

# ENDOCRINOLOGY & REPRODUCTION II MODULE

## 4<sup>th</sup> Year MBBS



Swat Medical College, Swat  
Marghuzar Road, Saidu Shareef, Swat

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## **Khyber Medical University: Vision**

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

## **Vision and Mission of STMC**

### **Swat Medical College: Vision**

To be a center of excellence in medical education, patient care and research globally.

### **Swat Medical College: Mission**

To impart quality medical education through evidence based teaching incorporating professionalism, patient safety, research, critical thinking, ethics and leadership.

## Curriculum Committee STMC

S.NO	NAME	DESIGNATION
1.	Prof. Dr Aziz Ahmad	Principal/Dean/Chairman
2.	Prof.Dr. Manzoor Ali	VP Academics/Co-Chairman
3.	Prof. Dr. Rashid Ahmad	VP Administration / Member
4.	Prof.Dr. Nisar Ali	VP Clinical / Member
5.	Prof. Dr. Gulshan Hussain	HoD ENT / Member
6.	Prof. Dr. Mukammil Shah	Professor Pathology / Member
7.	Prof.Dr. Qarib Ullah	HoD Community Medicine / Member
8.	Prof.Dr. Liaqat Ali	HoD Anatomy /Member
9.	Dr. Hidayat Ur Rahman	Associate Prof. Forensic Medicine / Member
10.	Dr. Khurshid Ahmad	Director DME
11.	Dr. Obaid-ur-Rahman	Associate Professor Biochemistry
12.	Dr. Ibrahim	Assistant Professor Pediatric
13.	Dr. Ubaidullah	Assistant Prof Community Med/PRIME
14.	Dr. Salahuddin	Assistant Professor Ophthalmology
15.	Dr. Zulfiqar Ali	SR. Gynae
16.	Dr. Alam Zeb	Senior Lecturer Physiology
17.		C.R 4 <sup>th</sup> Year MBBS
18.		G.R 4 <sup>th</sup> Year MBBS
19.		C.R 3 <sup>rd</sup> Year MBBS
20.		G.R 3 <sup>rd</sup> Year MBBS
21.		C.R 2 <sup>nd</sup> Year MBBS
22.		G.R 2 <sup>nd</sup> Year MBBS
23.		C.R 1 <sup>st</sup> Year MBBS
24.		G.R 1 <sup>st</sup> Year MBBS

## MODULE PLANNING COMMITTEE – IV (MPC-IV)

S.NO	Name	Department	Designation
1.	Prof. Dr. Aziz Ahmed	Principal & Professor HoD Medicine	Patron
2.	Prof. Dr. Imran ud Din Khattak	Professor & HoD Pathology	Chairman
3.	Prof. Dr. Shah Jehan	Professor & Pathology	Member
4.	Dr. Qarib Ullah	Professor/HoD Community Medicine	Member
5.	Dr. Rahman Shah	Associate Professor & Pharmacology	Member
6.	Dr. Hidayat Ur Rahman	Associate Professor & Hod Forensic Medicine	Member
7.	Dr. Ubaid Ullah	Assistant Professor & Community Medicine	Prime/Member
8.	Mr. Ibrar Khan	Computer Operator & Pathology	Secretary

## Integrated curriculum:

An integrated curriculum is all about making connections, whether to real life or across the disciplines, about skills or about knowledge. An integrated curriculum fuses subject areas, experiences, and real-life knowledge together to make a more fulfilling and tangible learning environment for students. Integrated teaching means that subjects are presented as a meaningful whole. Students will be able to have better understanding of basic sciences when they repeatedly learn in relation to clinical examples. Case based discussions, computer-based assignments, early exposure to clinics, wards, and skills acquisition in skills lab are characteristics of integrated teaching program.

## Outcomes of the curriculum:

- Role model
- Knowledgeable
- Skillful
- Community Health Promoter
- Problem-solver
- Professional
- Researcher
- Leader

## Knowledge

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

1. Relate to patient and caregivers 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

## Modules Year-4th MBBS

S. No	Module Name	Duration
1	Neuroscience II Module	9 weeks
2	Gastro intestinal & Hepatobiliary System Module	8 weeks
3	Renal Module	3 weeks
4	Endocrinology & Reproduction Module	
5	ENT	
6	EYE	

**Table 1: Themes**

<b>S. No</b>	<b>Theme</b>	<b>Duration in days</b>
1	Tall/short stature	3
2	Neck swelling and Musclecramps	6
3	Excessive thirst and urination	6
4	Moon face	5
5	Infertility and pregnancy	15
6	Breast lump	3

## Teaching Hours Allocation

Table 2: Total hours of different subjects

S#	Subject	Hours
1	Pathology	44
2	Pharmacology	23
3	Forensic medicine	16
4	Medicine	19
5	Community medicine	30
6	Gynaecology	14
7	Surgery	05
8	Paediatrics	02
9	Physiology	02
10	Urology	01
11	Neurosurgery	01
12	Family medicine	03
13	PRIME/MEDICAL EDUCATION	2
14	Research*	14**
	<b>Total</b>	<b>162</b>

\* Two hours per week for research project in the whole academic session

\*\*these hours are neither included in total hours nor in assessment as separate marks have been allotted to research in viva

