



SURGERY STUDY GUIDE

KGMC

GENERAL SURGERY STUDY
GUIDE FINAL YEAR 2023

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



“Excellence in health care, research, teaching and training in the service of Humanity”

Khyber Girls Medical College: Mission



The mission of KGMC is to promote compassionate and professional health care leaders Who are knowledgeable, skillful, and community oriented lifelong learners serving humanity through evidence-based practices.

Curriculum Committee KGMC

Chair:

Professor Dr.Zahid Aman , Dean KGMC.

Co-Chair:

Dr. Amir Mohammad, 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.
- Dr. Khurram Naushad, 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.

Outcomes of the curriculum:

The Curricular Outcomes of the MBBS Program for a Graduating Doctor according to the PMDC are as follows:

1. Knowledgeable

Knowledgeable about the diseases and health conditions prevalent in the population of Pakistan and use Evidence-based medicine to provide best possible cost-effective care.

2. Skillful

Skillful in History taking and Physical examination to compassionately deal with a patient.

3. Community health promoter

Take appropriate decisions and actions for protecting and promoting the health of their community.

4. Critical Thinker

Evaluate critically the patient data to effectively deal with complexity of medical decisions for the best possible outcomes using evidence-based practices in service of humanity.

5. Professional

Display professional values (honesty, accountability, cultural and religious sensitivity), attitudes and behaviors (empathy, ethics, good communication skills and lifelong learner) that embody good medical practice.

6. Researcher

Exhibit a spirit of inquisitiveness, inventiveness, and ethical conduct while carrying out research in accordance with the prescribed guidelines.

7. Leader and role Model

Demonstrate exemplary conduct and leadership in Advancing healthcare, enhancing medical education, and enhancing the trust of the public in the medical profession by being exceptional role models.

6. LEARNING OUTCOMES OF SURGERY MODULE

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 stigmatization. (C5)
- h. State postoperative complications. (C 1)

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)

Themes

S. No	Module / System / Theme
	Foundation Module
1	The In-Patient
2	Perioperative Care
	Musculoskeletal Module
3	Joint pains
4	Aching Bones
5	Muscle Weakness
	Cardiopulmonary system
6	Chest Pain and Palpitations
7	Shortness of Breath
	Renal System
8	Loin Pain and Dysuria
9	Pain and swelling of external Genetalia
	Endocrine and Reproductive System
10	Neck swelling
11	Diabetic Foot
12	Breast Lumps
	Nervous System-3
13	Headache
14	Lower limb weakness
	GIT and Hepatobiliary System
15	Difficulty in swallowing and Epigastric Pain
16	Yellow discoloration of the sclera
17	Pain Abdomen, diarrhoea & Constipation
	Constipation and Bleeding per rectum
	Multisystem-2
18	Weight loss/gain

Foundation Module				
Subject	Topic	S. No	Domain of learning	Learning objective: <i>At the end of this session, the students of year 5 will be able to:</i>
Theme-1: The in-patient				
Surgery	Basic surgical skills	1	Cognitive	Explain the principles of patient care and safety in operation theatre / surgical safety checklists
		2		Explain the principles of skin and abdominal incisions
		3		Explain the principles of wound closure and drain usage and diathermy
	Laparoscopic and robotic surgery	4	Cognitive	Explain the principles, advantages, disadvantages, indications and complications of Laparoscopic and Robotic surgery
	Surgical informed consent	5	Cognitive	Explain the types and components of informed consent in surgical practice
	Nutrition and fluid therapy	6	Cognitive	Assess the fluid and electrolytes requirements in pre and post-operative patients
		7		Explain the different methods of providing nutritional support and their complications
	Postoperative care	8	Cognitive	Explain the standards of postoperative care
		9		Discuss the general and system specific postoperative complications
Radiology	Diagnostic imaging	10		Describe the basic principles of radiation protection
		11		Explain the types and principles of different imaging techniques and their indications
Theme-2: Perioperative care				

Surgery	Enhanced Recovery after Surgery (ERAS)	12	Cognitive	Describe the ERAS protocol
		13	Cognitive	Discuss the components of ERAS protocol
		14	Cognitive	Explain the benefits of ERAS
	Pain Management	15	Cognitive	Evaluate a patient with postoperative pain
		16	Cognitive	Manage a patient with pain during perioperative phase
		17	Cognitive	Discuss the pathophysiological consequences of postoperative pain
Musculoskeletal System				
Theme-3: Joint pains				
Orthopedics	Surgical management of disabling Rheumatoid arthritis	18	Cognitive	Explain the surgical interventions and their indications in the management of disabling Rheumatoid arthritis <ul style="list-style-type: none"> • Rheumatic hand disorders • Rheumatic foot disorders
	Tuberculous/ Septic arthritis	19	Cognitive	Discuss the etiology, risk factors, Clinical presentation, Diagnostic approach, and management of tuberculous and septic hip and knee arthritis
Theme-4: Aching bones				
Orthopedics	Deformities and congenital disorders	20	Cognitive	Classify common deformities and congenital disorders of bones
		21	Cognitive	Discuss the pathophysiology, clinical features and complications of Achondroplasia
		22	Cognitive	Discuss the pathophysiology, clinical features and complications of Osteogenesis imperfecta
		23	Cognitive	Discuss the pathophysiology, clinical features and complications of Paget's disease

