Dr. JamshedAlam Ven :Surg ward		<b>SGD</b> Management of patients with inguinal and femoral hernia Mod: Prof. ZahidAman Ven:Surg Auditorium
Wednesday	<b>Role Play</b> Consent a patient for hernia repair Mod: Dr. Shehla Ven: surgical Ward	<b>SGD</b> Interpretation of blood and radiological investigation Mod: AP Muhammad Shah Ven: Sug Auditorium		<b>DOPS/ Video</b> Operative steps of biopsy, lipoma excision, hernia repair Mod: Dr. Rashid Aslam Ven: OT Complex		<b>SDL</b> Venue: Library
Thursday	<b>SGD</b> Management of incisional and puh Mod: Dr. rashid Ven: Surg Auditorium	<b>SGD</b> Review of primary and secondary survey of trauma patient Mod: Dr. Talal Ven: Surgical auditorium		<b>BST</b> Management of patient in ICU Mod: Dr. Raza Ullah Venue: SurgICU		<b>DOPS</b> Endotracheal Tube Cricothyroidotomy Cervical Collar Mod: AP MS Ven: Skill Lab

Friday	<b>LECTURE:</b> Management of abdominal trauma Mod: Prof. Shehzad Akbar Ven: Lecture Theater		<b>Role Play</b> Scenario practice of trauma management Mod: AP Muhammad Shah Ven: Surg Auditorium		<b>FRIDAY PRAYERS</b>
Saturday	<b>Internal Assessment</b> Theory Paper (MCQS, SAQS) Moderator: All faculty members Venue: Examination Hall		<b>Internal Assessment</b> OSCE Moderator: All faculty members Venue: Examination Hall		<b>Recreation</b>

**MODULE: SURGERY**

**THEME: BREAST**

7.2 SUB THEME: BREAST LUMP

OUTCOMES	COGNITIVE						PSYCHOMOTOR				AFFECTIVE					MITs	Asses Tool	%age	
	C 1	C 2	C 3	C 4	C 5	C 6	P 1	P 2	P 3	P 4	A1	A 2	A 3	A 4	A5				
Know anatomy of breast including blood supply, venous drainage and lymphatic drainage.		10															Lecture /SGD	MCQs	
List differential diagnosis of lump breast e.g. Ca breast, fibroadenoma, breast abscess	10																Lecture /SGD	MCQs	



Recognize features of malignancy in patient with breast lump		10															SGD (PBL)/ BST (CBL)	MCQs	
Reconstruct management plan for patients presenting with breast lump			10														TBL	MCQs OSCE	
Advise & interpret various blood, radiological (U/S, mammography) & special investigation (CT, bone scan, FNAC/ trucut biopsy) including triple assessment.				10													SGD/	MCQs OSCE	
Carryout breast & axillary examination independently		5															SGD (OT)	OSCE	
Scrub for theatre procedures following basic principles of sterilization and disinfection.									8								BST Skills lab	OSCE	
Listen to the patient concern with respect.									7								Demo	OSCE	
Exhibit empathy while dealing with the patient & relatives.							5										Skill lab BST	OSCE	05
Counsel & consent patient for mastectomy									5								Skill lab	OSCE	05

**MODULE: SURGERY**

**THEME: THYROID**

7.3 **SUB THEME: NECK SWELLING (GOITER)**

By the end of this module a final year student should be able to

OUTCOMES	COGNITIVE						PSYCHOMOTOR				AFFECTIVE					MITs	Asses Tool	%age
	C1	C2	C3	C4	C5	C6	P1	P2	P3	P4	A1	A2	A3	A4	A5			
Explain applied anatomy of the thyroid, synthesis of thyroid hormones and pathophysiology of goiter.		10														Lecture /SGD	MCQs	
Know the clinical features of hypo & hyper thyroidism.	10															Lecture /SGD	MCQs	
Advise & interpret various blood (TFTs) radiological (x ray throax,, CT/MRI neck, U/S neck) and special investigations, (FNAC, thyroid scan, IDL)		10														SGD (PBL)/ BST (CBL)	MCQs	
Formulate a management plan for patients presenting with goiter and hypo or hyper thyroidism.			10													TBL	MCQs OSCE	

Assist in making patient position for thyroidectomy on the table.					10												SGD/	MCQs OSCE		
Scrub for theatre procedures following basic principles of sterilization and disinfection.		5																SGD (OT)	OSCE	
Discuss post operative complications of thyroidectomy									8									BST Skills lab	OSCE	
Listen to the patients concern with respect.									7									Demo	OSCE	
Counsel & consent the patient for thyroidectomy.								5										Skill lab BST	OSCE	05
Exhibit empathy while dealing with the patient & relatives.									5									Skill lab	OSCE	05



## 9. REFERENCES

### Text books

1. Guyton and Hall. Textbook of medical physiology. 13<sup>th</sup> edition
2. Gray's anatomy for students. 40<sup>th</sup> edition. South Asian edition
3. Robbins Basic pathology. 10<sup>th</sup> edition Elsevier
4. Robbins and Cotran Pathologic basis of disease. 9<sup>th</sup> edition
5. Bailey & Love's SHORT PRACTICE OF SURGERY. 27<sup>th</sup> edition. International student edition

### Digital Media

6. [https://www.academia.edu/37780581/Bailey\\_and\\_Loves\\_Short\\_Practice\\_of\\_Surgery\\_27th\\_Edition.pdf](https://www.academia.edu/37780581/Bailey_and_Loves_Short_Practice_of_Surgery_27th_Edition.pdf)
7. <https://www.practicalpainmanagement.com/pain/acute/common-causes-acute-abdominal-pain>
8. <https://www.mayoclinic.org/diseases-conditions/cholecystitis/symptoms-causes/syc-20364867>
9. <https://geekymedics.com/abdominal-examination/>
10. [https://www.surgeryjournal.co.uk/article/S0263-9319\(06\)70104-1/fulltext](https://www.surgeryjournal.co.uk/article/S0263-9319(06)70104-1/fulltext)
11. <https://www.surgeryencyclopedia.com/Pa-St/Preoperative-Care.html>
12. <https://geekymedics.com/surgical-scrubbing-gowning-gloving-guide/>
13. <https://www.cdc.gov/infectioncontrol/guidelines/disinfection/introduction.html>
14. <https://www.nhs.uk/conditions/swallowing-problems-dysphagia/causes/>
15. <https://www.uptodate.com/contents/approach-to-acute-upper-gastrointestinal-bleeding-in-adults/print>
16. <https://emedicine.medscape.com/article/277930-overview>
17. <https://www.memhosp.com/post-operative-care>