## Learning Objectives

### General Learning Objectives

**By the end of Endocrine & Reproduction Module, 4th year MBBS students will be able to:**

- 1) Describe the pathology, clinical features, investigations, and treatment of Hyper and hypopituitarism
- 2) Describe the pathology, clinical features, investigations, and treatment of Hyper and hypothyroidism, and hyperand hypoparathyroidism
- 3) Describe the classification, pathogenesis, clinical features, investigations, and treatment of Diabetes mellitus
- 4) Explain the pathology, clinical features, investigations, and treatment of Hyper and hypoadrenalism
- 5) Explain the causes of male and female infertility and its management
- 6) Explain the classification, pathology, and management of testicular tumors
- 7) Explain benign and malignant breast disease
- 8) Discuss the etiology, risk factors, clinical features, investigations, and treatment of carcinoma of breast
- 9) Describe the pharmacokinetics and pharmacodynamics of pituitary, gonadal, pancreatic, thyroid, and adrenocortical hormones, their synthetic analogues and antagonists, and their role in the management of relevant disease conditions
- 10) Formulate prescriptions for patients with Graves' disease and Diabetes mellitus
- 11) Discuss the laws related to sexual offenses, and management of a rape victim in forensic aspects
- 12) Explain the pathophysiology and surgical management of benign prostatic hyperplasia and carcinoma of the prostate

## Specific Learning Objectives

**Table 3: Theme Wise Learning Objectives**

Theme-1: Tall / short stature					
Subject	Topic	Hours	Learning Objectives	MIT	Assessment
Pathology	Pituitary gland- Physiological anatomy	1	Explain the gross and microscopic structure of pituitary gland	SGD/LGF	MCQs/SEQs
			Explain the functions of hormones of the anterior and posterior pituitary gland and their regulation by the Hypothalamus	SGD/LGF	MCQs/SEQs
	Hyperpituitarism/ Pituitaryadenomas: <ul style="list-style-type: none"> <li>• Prolactinomas</li> <li>• Somatotrophic</li> </ul>	1	Explain the causes of hyperpituitarism	SGD/LGF	MCQs/SEQs
			Discuss the gross and microscopic structure of pituitary adenomas, and the hormones secreted from these	SGD/LGF	MCQs/SEQs

	tumors <ul style="list-style-type: none"> <li>• Corticotrophic tumors</li> <li>• Others</li> </ul>		Explain the clinical manifestations of different types of pituitary adenomas	SGD/LGF	MCQs/SEQs
				SGD/LGF	MCQs/SEQs

	Hypopituitarism	1	Describe the etiology and clinical manifestations of hypopituitarism	SGD/LGF	MCQs/SEQs
Medicine	Acromegaly/ Gigantism	2	Explain the etiology, clinical features, investigations, treatment, and complications of Acromegaly/gigantism	SGD/LGF	MCQs/SEQs
	Hyperprolactinemia		Discuss the etiology, clinical features, investigations, and treatment of Hyperprolactinemia	SGD/LGF	MCQs/SEQs
	Hypopituitarism/ Sheehan`s syndrome		Explain the etiology, clinical features, investigations and treatment of Hypopituitarism and Sheehan`s syndrome	SGD/LGF	MCQs/SEQs
Pharmacology	Growth hormone	1	Describe the sources of Growth hormone (old and new sources)	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, clinical uses, and adverse effects of Growth hormone	SGD/LGF	MCQs/SEQs
	Growth		Enlist Growth hormone antagonists	SGD/LGF	MCQs/SEQs
	hormone antagonists (Octreotide and others)		Describe the clinical role of Octreotide in Acromegaly	SGD/LGF	MCQs/SEQs
			Describe the route of administration, dosage,and adverse effects of octreotide in acromegaly and gigantism	SGD/LGF	MCQs/SEQs



				SGD/LGF	MCQs/SEQs
				SGD/LGF	MCQs/SEQs

	Bromocriptine	1	Describe the mechanism of action, clinical uses, and adverse effects of Bromocriptine	SGD/LGF	MCQs/SEQs
Paediatrics	Short stature	1	Describe the method to measure and plot height; and calculate height velocity and midparental, target height to allow early diagnosis of growth disorders in paediatric patients	SGD/LGF	MCQs/SEQs
			Explain the diagnostic criteria that allow to differentiate causes of growth deficiency	SGD/LGF	MCQs/SEQs
			Discuss the tools for better communication with patients and families and coordination of multidisciplinary care	SGD/LGF	MCQs/SEQs
			Discuss treatment of growth hormone deficiency or other diseases responsible for short stature and their appropriate management	SGD/LGF	MCQs/SEQs
Neurosurgery	Surgical management of pituitary adenoma	1	Explain the surgical treatment and complications of pituitary macro/microadenomas	SGD/LGF	MCQs/SEQs
Community medicine	Occupational	1	Define occupational health	SGD/LGF	MCQs/SEQs
			Discuss importance of occupational health	SGD/LGF	MCQs/SEQs
			Describe ergonomics	SGD/LGF	MCQs/SEQs

	Health: Introducti on		Describe principles and responsibilities of occupational health officer [OHO]	SGD/LGF	MCQs/SEQs
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	Physical hazards	1	Enumerate physical hazards (heat, cold, noise, light, vibrations, pressure effect, Radiations)	SGD/LGF	MCQs/SEQs
			Discuss its ill effects on health	SGD/LGF	MCQs/SEQs
			Discuss its preventive measures	SGD/LGF	MCQs/SEQs
	Chemical hazards	1	Enumerate chemical hazards (inorganic dust diseases, organic dust diseases, metals & chemicals)	SGD/LGF	MCQs/SEQs
			Discuss its ill effects on health	SGD/LGF	MCQs/SEQs
			Discuss preventive measures	SGD/LGF	MCQs/SEQs
	Mechanical, Biological & Psychosomatic hazards	1	Describe mechanical hazards	SGD/LGF	MCQs/SEQs
			Discuss control measures of mechanical hazards	SGD/LGF	MCQs/SEQs
			Discuss control measures of mechanical hazards	SGD/LGF	MCQs/SEQs
			Discuss control measures of biological hazards	SGD/LGF	MCQs/SEQs
			Describe psychosomatic stressors	SGD/LGF	MCQs/SEQs
			Discuss control measures of psychosomatic stressors	SGD/LGF	MCQs/SEQs
	Animal hazards	1	Describe types, prevalence, and statistics of snake bite	SGD/LGF	MCQs/SEQs
			Discuss prevention and management of snake bite	SGD/LGF	MCQs/SEQs