	Structural spine abnormalities	24	Cognitive	Classify and explain structural spine abnormalities in terms of clinical features, complications, and management
	Osteomyelitis	25	Cognitive	Explain the etiology, clinical presentation, investigations, and medical and surgical management of Osteomyelitis
	Caries Spine	26	Cognitive	Explain the etiology, clinical presentation, investigations, and medical and surgical management of Caries spine
Theme-5: Muscle weakness				
Orthopedics	Poliomyelitis	27	Cognitive	Explain the Orthopedic complications of poliomyelitis their Diagnostic workup and Management
Surgery/plastic surgery	Burns Classification Assessment Management Complications	28	Cognitive	Classify burns
		29	Cognitive	Assess a patient of burns in terms of burn area calculation, fluid assessment, and referral to specialized burn units
		30	Cognitive	Discuss the initial and long term management of burns
		31	Cognitive	Explain the early and late complications of burns
		32	Psychomotor	Calculate burn area
		33	Affective	Counsel a patient and his/her family members with burns
Cardiopulmonary Module				
Theme 6: Chest Pain and Palpitations				
Surgery	Chest trauma Hemothorax	34	Cognitive	Discuss the diagnostic workup for Chest trauma
		35	Cognitive	Discuss the management options for a patient with Chest trauma

		36	Psychomotor	Perform ABC in a case presenting with chest trauma
		37	Psychomotor	Observe chest intubation of a patient presenting with chest trauma
Theme 7: Shortness of breath				
Surgery	Thoracostomy and chest intubation	38	Cognitive	Explain the indications for Thoracostomy and chest intubation
		39	Psychomotor	Observe the procedure of Thoracostomy and chest intubation
		40	Affective	Counsel a patient for the procedure of Thoracostomy and chest intubation
Renal System				
Theme-8: Loin pain and dysuria				
Surgery	Nephrolithiasis	41	Cognitive	Explain the etiology, risk factors, types, approach, investigations, treatment and prevention of Nephrolithiasis
		42	Psychomotor	Take a history from a patient presenting with acute Flank and loin pain.
		43	Psychomotor	Perform a physical examination of a patient with acute Flank, and loin pain
		44	Affective	Counsel a patient presenting with nephrolithiasis
	Dysuria	45	Cognitive	Discuss the diagnostic workup for Dysuria
		46	Cognitive	Discuss the management options for a patient with Dysuria
	Hematuria	47	Cognitive	Discuss the diagnostic workup for Hematuria
		48	Cognitive	Discuss the management options for a patient with Hematuria
Theme-9: Pain and swelling of external genitalia				

Surgery	Testicular torsion	49	Cognitive	Discuss the diagnostic workup for Testicular torsion
		50	Cognitive	Discuss the management options for a patient with Testicular torsion
	Hydrocele	51	Cognitive	Discuss the diagnostic workup for Hydrocele
		52	Cognitive	Discuss the management options for a patient with Hydrocele
	Testicular tumors	53	Cognitive	Explain the diagnostic workup and management and complications of a patient with suspected Testicular tumors
	Epididymo-orchitis	54	Cognitive	Discuss the diagnostic workup for Epididymo-orchitis
		55	Cognitive	Discuss the management options for a patient with Epididymo-orchitis
Pediatric surgery	hypospadias	56	Cognitive	Discuss the types, complications, and management of a child with Hypospadias
Urology	Male infertility	57	Cognitive	Discuss the diagnostic approach and management options for a male patient with infertility
Endocrine and Reproduction-3				
Theme-10: Neck swelling				
Surgery	Thyroid nodule	58	Cognitive	Explain the diagnostic approach, management and complications of multinodular goitre
			Cognitive	Explain the diagnostic approach, and management of a patient with solitary thyroid nodule
		59	Psychomotor	Perform thyroid examination
Theme-11: Diabetic foot				
Surgery	Diabetic foot ulcers	60	Cognitive	Discuss the classification, investigations, management and complications of diabetic foot ulcers
		61	Psychomotor	Examine and stage a diabetic foot ulcer
Theme12:- breast lumps				

Surgery	Breast diseases	62	Cognitive	Discuss approach to a patient with breast lump emphasizing on diagnostic work-up of different breast pathologies (complexity of benign and malignant breast diseases) including imaging and procedures
		63	Cognitive	Discuss the diagnostic approach and management of a patient with nipple discharge
		64	Psychomotor Skills	<i>Perform a Clinical breast examination by all techniques including “radial wagon wheel” and “spoke” method</i>
		65	Affective domain	Counsel a patient with breast cancer about the diagnosis, management and screening of her family members
Nervous System				
Theme-13: Headache				
Neurosurgery	Intracranial space occupying lesions	66	Cognitive	Classify intracranial space occupying lesions (benign, malignant and infections)
			Cognitive	Discuss the clinical features, radiological findings and treatment of intracranial space occupying lesions
	Head Injury	67	Cognitive	Discuss the diagnostic workup and management for patients with Head Injury
		68	Affective domain	Counsel about the post-operative care of patients with head injuries and their families.
Theme-14: Lower limb weakness				
Pediatric surgery	Congenital malformations- Spina Bifida/myelomeningocele	69	Cognitive	Explain the clinical features, investigations, and management of a pa child with Spina Bifida/Myelomeningocele

		70	Affective Domain	Discuss and counsel the pts regarding the changes in the lifestyle of patients with congenital malformations
Neurosurgery	Syringomyelia	71	Cognitive	Describe Syringomyelia and Explain the onset of Syringomyelia
			Cognitive	Discuss the diagnostic work up and management for pts suspected of Syringomyelia
Orthopedics	Diseases of the vertebrae and intervertebral discs	72	Cognitive	Classify diseases of the vertebrae and intervertebral discs, their clinical features, investigations, complications and management
	Kyphoscoliosis	73	Cognitive	Discuss the etiology, clinical features, complications and management of Kyphoscoliosis
GIT and Hepatobiliary System				
Theme-15: Difficulty in swallowing and Epigastric Pain				
Surgery	Dysphagia	74	Cognitive	Explain the diagnostic workup and management of a patient with dysphagia
Theme-16: Yellow discoloration of the sclera				
Surgery	Obstructive jaundice	75	Cognitive	Discuss the diagnostic approach and management of a patient with suspected obstructive jaundice
		76	Affective	counsel a standardized patient with newly diagnosed Carcinoma head of the Pancreas
Theme-17: Pain Abdomen and diarrhea				
Surgery	Acute appendicitis	77	Cognitive	Discuss the diagnostic approach and management of a patient with pain in the right iliac fossa due to suspected appendicitis
	Pain abdomen	78	Cognitive	Discuss the diagnostic approach and management of a patient with pain in

				the abdomen of acute onset and chronic onset
		79	Psychomotor	Illicit signs of acute appendicitis in a child
		80	Affective	Counsel the parents of a child with acute appendicitis
	Intestinal obstruction	81	Cognitive	Discuss the etiology, diagnostic approach and management of a patient with suspected intestinal obstruction
	Intestinal perforation	82	Cognitive	Discuss the etiology, diagnostic approach and management of a patient with suspected intestinal perforation/peritonitis
	Hernias	83	Cognitive	Discuss the etiology, anatomical concepts, management, and complications of a patient with inguinal hernias
		84	Psychomotor	Perform transillumination test for inguinal hernias

Final year MBBS Timetable for academic session 2023

Theme-18: Constipation and bleeding per rectum				
Surgery	Constipation	85	Cognitive	Discuss the diagnostic workup and management approach for a patient with constipation
	Ulcerative colitis	86	Cognitive	Discuss the approach to the management of a patient with ulcerative colitis, its short and long-term complications, and the role of surveillance colonoscopies in the prevention of colorectal malignancies
	Crohn's Disease	87	Cognitive	Discuss the approach to the management of a patient with Crohn's disease, its short and long-term complications and extra intestinal manifestations
	Colorectal cancer	88	Cognitive	Discuss the approach to the management of a patient with suspected colorectal cancer and its staging
Pediatrics surgery	Hirschsprung's disease	89		Explain the etiology, clinical features, investigations, treatment of a child with Hirschsprung's disease
Multisystem				
Theme-19: Weight loss/gain				
Surgery	Bariatric surgery	90	Cognitive	Discuss the forms of surgical management of obesity
	Vitamins deficiencies Thiamine deficiency Pyridoxine deficiency B12 deficiency and pernicious anemia	91	Cognitive	Explain the etiology, clinical features, investigations and treatment of Beri Beri

		92	Cognitive	Explain the etiology, clinical features, investigations, and treatment of Pyridoxine deficiency
		93	Cognitive	Explain the etiology, clinical features, investigations and treatment of B12 deficiency / pernicious anemia
	Vitamin A, D, E, K deficiency	94	Cognitive	Explain the etiology, clinical features, investigations, treatment, and prevention of Vitamin A deficiency
		95	Cognitive	Explain the etiology, clinical features, investigations, and treatment of vitamin D deficiency
		96	Cognitive	Explain the etiology, clinical features, investigations and treatment of vitamin E deficiency
		97	Cognitive	Explain the etiology, clinical features and management of vitamin K deficiency
Surgery	Nutritional support/Enteral and parenteral nutrition	98	Cognitive	Define malnutrition and explain the methods of nutritional support
		99	Cognitive	Explain the indications, contraindications and complications of oral, enteral and parenteral nutritional support
		100	Cognitive	Discuss the modes of clinical and laboratory monitoring of nutritional support
		101	Cognitive	Describe the routes of access of parenteral nutrition
		102	Psychomotor	Perform insertion of Nasogastric tube
		103	Psychomotor	Observe the insertion and care of PEG tube