		Discuss causes of poor management with respect to awareness and vaccination	SGD/LGF	MCQs/SEQs
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	Preventive measures, health insurance, social security schemes	1	Describe various preventive measures of occupational hazards (Medical engineering and legal measure)	SGD/LGF	MCQs/SEQs	
			Discuss role and benefits of health insurance	SGD/LGF	MCQs/SEQs	
			Discuss social security and its benefits	SGD/LGF	MCQs/SEQs	
			3	Define demography and various related terms	SGD/LGF	MCQs/SEQs
				Explain and interpret population pyramid	SGD/LGF	MCQs/SEQs
				Explain demographic transition	SGD/LGF	MCQs/SEQs
				Describe the causes of high and low fertility and mortality	SGD/LGF	MCQs/SEQs
		Growth rate	Define population growth rate, CDR, CBR	SGD/LGF	MCQs/SEQs	
			Describe growth rate	SGD/LGF	MCQs/SEQs	
			Describe population explosion & its implications	SGD/LGF	MCQs/SEQs	
			Explain advantages of population control	SGD/LGF	MCQs/SEQs	
	Demographic indicators	Describe the demographic indicators of Pakistan	SGD/LGF	MCQs/SEQs		
	PRIME/MEDICAL EDUCATION	Dealing with patients	1	Serve the patient as an individual, considering lifestyle, beliefs, and support system	SGD/LGF	MCQs/SEQs
Community Need analysis		Identify the health care needs of community.		SGD/LGF	MCQs/SEQs	

			SGD/LGF	MCQs/SEQs
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Theme-2: Neck swelling and muscle cramps					
Physiology	Physiologic anatomy of the Thyroid gland	1	Explain the gross and microscopic structure of Thyroid gland	SGD/LGF	MCQs/SEQs
			Explain the synthesis and functions of hormones of the thyroid gland and their regulation by the anterior pituitary	SGD/LGF	MCQs/SEQs
Pathology	Hyperthyroidism including Grave's disease	1	Discuss the etiology, pathogenesis and morphology of Hyperthyroidism and Grave's disease	SGD/LGF	MCQs/SEQs
	Hypothyroidism	1	Discuss the etiology, pathogenesis, morphology, and clinical features of Hypothyroidism	SGD/LGF	MCQs/SEQs
	Thyroiditis	1	Discuss the classification, morphology, and presentations of Thyroiditis	SGD/LGF	MCQs/SEQs
	Multinodular goitre		Explain the etiology, clinical features, and complications of multinodular goitre	SGD/LGF	MCQs/SEQs
	Thyroid malignancies	1	Classify thyroid malignant disorders	SGD/LGF	MCQs/SEQs
			Explain morphology, clinical features, and prognosis of thyroid malignancies	SGD/LGF	MCQs/SEQs



Medicine	Hyperthyroidism including Grave's disease	1	Discuss the etiology, clinical features, investigations and treatment and prognosis of Hyperthyroidism and Grave's disease	SGD/LGF	MCQs/SEQs
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			Explain the pathogenesis, clinical features, and management of Grave`s Ophthalmopathy	SGD/LGF	MCQs/SEQs
	Hypothyroidism	2	Discuss the types, etiology, clinical features, investigations, and treatment of Hypoparathyroidism	SGD/LGF	MCQs/SEQs
	Thyroiditis		Describe the classification, etiology, clinical features, investigations, and treatment of Thyroiditis	SGD/LGF	MCQs/SEQs
	Multinodular goitre	1	Discuss the etiology, clinical features, investigations, and management approach to a patient with multinodular goitre	SGD/LGF	MCQs/SEQs
	Thyroid malignancies		Classify thyroid malignant disorders	SGD/LGF	MCQs/SEQs
			Discuss the pathogenesis, clinical features, investigations, and management of Thyroid malignancies	SGD/LGF	MCQs/SEQs
	Hyperparathyroidism	1	Discuss the types, etiology, clinical features, investigations, and treatment of Hyperparathyroidism	SGD/LGF	MCQs/SEQs
	Hypoparathyroidism		Discuss the types, etiology, clinical features, investigations, and treatment of Hypoparathyroidism	SGD/LGF	MCQs/SEQs

Pharmacology	Thyroid hormones	1	Enlist thyroid preparations (used clinically as well as older-obsolete ones)	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, pharmacological effects, clinical use, and adverse effects of Thyroxine (T <sub>4</sub> ) and Triiodothyronine (T <sub>3</sub> )	SGD/LGF	MCQs/SEQs
	Antithyroid drugs	2	Classify Antithyroid drugs	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, clinical use, and adverse effects of Thioamides	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, clinical use, and adverse effects of Potassium iodide	SGD/LGF	MCQs/SEQs
			Describe Lugol's iodine solution	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, clinical use, and adverse effects of Radioactive iodine ( <sup>131</sup> I)	SGD/LGF	MCQs/SEQs
			Describe the use of β-blockers in hyperthyroid patients	SGD/LGF	MCQs/SEQs
Paediatrics	Congenital hypothyroidism	1	Discuss the types and clinical features of hypoparathyroidism	SGD/LGF	MCQs/SEQs
			Discuss investigations and treatment of Hypoparathyroidism	SGD/LGF	MCQs/SEQs
Community medicine	Iodine deficiency / Goitre	1	Discuss sources of iodine and goitrogens	SGD/LGF	MCQs/SEQs
			Discuss iodine deficiency disorders and daily requirement of Iodine	SGD/LGF	MCQs/SEQs
			Explain the epidemiological determinants and control strategies for iodine deficiency/goitre	SGD/LGF	MCQs/SEQs

Theme-3: Excessive thirst and urination					
Pathology	Diabetes Mellitus <ul style="list-style-type: none"><li>• Classification</li><li>• Diagnosis</li><li>• Insulin resistance</li><li>• Beta cell dysfunction</li><li>• Complications<ul style="list-style-type: none"><li>○ Acute</li><li>○ Chronic</li></ul></li></ul>	1	Classify Diabetes mellitus	SGD/LGF	MCQs/SEQs
			Explain the diagnostic criteria of DM	SGD/LGF	MCQs/SEQs
			Explain the mechanisms of insulin resistance	SGD/LGF	MCQs/SEQs
			Explain the mechanisms of beta cell dysfunction	SGD/LGF	MCQs/SEQs
			Explain the acute and chronic complications of DM	SGD/LGF	MCQs/SEQs
	Pancreatic neuroendocrine tumors	1	Describe the types and clinical presentations of pancreatic neuroendocrine tumors	SGD/LGF	MCQs/SEQs
	Medicine	Diabetes mellitus <ul style="list-style-type: none"><li>• Types</li><li>• Insulin resistance syndromes</li><li>• Clinical features investigations</li><li>• Treatment</li><li>• Complications</li></ul>	2	Explain the different types of DM	SGD/LGF
Discuss the mechanism presentation, and management of insulin resistance				SGD/LGF	MCQs/SEQs
Discuss the clinical features of DM				SGD/LGF	MCQs/SEQs
Explain the diagnostic workup of a patient with DM				SGD/LGF	MCQs/SEQs
Classify the pharmacological treatment of DM				SGD/LGF	MCQs/SEQs
Explain lifestyle modifications in the management of DM				SGD/LGF	MCQs/SEQs

		1	Discuss the acute and chronic complications of DM	SGD/LGF	MCQs/SEQs
	Hypoglycemic coma	1	Explain the etiology, clinical features and management of hypoglycemic coma	SGD/LGF	MCQs/SEQs
	Diabetic ketoacidosis	1	Explain the precipitating factors, diagnostic workup, and treatment of a patient with diabetic Ketoacidosis	SGD/LGF	MCQs/SEQs
	Hyperosmolar		Explain the precipitating factors, diagnostic workup, and treatment of a patient with Hyperosmolar non-ketotic diabetic coma	SGD/LGF	MCQs/SEQs
	Lactic acidosis		Explain the precipitating factors, diagnostic workup, and treatment of a patient with Lactic Acidosis	SGD/LGF	MCQs/SEQs
	Posterior pituitary gland	1	Discuss the functions of hormone Vasopressin secreted by the posterior pituitary gland	SGD/LGF	MCQs/SEQs
			Explain the etiology, clinical features, investigations, and treatment of Diabetes Insipidus	SGD/LGF	MCQs/SEQs
	SIADH		Explain the etiology, and pathogenesis of SIADH Secretion	SGD/LGF	MCQs/SEQs
Pharmacology	Insulin	1	Classify Insulins	SGD/LGF	MCQs/SEQs
			Describe the sources of Insulin	SGD/LGF	MCQs/SEQs

			Describe the differences between the human,bovine and porcine Insulins	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action and clinical uses of Insulin	SGD/LGF	MCQs/SEQs
			Describe the complications of Insulin therapy	SGD/LGF	MCQs/SEQs
			Describe the management of hypoglycemia caused by Insulin	SGD/LGF	MCQs/SEQs
			Describe the management of diabetic Ketoacidosis	SGD/LGF	MCQs/SEQs
	Oral hypoglycemic drugs	2	Classify oral hypoglycemic drugs	SGD/LGF	MCQs/SEQs
			Enlist euglycaemic drugs	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action and adverse effects of Sulphonylureas	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action and clinical use of Meglitinides	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, clinical use,and adverse effects of Biguanides	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, clinical use,and adverse effects of Thiazolidinediones	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, clinical use,and adverse effects of $\alpha$ -glucosidase inhibitors	SGD/LGF	MCQs/SEQs