		104	Psychomotor	Keep an intake and output record of an admitted patient on parenteral nutrition
		105	Affective	Counsel a patient before NG tube and PEG tube insertion

Department of General Surgery

Khyber Girls Medical College / Hayatabad Medical Complex Peshawar

Day	week 1 Foundation Module – Theme: 1 (The in-patient) w.e.f. 20-2-2023							
		8:30-10:30 AM		10:30-12:30 AM-PM		12:30 To 1:0PM		1:00-3:00 PM
Mon		Basic surgical skills Principles of patient care, OT safety checklist Principle of skin and abdominal incision Dr. Rashid Aslam		Principle of wound closure, drain usage and diathermy OT visit Dr Rashid Aslam		B R E A K		Operation theatre
Tue		Laparoscopic and Robotic surgery (principles, advantages and disadvantages) Surgical inform consent Dr. Siddique Ahmad		Nutrition and fluid therapy Dr. Siddique Ahmad				Surgical C ward PRIME Patient safety BST Dr. Siddique Ahmad
Wed		Postoperative care Standards, general and systemic postoperative complications Dr. M. Alam		Diagnostic imaging Basic principle of radiation protection Dr. M. Alam				Surgical C ward Relevant patients Dr. M. Alam
	Theme-2 perioperative care							
Thu		Enhanced recovery after surgery (ERAS) Describe, discuss components of ERAS Dr. Yousaf Jan		OPD relevant patients Dr. Yousaf Jan				Surgical A ward BST Dr. Yousaf Jan
Fri		Pain Management To evaluate a patient with postoperative pain Management of patient with perioperative pain Prof. Zahid Aman		Pathophysiological consequences of perioperative pain Prof. Zahid Aman		Friday 12:30 To 1:30 PM		OT Relevant patients Prof. Zahid Aman

Week 3 Musculoskeletal Module Themes: Joint Pain, Aching bones, Muscle weakness						
Day	Week 2					
	8:30-10:30 AM	Theme	s:	10:30-12:30 PM	Module 1: Muscles, Joints, Bones	12:30-1:00 PM
Day	8:30-10:30 AM			10:30-12:30 AM-PM	12:30 To 1:00 PM	1:00-3:00 PM
Mon		Joint pain RA Dr Israr Ortho B classroom		Surgical management Dr Israr Ortho B classroom	BREAK	Arthroplasty Patient Dr Israr Ortho B OPD/ward
Tue		Joint pain septic arthritis TB Dr Saeed Ortho A classroom		Relevant Patients Dr Ahmed A ward examination Dr waqar		Surgical management Dr Saeed Ortho A classroom
Wed		Pottomyelitis Introduction Aching bones congenital deformities Dr Wasim Dr Salik Ortho B classroom		Pottomyelitis Relevant patient Dr Wasim examination Ortho B ward/OPD Dr salik Ortho A classroom		Pottomyelitis surgical management intervention Dr salik Dr Wasim Ortho A classroom Ortho B classroom
Thu		Osteomyelitis pathology Dr zahid Dr Noor Rehman Ortho A classroom		Osteomyelitis Patients Dr zahid examination Ortho A ward Dr Noor Rehman Ortho B OPD/ward		Disease of vertebral disc Osteomyelitis surgical intervention Dr Sameer Dr Noor Rehman Ortho A classroom
Fri		Structural abnormalities orthopedic diseases Spine introduction Dr Saeed Prof M. Aif Ortho A classroom		Common surgical procedure trauma abnormalities spine Dr Saeed patients Ortho A OPD/ward Dr Satar Ortho A ward/opd		Fractures, common orthopedic diseases treatment Structural abnormalities spine Common surgical procedure surgery Pediatrics Dr Satar Ortho A ward/opd
Thu		BURNS Classifications, assessment Prof. Tehmeed Tehmeed Burns & Plastic Surgery Unit		Management and complications of burns Prof. Tehmeed Burns & Plastic Surgery Unit		Ortho A classroom Assess patients of burns in terms of burn area, fluid assessment. Explain early and late complications Prof. Tehmeed Burns & Plastic Surgery Unit
Fri		Common surgical procedure Arthroplasty Dr Israr Ortho A OT		Common surgical procedure sports Dr waseem Ortho A OT	Friday 12:30 To 1:30 PM	Common surgical procedure pelvis Dr Noor Rehman Ortho A OT