			Describe the mechanism of action and clinical use of Pramlintide, Exenatide and Sitagliptin	SGD/LGF	MCQs/SEQs
	Glucagon	1	Describe the mechanism of action and clinical use of Glucagon	SGD/LGF	MCQs/SEQs
	Vasopressin/ Desmopressin		Describe the mechanism of action, clinical use, and adverse effects of Desmopressin	SGD/LGF	MCQs/SEQs
			Enlist the drugs used in nephrogenic diabetes insipidus	SGD/LGF	MCQs/SEQs
Paediatrics	Management of Type 1 Diabetes mellitus in children	1	Enumerate the blood glucose parameters and the clinical signs for an early diagnosis of diabetes in a child.	SGD/LGF	MCQs/SEQs
			Recognize how diabetes may present in young children or babies, to make the diagnosis and prevent coma or death	SGD/LGF	MCQs/SEQs
			Plan investigations and management plan for a newly diagnosed and a known diabetic child.	SGD/LGF	MCQs/SEQs
			Enumerate the different types of insulins.	SGD/LGF	MCQs/SEQs
Community medicine	Non-communicable diseases: Prevention	2	Discuss Prevalence of diabetes mellitus globally and in Pakistan	SGD/LGF	MCQs/SEQs
			Discuss modifiable and non-modifiable risk factors for diabetes mellitus	SGD/LGF	MCQs/SEQs
			Describe epidemiological determinants of diabetes mellitus	SGD/LGF	MCQs/SEQs
			Discuss screening methods for diabetes mellitus	SGD/LGF	MCQs/SEQs
			Discuss the prevention (Primary, secondary, and tertiary) and care of diabetes mellitus	SGD/LGF	MCQs/SEQs

	of  diabetes mellitus				
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Theme-4: Moon face					
Physiology	Physiology of the Adrenalcortical hormones	1	Explain the gross and microscopic structure of Adrenal gland	SGD/LGF	MCQs/SEQs
			Explain the synthesis and functions of hormonesof the adrenal cortex and their regulation by the anterior pituitary	SGD/LGF	MCQs/SEQs
Pathology	Hypercortisolism	1	Discuss the etiology of Hypercortisolism	SGD/LGF	MCQs/SEQs
			Explain the etiology and clinical features, of Cushing`s syndrome	SGD/LGF	MCQs/SEQs
	Hyperaldosteronism	1	Explain the etiology, and presentation of primary Hyperaldosteronism	SGD/LGF	MCQs/SEQs
	Adrenogenital syndrome		Explain the etiology, clinical features, of Adrenogenital syndrome	SGD/LGF	MCQs/SEQs
	Adrenal insufficiency <ul style="list-style-type: none"><li>• Primary (Acute andChronic)</li><li>• Secondary</li></ul>	1	Classify adrenal insufficiency in the context of its Etiology	SGD/LGF	MCQs/SEQs
			Discuss the clinical presentations and complications of adrenal insufficiency	SGD/LGF	MCQs/SEQs
	Adrenal neoplasms	1	Discuss the types of adrenal neoplasms	SGD/LGF	MCQs/SEQs
			Explain the morphology, and clinical features of adrenal neoplasma	SGD/LGF	MCQs/SEQs
Pheochromocytoma	1	Explain the morphology, and clinical features of Pheochromocytoma	SGD/LGF	MCQs/SEQs	

	Multiple Endocrine Neoplasia syndromes (MEN)		Classify Multiple endocrine neoplasia syndrome	SGD/LGF	MCQs/SEQs
			Explain the morphology and clinical features of MEN	SGD/LGF	MCQs/SEQs
Medicine	Hypercortisolism	1	Explain the etiology, clinical features, diagnostic workup, and management of Hypercortisolism/Cushing's syndrome	SGD/LGF	MCQs/SEQs
	Primary Hyperaldosteronism	1	Explain the etiology, clinical features, diagnostic workup, and management of Primary Hyperaldosteronism	SGD/LGF	MCQs/SEQs
	Adrenogenital syndrome	1	Explain the etiology, clinical features, diagnostic workup, and management of Adrenogenital Syndrome	SGD/LGF	MCQs/SEQs
	Adrenal insufficiency <ul style="list-style-type: none"> <li>Primary (Acute and Chronic)</li> <li>Secondary</li> </ul>	1	Classify adrenal insufficiency	SGD/LGF	MCQs/SEQs
			Explain the etiology, clinical features, investigations, and treatment of primary Addison's disease	SGD/LGF	MCQs/SEQs
			Explain the etiology, clinical features, investigations, and treatment of pituitary adrenal insufficiency	SGD/LGF	MCQs/SEQs
	Adrenal neoplasms	1	Explain the types of adrenal tumors	SGD/LGF	MCQs/SEQs

		Discuss the clinical presentations, diagnostic workup, and treatment of adrenal tumors	SGD/LGF	MCQs/SEQs
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	Pheochromocytoma	1	Explain the clinical features, investigations, management, and complications of Pheochromocytoma	SGD/LGF	MCQs/SEQs
	Gastro-entero-pancreatico-neuroendocrine tumors (GEP-NETs) including Carcinoid tumors		Explain the clinical features, investigations, management of GEP-NETs/Carcinoid tumors	SGD/LGF	MCQs/SEQs
Pharmacology	Glucocorticoids	1	Classify Glucocorticoids	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, pharmacological effects, clinical uses, and adverse effects of glucocorticoids	SGD/LGF	MCQs/SEQs
			Describe dexamethasone suppression test	SGD/LGF	MCQs/SEQs
	Glucocorticoid antagonists/synthesis inhibitors	1	Enlist Glucocorticoid antagonists/synthesis inhibitors	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, clinical uses and adverse effects of Mifepristone, Ketoconazole, Metirapone and Aminoglutethimide	SGD/LGF	MCQs/SEQs
	Aldosterone antagonists		Describe the mechanism of action, clinical uses, and adverse effects of Spironolactone (apart from being used as diuretic)	SGD/LGF	MCQs/SEQs
Community medicine	Introduction to nutrition, basic measurements &	8	Classify nutrients	SGD/LGF	MCQs/SEQs
			Discuss quality of nutrients in diet	SGD/LGF	MCQs/SEQs
			Discuss the balanced diet	SGD/LGF	MCQs/SEQs
			Discuss energy value of different nutrients	SGD/LGF	MCQs/SEQs
			Describe classification of macronutrients	SGD/LGF	MCQs/SEQs

	allowances	Discuss the functions and importance of various macronutrients	SGD/LGF	MCQs/SEQs
	Macronutrients	Discuss daily allowance of macro nutrients	SGD/LGF	MCQs/SEQs