Day	Week 4 Cardio pulmonary Module Themes: Chest pain, palpitations and shortness of breath							
		8:30-10:30 AM		10:30-12:30 AM-PM		12:30 To 1:0PM		1:00-3:00 PM
Mon		Chest Trauma Hemothorax Pneumothorax, tension pneumothorax Dr. Imran Tahir		Diagnostic workup for chest trauma Dr. Imran Tahir		B R E A K		OPD relevant patients Dr. Imran Tahir
Tue		Management of patient with chest trauma Empyema chest Dr. Imran Tahir		Perform ABC in a case presenting with chest trauma Dr. Imran Tahir				Operation theatre Dr. Imran Tahir
Wed		Thoracostomy and chest intubation Hydatid disease lung Dr. Imran Tahir		Observe chest intubation of a patient presenting with chest trauma Dr. Imran Tahir				Surgical A ward BST Dr. Imran Tahir
Thu		Ca lung Diagnostic workup Management and complications of Ca lung Dr. Imran Tahir		Observe procedure of thoracostomy and chest intubation Surgical A ward BST Dr. Imran Tahir				Dr. Imran Tahir OPD relevant patients
Fri		Chest wall/mediastinal tumour Complications of tube thoracostomy Dr. Imran Tahir		PRIME Counsel a patient for thoracostomy and chest intubation Operation theatre Dr. Imran Tahir		Friday 12:30 To 1:30 PM		Operation theatre Dr. Imran Tahir

Day	Week 5 Renal Module Theme 1: Loin pain and dysuria							
		8:30-10:30 AM		10:30-12:30 AM-PM		12:30 To 1:00PM		1:00-3:00 PM
Mon		Epidemiology and Pathophysiology of stone disease. Dr. M.Naeem		History and physical examination of a patient presenting with acute Flank and loin pain Dr. M. Naeem		BREAK		PRIME Communication with media and press Dr. M. Naeem
Tue		Clinical feature Dr. M. Shahzad		Discuss the diagnostic workup for dysuria Dr. M. Shahzad				Discuss the management option for a patient with dysuria Dr. M. Shahzad
Wed		Investigation of Urolithiasis Dr. Mazhar Khan		Discuss the management option for a patient with Hematuria Dr. Mazhar Khan				Urology ward Bed side teaching Dr. Mazhar Khan
Theme-2: pain and swelling of external genitalia								
Thu		Rationalising management of stone Disease. Dr. Liaqat Ali		Discuss the diagnostic workup for Hydrocele, Discuss the management option for a patient with Hydrocele Dr. Liaqat Ali				PRIME Explain the diagnostic workup and management and complications of patient with suspected Testicular tumors Counsel a patient for orchidectomy Dr. Liaqat Ali
Fri		Team Based Learning (TBL) on Theme-8 Dr. Liaqat Ali		Discuss the type , complication, and management of a child with hypospadias Dr. Liaqat Ali		Friday 12:30 To 1:30 PM		Discuss the diagnostic approach and management option for a male patient with infertility. Dr. Liaqat Ali

Day	Week 6 Endocrine and Reproductive system							
		Theme-1: Neck swelling						
		8:30-10:30 AM		10:30-12:30 AM-PM		12:30 To 1:0PM		1:00-3:00 PM
Mon		Neck Lumps Diagnostic approach Differentials, workup and management of GOITRE Dr. Siddique Ahmad		Treatment options of multinodular GOITRE Dr. Siddique Ahmad		BREAK		Operation theatre Relevant patients Dr. Siddique Ahmad
Tue		Diagnostic approach of solitary thyroid nodule Management of solitary thyroid nodule Dr. Siddique Ahmad		Thyroid examination Surgical C ward BST Dr. Siddique Ahmad				PRIME Request form for thyroid investigations Dr. Siddique Ahmad
Wed		Parathyroid glands Diagnostic approach and treatment of hyper para thyroidism Dr. Siddique Ahmad		OPD relevant patients Dr. Siddique Ahmad				Ward Neck swelling examination Dr. Siddique Ahmad
Thu		Operative steps of thyroidectomy Complications of thyroidectomy Dr. Rashid Aslam		PRIME Patient counseling of MNG Dr. Rashid Aslam				Operation theatre Relevant patients Dr. Rashid Aslam
		Theme-2: Diabetic Foot						
Fri		Diabetic foot Introduction, classification Investigations and complications of diabetic foot Dr. Rashid Aslam		Examine and stage a diabetic foot ulcer OPD relevant patients Dr. Rashid Aslam		Friday 12:30 To 1:30 PM		OPD Relevant patients Dr. Rashid Aslam

Day	Week 7 Endocrine and Reproductive system							
		Theme-1: Diabetic foot						
		8:30-10:30 AM		10:30-12:30 AM-PM		12:30 To 1:0PM		1:00-3:00 PM
Mon		Complications and management of diabetic foot Dr. Rashid Aslam		Examination of diabetic foot Operation theatre Dr. Rashid Aslam		B R E A K		Operation theatre Relevant patients Dr. Rashid Aslam
	Theme-3: Breast Lumps							
Tue		Benign breast diseases Dr. M. Alam		History taking of a patient with breast lump Dr. M. Alam				Surgical C ward BST Dr. M. Alam
Wed		Diagnostic workup of different breast pathologies Including imaging and procedures Dr. M. Alam		OPD relevant patient Dr. M. Alam				OPD relevant patient Dr. M. Alam
Thu		Nipple discharge, diagnostic approach Management of nipple discharge Dr. M. Alam		PRIME Patient counselling for mastectomy Operation theatre Dr. M. Alam				Operation theatre Relevant patients Dr. M. Alam
		Theme-2: Diabetic Foot						
Fri		Management of Ca breast Perform clinical breast examination by all techniques including, “radial wagon wheel” and “spoke” method Dr. M. Alam		Council a Ca breast patient about diagnosis, management and screening of her family members Dr. M. Alam		Friday 12:30 To 1:30 PM		Ward / OPD Relevant patient Dr. M. Alam