			Discuss the diseases caused by their deficiency and excess	SGD/LGF	MCQs/SEQs
	Micronutrients -		Describe classification of micronutrients	SGD/LGF	MCQs/SEQs
	Vitamin deficiencies		Discuss the function and importance of various vitamins	SGD/LGF	MCQs/SEQs
	allowances & control		Discuss daily allowances of vitamins	SGD/LGF	MCQs/SEQs
			Discuss diseases caused by their deficiency	SGD/LGF	MCQs/SEQs
	Micronutrients -		Discuss the function and importance of various minerals essential for health	SGD/LGF	MCQs/SEQs
	and control		Discuss daily allowance of minerals intake	SGD/LGF	MCQs/SEQs
			Discuss diseases caused by their deficiency	SGD/LGF	MCQs/SEQs
	Undernutrition -		Define undernutrition and its classification	SGD/LGF	MCQs/SEQs
	Protein calorie		Discuss protein calorie malnutrition & its causes	SGD/LGF	MCQs/SEQs
	malnutrition and		Describe the various classifications for	SGD/LGF	MCQs/SEQs
	control		assessment of PEM		
			Discuss control strategies of malnutrition	SGD/LGF	MCQs/SEQs
	Over-nutrition /		Define obesity	SGD/LGF	MCQs/SEQs
			Calculate BMI	SGD/LGF	MCQs/SEQs
			Discuss Epidemiology of obesity.	SGD/LGF	MCQs/SEQs
			enumerate Causes of obesity.	SGD/LGF	MCQs/SEQs
			Explain the Complications of obesity	SGD/LGF	MCQs/SEQs
			Formulate a management plan for obesity	SGD/LGF	MCQs/SEQs
			Discuss Prevention of obesity	SGD/LGF	MCQs/SEQs

Theme-5: Infertility and pregnancy					
Pathology	Testicular tumors	1	Classify testicular tumors	SGD/LGF	MCQs/SEQs
			Explain the gross and microscopic morphology of benign and malignant testicular tumors	SGD/LGF	MCQs/SEQs
			Discuss the staging and prognosis of testicular malignant tumors	SGD/LGF	MCQs/SEQs
	Prostatic disorders <ul style="list-style-type: none"> <li>• Prostatitis</li> <li>• Benign prostatic hyperplasia (BPH)</li> <li>• Prostatic carcinoma</li> </ul>	2	Explain the etiology and morphology of Prostatitis	SGD/LGF	MCQs/SEQs
			Explain the gross and microscopic morphology and complications of BPH	SGD/LGF	MCQs/SEQs
			Explain the clinical features, types and staging of prostatic carcinoma	SGD/LGF	MCQs/SEQs
	Sexually transmitted diseases (STDs) <ul style="list-style-type: none"> <li>• Syphilis</li> <li>• Gonorrhea</li> </ul>	1	Explain the types of STDs	SGD/LGF	MCQs/SEQs
			Explain the stages, morphology, clinical features, and complications of Syphilis	SGD/LGF	MCQs/SEQs
			Name the organisms causing Gonorrhea and its clinical features	SGD/LGF	MCQs/SEQs
	Introduction gynecological cancers	1	Enlist different types of gynecological cancers	SGD/LGF	MCQs/SEQs

	Cervical carcinoma	Explain the gross and microscopic morphology, clinical features and staging of Cervical Carcinoma		
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	Endometritis	1	Explain the etiology and pathogenesis of endometritis	SGD/LGF	MCQs/SEQs
	Uterine fibroids		Explain the etiology and morphology of uterine Fibroids	SGD/LGF	MCQs/SEQs
	Endometriosis		Explain the etiology, pathogenesis and morphology of endometriosis	SGD/LGF	MCQs/SEQs
	Endometrial and endometrial carcinoma	1	Explain the etiology, pathogenesis, morphology of Endometrial hyperplasia /carcinoma	SGD/LGF	MCQs/SEQs
	Polycystic ovarian disease	1	Explain the etiology, risk factors, clinical features, and morphology of Polycystic ovary syndrome	SGD/LGF	MCQs/SEQs
	Tumors of the ovary	1	Classify benign and malignant tumors of the Ovary	SGD/LGF	MCQs/SEQs
Gynaecology	<ul style="list-style-type: none"> <li>Benign</li> <li>malignant</li> </ul>		Explain the gross and microscopic morphology, clinical features, staging and complications of ovarian carcinoma	SGD/LGF	MCQs/SEQs
	Anatomy reproductive tract	1	Describe the anatomy of the perineum, the vagina, cervix and uterus, the adnexa and ovary	SGD/LGF	MCQs/SEQs
	Menopause	1	Define Menopause.	SGD/LGF	MCQs/SEQs
			Describe physiological and non-physiological menopause	SGD/LGF	MCQs/SEQs

			Explain the clinical effects of menopause on women	SGD/LGF	MCQs/SEQs
			Outline the assessment of menopausal women,based on modifiable and non-modifiable risk factors.	SGD/LGF	MCQs/SEQs
			Explain the management of menopause	SGD/LGF	MCQs/SEQs
			Describe the types, side-effects, relative and absolute contraindications of hormone replacement therapy (HRT)	SGD/LGF	MCQs/SEQs
	Contraception	1	Define contraception	SGD/LGF	MCQs/SEQs
			Classify contraceptive methods	SGD/LGF	MCQs/SEQs
			Explain their mechanisms of action, efficacy, and failure rates	SGD/LGF	MCQs/SEQs
			Explain the risks and benefits of each method	SGD/LGF	MCQs/SEQs
			Identify the complications of different contraceptive methods	SGD/LGF	MCQs/SEQs
	Polycystic ovary syndrome	1	Explain the risk factors, etiology, clinical features, investigations, treatment, complications, and prognosis of polycystic ovary syndrome	SGD/LGF	MCQs/SEQs

	Uterine fibroids		Explain the risk factors, clinical features, and management of uterine fibroids	SGD/LGF	MCQs/SEQs
	Endometrial cancers	1	Explain the risk factors, clinical features, investigations, prognosis, and management of endometrial carcinoma	SGD/LGF	MCQs/SEQs
	Cervical carcinomas		Explain the risk factors, clinical features, investigations, prognosis, and management of cervical carcinoma	SGD/LGF	MCQs/SEQs
	Female infertility	1	Define infertility	SGD/LGF	MCQs/SEQs
			Discuss the causes and management of female Infertility	SGD/LGF	MCQs/SEQs
	Malignant diseases of the ovaries	1	Classify benign and malignant diseases of the Ovaries	SGD/LGF	MCQs/SEQs
			Explain the clinical features, diagnosis, serological markers, staging, management and complications of ovarian carcinoma	SGD/LGF	MCQs/SEQs
	Uterovaginal prolapse	1	Describe the etiology, clinical features, complications, and management of Uterovaginal Prolapse	SGD/LGF	MCQs/SEQs
	Urinary incontinence	1	Classify urinary incontinence	SGD/LGF	MCQs/SEQs

			Explain the etiology, clinical features, management, and prevention of urinary incontinence	SGD/LGF	MCQs/SEQs
	Endometriosis	1	Define endometriosis	SGD/LGF	MCQs/SEQs
			Explain the etiology, clinical features, investigations, and management of Endometriosis	SGD/LGF	MCQs/SEQs
	Abnormal uterine bleeding	1	Explain the etiology of abnormal uterine bleeding	SGD/LGF	MCQs/SEQs
			Describe the diagnostic approach to a patient with abnormal uterine bleeding	SGD/LGF	MCQs/SEQs
	Miscarriage	1	Define miscarriage	SGD/LGF	MCQs/SEQs
			Explain the etiology, risk factors, management, and prevention of miscarriage	SGD/LGF	MCQs/SEQs
	Ectopic gestation		Describe the etiology, clinical features, diagnosis, and management of ectopic gestation	SGD/LGF	MCQs/SEQs
	Gestational trophoblastic diseases (GTDs)	1	Classify GTDs	SGD/LGF	MCQs/SEQs
			Explain the etiology, clinical features, diagnosis, management, and complications of H. Mole	SGD/LGF	MCQs/SEQs
			Explain the etiology, clinical features, diagnosis, management, and complications of Choriocarcinoma	SGD/LGF	MCQs/SEQs

	Vaginal discharge and STDs	1	Explain the etiology and diagnostic workup of vaginal discharge	SGD/LGF	MCQs/SEQs
			Describe the risk factors, etiology, clinical features, management, complications, and prevention of STDs	SGD/LGF	MCQs/SEQs
Pharmacology	Gonadotropins (FSH & LH) and human chorionic gonadotropin	1	Describe the mechanism of action, clinical uses, and adverse effects of Gonadotropins (FSH & LH) and human chorionic gonadotropin (hCG)	SGD/LGF	MCQs/SEQs
			Describe the role of gonadotropins in male infertility	SGD/LGF	MCQs/SEQs
	Gonadotropin-releasing hormone and (Gonadorelin and others)		Describe the mechanism of action, clinical uses and adverse effects of Gonadotropin-releasing hormone and analogues (Gonadorelin and others)	SGD/LGF	MCQs/SEQs
	Oxytocin	1	Describe the mechanism of action, clinical uses, and adverse effects of Oxytocin	SGD/LGF	MCQs/SEQs
	Oestrogens	1	Classify Oestrogens	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, organ system effects, clinical uses, adverse effects, and contraindications of Oestrogens	SGD/LGF	MCQs/SEQs
			Describe Premarin	SGD/LGF	MCQs/SEQs
	Progestins	1	Classify Progestins	SGD/LGF	MCQs/SEQs

			Describe the mechanism of action, organ system effects, clinical uses, adverse effects, and contraindications of Progestins	SGD/LGF	MCQs/SEQs
	Oral contraceptives	2	Classify Oral contraceptives	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, organ system effects, clinical uses, adverse effects, and contraindications of oral contraceptive pills	SGD/LGF	MCQs/SEQs
			Describe mini pills with their advantages and disadvantages	SGD/LGF	MCQs/SEQs
			Describe post-coital contraceptives	SGD/LGF	MCQs/SEQs
	Parenteral and implantable contraceptives		Describe the use of Parenteral (Medroxyprogesterone) and implantable (Norplant system) contraceptives	SGD/LGF	MCQs/SEQs
	Ovulation-inducing (Clomiphene)	1	Describe the mechanism of action, clinical use, and adverse effects of Clomiphene	SGD/LGF	MCQs/SEQs
	Mifepristone		Describe the mechanism of action, clinical uses, and adverse effects of Mifepristone	SGD/LGF	MCQs/SEQs
	Danazol		Describe the mechanism of action, clinical uses, and adverse effects of Danazol	SGD/LGF	MCQs/SEQs
	Androgens and	1	Enlist Androgens and anabolic steroids	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action, clinical uses, and adverse effects of androgen preparations	SGD/LGF	MCQs/SEQs