Day	Week 8 Module: Nervous system Themes: Headache, Lower limb weakness				
		8:30-10:30 AM	10:30-12:30 AM-PM	12:30 To 1:0PM	1:00-3:00 PM
Mon		Introduction to intracranial SOL Dr. Miyan Iftikhar UI Haq	Etiology & classification of intracranial SOL Dr. Miyan Iftikhar UI Haq	B R E A K	Clinical features of intracranial SOL & diagnostic workup & radiological findings Dr. Miyan Iftikhar UI Haq
Tue		History, examination & treatment options for intracranial SOL clinical case discussion counseling Dr. Miyan Iftikhar UI Haq	Adjuvant therapy for intracranial SOL & rehabilitation Dr. Miyan Iftikhar UI Haq		PRIME Critical incidence reports (lecture) Dr. Miyan Iftikhar UI Haq
Wed		Resuscitation for head injury (ATLS protocol) Neurological assessment Dr. Sohail Amir	Classification & mechanism of head injury Dr. Sohail Amir		Diagnostic workup & radiological findings Dr. Sohail Amir
Thu		Treatment options for head injury & ICU care Dr. Sohail Amir	Management of complications of head injury Dr. Sohail Amir		Counselling for post op care & rehabilitation after head injury Dr. Sohail Amir
Fri		Introduction to congenital malformations – spinal dysraphism Dr. Imran Khan	Etiology & classification of spina bifida Dr. Imran Khan	Friday 12:30 To 1:30 PM	Clinical features, diagnostic workup & radiological findings of spina bifida Dr. Imran Khan

Day	Week 9 Module: Nervous system Themes: Headache, Lower limb weakness				
		8:30-10:30 AM	10:30-12:30 AM-PM	12:30 To 1:0PM	1:00-3:00 PM
Mon		Hx & examination of spina bifida & clinical case discussion Dr. Imran Khan	Treatment options for spina bifida Dr. Imran Khan	B R E A K	Management of post op complications & counseling for post op care Dr. Imran Khan
Tue		Introduction to craniocervical junction & syringomyelia Dr. M. Ali Noman	Etiology & classification of syringomyelia Dr. M. Ali Noman		Clinical features & radiological findings of syringomyelia Dr. M. Ali Noman
Wed		Hx & examination of syringomyelia & clinical case discussion Dr. M. Ali Noman	Treatment options for syringomyelia Dr. M. Ali Noman		Management of post op complications & counseling for post op care Dr. M. Ali Noman
Thu		Introduction to diseases of vertebrae & intervertebral discs & kyphoscoliosis Dr. Shahid Ayub & Dr. Mushtaq	Etiology, classification, clinical and radiological findings of diseases of vertebrae & intervertebral disc & kyphoscoliosis Dr. Shahid Ayub & Dr. Mushtaq		PRIME Communication with colleagues (role play / hospital teaching) Dr. Shahid Ayub & Dr. Mushtaq
Fri		Hx & examination of diseases of vertebrae & intervertebral discs & kyphoscoliosis Dr. Shahid Ayub & Dr. Mushtaq	Management of diseases of vertebrae & intervertebral discs & kyphoscoliosis Dr. Shahid Ayub & Dr. Mushtaq	Friday 12:30 To 1:30 PM	Management of post op complications and counseling for post op care Dr. Shahid Ayub & Dr. Mushtaq

Day	Week 10 GIT & Hepatobilliary system						
		Theme-1: Difficulty in swallowing and epigastric pain					
		8:30-10:30 AM		10:30-12:30 AM-PM		12:30 To 1:0PM	1:00-3:00 PM
Mon		Dysphagia Diagnostic workup Prof. Zahid Aman		OPD Relevant patients Prof. Zahid Aman		BREAK	OPD / Surgical A ward History taking of patient with dysphagia Prof. Zahid Aman
Tue		Management of patient with dysphagia Dr. Yousaf Jan		Clinical examination of Ca esophagus patient OT Dr. Yousaf Jan			Operation theatre Relevant teaching Dr. Yousaf Jan
		Theme-2: Yellow discolouration of the sclera					
Wed		Obstructive jaundice Diagnostic approach & management Dr. Yousaf Jan		PRIME (team work / role play) Counsel a patient with newly diagnose Ca head of pancreas Dr. Yousaf Jan			Surgical A ward BST Dr. Yousaf Jan
		Theme-3: Pain Abdomen and Diarrhea					
Thu		Pain abdomen diagnostic approach & management of suspected acute appendicitis Dr. Jamshed Alam		Elicit signs of acute appendicitis Counsel the parents of a child with acute appendicitis OPD Dr. Jamshed Alam			OPD relevant patients Dr. Jamshed Alam
Fri		Intestinal obstruction/perforation Etiology, diagnostic approach and management Dr. Jamshed Alam		Examination of patients with intestinal obstruction OT Dr. Jamshed Alam		Friday 12:30 To 1:30 PM	PRIME Dealing with colleagues / respect for colleagues (role play) Dr. Jamshed Alam

Day	Week 11 GIT & Hepatobilliary system						
		8:30-10:30 AM		10:30-12:30 AM-PM		12:30 To 1:0PM	1:00-3:00 PM
Mon		Hernias, Types, etiology, management, diagnostic approach and complications Dr. Jamshed Alam		Examination of a patient with inguinal hernia OPD Dr. Jamshed Alam		B R E A K	Surgical OPD relevant teaching Dr. Jamshed Alam
		Theme3: Constipation and bleeding per rectum					
Tue		Constipation / Bleeding PR Differentials, diagnostic workup and management Dr. Ainul Hadi		History taking of a patient with bleeding PR OPD Dr. Ainul Hadi			OPD Relevant teaching Dr. Ainul Hadi
Wed		Ulcerative collitus, Crohn’s disease, Diagnostic approach, short and long term complications Prof. Shehzad Akbar Khan		Extra intestinal manifestation of inflammatory bowel disease Prof. Shehzad Akbar Khan			Operation theatre Relevant teaching Prof. Shehzad Akbar Khan
Thu		Colorectal cancer, diagnostic approach and management Dr. Ainul Hadi		Examination of a Ca rectum patient Surgical A ward BST Dr. Ainul Hadi			PRIME Honesty—acts honestly in dealing with patients Dr. Ainul Hadi
Fri		Fistula in ano / Hirschprun disease, Anal fissure / hemorrhoids Dr. Ainul Hadi		Management of a child with hirschprun disease Dr. Ainul Hadi		Friday 12:30 To 1:30 PM	OPD relevant patients Dr. Ainul Hadi

Day	Week 12 Multi system Theme: Weight loss / gain				
		8:30-10:30 AM	10:30-12:30 AM-PM	12:30 To 1:0PM	1:00-3:00 PM
Mon		Bariatric Surgery Surgical management of obesity Prof. Shehzad Akbar Khan	Vitamin deficiency Thiamine, pyridoxine, Vitamin B12 deficiency and pernicious anemia Dr. Ainul Hadi	B R E A K	Operation theatre Relevant teaching Dr. Ainul Hadi
Tue		Etiology, clinical features, investigations and treatment of Beri Beri Vitamin A,D,E,K deficiency Dr. Ainul Hadi	Etiology, clinical features, investigations, treatment and prevention of Vit A,D,E,K deficiency Dr. Ainul Hadi		OPD relevant teaching Dr. Ainul Hadi
Wed		Nutritional support / enteral and parental nutritional Mal nutrition, methods of nutiriton support, indications, contra- indications and complications of oral enteral and parental nutrition Dr. Ainul Hadi	Perform insertion of NG tube, observe insertion and care of PEG tube, Council a patient before NG and PEG tube insertion Operation theatre Dr. Ainul Hadi		PRIME Patients records Daily progress report Dr. Ainul Hadi
Thu		Modes of clinical and laboratory monitoring of nutrition support Routes of access of parenteral nutrition Dr. Ainul Hadi	Keep an intake and output record of an admitted patient on parental nutrition Surgical B ward BST Dr. Ainul Hadi		Surgical B ward BST Dr. Ainul Hadi
Fri		Assessment (MCQs, SEQs) OT auditorium	Assessment (MCQs, SEQs) OT auditorium		Discussion OT auditorium
				Friday 12:30 To 1:30 PM	



Assessment Plan

Final Year MBBS

Assessment Plan - Final Year MBBS

The year-5 will be assessed in 4 blocks

1) Block-1 (Foundation-3, Blood and Immunology-3, and MSK-3) will be assessed in

paper-N.

2) Block-2 (Cardiorespiratory-3) will be assessed in **paper-O.**

3) Block-3 (Renal-3 and Endocrine and Reproduction-3) will be assessed in **paper-P.**

4) Block-4 (Neurosciences-3, GIT and Hepatobiliary-3 and Multisystem-2) will be assessed in **paper-Q.**

5) Each written paper consists of 120 MCQs.

6) Internal assessment will be added to final marks in KMU as shown in table below.

7) In OSCE, each station will be allotted 6 marks, and a total of 120 (+10% marks of internal assessment (18 marks) marks are allocated for each OSCE examination.

8) Any content of the subjects (medicine and allied, Surgical and allied, Gynecology and pediatrics) already covered in the previous years will be included in the final year assessments (both written and practical).

9) Practical assessment will be in the form of OSCE (+embedded short cases and Objective Structured Long Examination Record.

10) The details of each section are given in the tables below.

Section-A

Total Marks Distribution Scheme

Table 1: Distribution of marks in the final year professional examination

Assessment Plan of Year 5 MBBS							
Theory paper	Modules	Theory marks	Internal assessment theory (10%)	OSCE	Structured Long-case)	Internal assessment OSPE/OSPE (10%)	TOTAL MARKS
Paper N	Foundation-3 Blood-3 MSK-3	120	12	120	30	18	300
Paper O	Cardiopulmonary-3	120	12	120	30	18	300
Paper P	Renal-3 Endocrine and Reproduction-3	120	12	120	30	18	300
Paper Q	Neurosciences-3 GIT-3 Multisystem-2	120	12	120	30	18	300
Total Marks		480	48	480	120	72	1200

Section-B

Theory Examination Scheme

Table-2: Paper-N (Foundation-3, Blood-3 and MSK-3)

Block	Module	Subject hours	Subject MCQs	Total MCQs	Paper MCQs
N	Foundation-3	PRIME	5	25	120
		Medicine	3		
		Surgery	10		
		Psychiatry	3		
		Pediatrics	3		
		Radiology	1		
	Blood-3	Pediatrics	17	35	
		Medicine	16		
		Gynecology	2		
	MSK-3	Medicine	21	60	
		Orthopedics	12		
		Paediatrics	7		
		Dermatology	14		
		Surgery/plastic surgery	5		
		Psychiatry	1		

Table-3: Paper-O (CVS-3 and Respiratory-3)

Block	Module	Subjects hours	Subject t MCQs	Total MCQ s	Paper MCQs	
O	Cardiopulmonary- 3	CVS- 3			70	120
		Medicine/cardiology	45			
		Pediatrics	25			
		Respiratory-3			50	
		Medicine/pulmonology	25			
		Pediatrics	20			
		Surgery	5			

Table-4: Paper-P (Renal-3 and Endocrine and Reproduction-3)

Block	Module	Subjects hours	Subject MCQs	Total MCQs	Paper MCQs
P	Renal-3	Medicine/Nephrology	22	40	120
		Surgery/Urology	10		
		Pediatrics	6		
		Pediatric surgery	2		
	Endocrine and Reprouction-3	Medicine/ Family medicine	12	80	
		Obstetrics	56		
		Surgery	8		
		Paediatrics	4		

Table-5: Paper-Q (Neurosciences-3, GIT-3 and Multisystem-3)

Block	Module	Subjects hours	Subject MCQs	Total MCQs	Paper MCQs
Q	NS-3	Medicine/ Family medicine	24	45	120
		Psychiatry	5		
		Pediatrics	8		
		Neurosurgery/surgery	4		
		Pediatrics surgery/Surgery	2		
		Orthopedics	2		
		GIT-3	Medicine		
	Surgery/ Pediatric surgery		17		
	Pediatrics		8		
	Gynaecology		1		
	Multisystem-2	Medicine/Nephrology	22	40	
		Paediatrics	11		
		Surgery	5		
		Psychiatry	1		
		Gynaecology	1		

Section-C

Practical Examination Scheme

Table 6: OSCE station distribution of different subjects

BLOCK-N (TOTAL STATIONS=20 and 6 marks/station)					
Subjects	OSCE stations		Viva stations	Logbook and history books (1-station)	Structured Long case =30 marks)
	Static/ interactive	Short cases			
Medicine+ Rheumatology	2	2	1	General Surgery and allied	General Surgery
Surgery	2	0	1		
Paediatrics	2	2	1		
Orthopedics	1	1	1		
Dermatology	2	0	1		
Total	9	5	5	1	1

Table 7: OSCE station distribution of different subjects

BLOCK-O (TOTAL STATIONS=20 and 6 marks/station)					
Subjects	OSCE stations		Viva stations	Logbook and history books (1-station)	Structured Long case =30 marks)
	Static/ interactive	Short cases			
Medicine	2	1	1	General medicine and allied	General Medicine
Cardiology	3	1	1		
Paediatrics	2	2	1		
Pulmonology	3	1	1		
Total	10	5	4	1	1

Table 8: OSCE station distribution of different subjects

BLOCK-P (TOTAL STATIONS=20 and 6 marks/station)					
Subjects	OSCE stations	Viva stations	Short cases	Logbook and history books (1-station)	Structured Long case -30 marks)
Gynaecology	7	1	2	Gynaecology And Obstetrics	Gynaecology And Obstetrics
Medicine+ Endocrinology	2	1	1		
Paediatrics	1	1	0		
Surgery	1	1	1		
Total	11	4	4	1	1

Table 9: OSCE station distribution of different subjects

BLOCK-Q (TOTAL STATIONS=20 and 6 marks/station)					
Subjects	OSCE stations	Viva stations	Short cases	Logbook and history books (1-station)	Structured Long case- 30 marks)
Medicine/neurology/ Gastroenterology	4	1	2	Paediatrics	Paediatrics
Paediatrics	1	1	1		
Surgery/neurosurgery / Paediatric surgery	5	1	1		
Psychiatry	1	1	0		
Total	11	4	4	1	1

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Text books

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