	Antiandrogens		Classify antiandrogens	SGD/LGF	MCQs/SEQs
			Describe the role of Ketoconazole as steroid synthesis inhibitor, its clinical uses, and adverse Effects	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action and clinical use of Finasteride	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action and clinical use of Cyproterone acetate	SGD/LGF	MCQs/SEQs
			Describe the role of Spironolactone as androgen receptor blocker and its use in this context	SGD/LGF	MCQs/SEQs
			Enlist the drugs used for male contraception	SGD/LGF	MCQs/SEQs
	Male contraception		Describe the role of Gossypol as male contraceptive agent	SGD/LGF	MCQs/SEQs
Forensic medicine	Impotence and sterility	1	Define impotence	SGD/LGF	MCQs/SEQs
			Define sterility	SGD/LGF	MCQs/SEQs
			Examine under supervision a case of sterility and Impotence	SGD/LGF	MCQs/SEQs
			Describe important causes leading to sterility and impotence in males as well as in females	SGD/LGF	MCQs/SEQs
			Appreciate difference between sterility and Impotence	SGD/LGF	MCQs/SEQs

			Medicolegal importance of sterility and impotence	SGD/LGF	MCQs/SEQs
	Sterilization	1	Define sterilization	SGD/LGF	MCQs/SEQs
			Medicolegal importance of sterilization	SGD/LGF	MCQs/SEQs
			Discuss the technique of sterilization in males and females	SGD/LGF	MCQs/SEQs
			enumerate legal formalities before sterilization	SGD/LGF	MCQs/SEQs
	Artificial insemination	1	Define artificial insemination	SGD/LGF	MCQs/SEQs
			Enumerate its different types	SGD/LGF	MCQs/SEQs
			Describe medicolegal aspects of artificial insemination	SGD/LGF	MCQs/SEQs
			Define test tube baby	SGD/LGF	MCQs/SEQs
			Define surrogate motherhood and enumerate its medicolegal importance	SGD/LGF	MCQs/SEQs
	Virginity	1	Define virginity	SGD/LGF	MCQs/SEQs
			Discuss signs of virginity	SGD/LGF	MCQs/SEQs
			Enumerate different types of hymens	SGD/LGF	MCQs/SEQs
	Pregnancy	1	Define pregnancy	SGD/LGF	MCQs/SEQs
			Describe presumptive signs of pregnancy	SGD/LGF	MCQs/SEQs
			Discuss probable signs of pregnancy	SGD/LGF	MCQs/SEQs
			Appreciate conclusive signs of pregnancy	SGD/LGF	MCQs/SEQs



			Enumerate signs of pregnancy in dead	SGD/LGF	MCQs/SEQs
			Discuss Medicolegal aspects of pregnancy	SGD/LGF	MCQs/SEQs
			Describe Isqat e Haml & Isqat E Janin as per PPC	SGD/LGF	MCQs/SEQs
	Delivery	1	Define delivery	SGD/LGF	MCQs/SEQs
			Appreciate signs of recent delivery in living	SGD/LGF	MCQs/SEQs
			Appreciate or identify signs of recent delivery in Dead	SGD/LGF	MCQs/SEQs
			Identify signs of remote delivery in living and Dead	SGD/LGF	MCQs/SEQs
			Enumerate medicolegal aspects of delivery	SGD/LGF	MCQs/SEQs
	Legitimacy & dissolution of marriage	1	Define legitimacy	SGD/LGF	MCQs/SEQs
			Define illegitimate child	SGD/LGF	MCQs/SEQs
			Enumerate medicolegal aspects of legitimacy	SGD/LGF	MCQs/SEQs
			Define superfetation	SGD/LGF	MCQs/SEQs
			Enumerate medicolegal aspects of affiliation/ adoption.	SGD/LGF	MCQs/SEQs
			Enlist legal grounds for nullity and dissolution of marriage	SGD/LGF	MCQs/SEQs
	Natural sexual offences: Rape & Incest	1	Define rape as per CrPC	SGD/LGF	MCQs/SEQs
			Enumerate medicolegal aspects of rape	SGD/LGF	MCQs/SEQs
			Examine under supervision a case of rape victim	SGD/LGF	MCQs/SEQs

			Examine under supervision examination of the Accused	SGD/LGF	MCQs/SEQs
			Define incest	SGD/LGF	MCQs/SEQs
	Zina	1	Define Muhsan as per Hudood ordinance 1979.	SGD/LGF	MCQs/SEQs
			Define Zina according Huddod ordinance 1979.	SGD/LGF	MCQs/SEQs
			Enumerate the conditions required for liability in case of Zina.	SGD/LGF	MCQs/SEQs
			Enlist punishment of Zina	SGD/LGF	MCQs/SEQs
			Enumerate steps of proof of Zina in the court	SGD/LGF	MCQs/SEQs
			Describe steps of complaint in case of Zina as per Cr PC	SGD/LGF	MCQs/SEQs
	Unnatural sexual offences Sodomy	1	Define sodomy	SGD/LGF	MCQs/SEQs
			Enumerate steps of examination of passive agent in sodomy	SGD/LGF	MCQs/SEQs
			Enumerate steps of examination of active agent	SGD/LGF	MCQs/SEQs
			Define and describe buccal coitus	SGD/LGF	MCQs/SEQs
			Define and describe tribadism	SGD/LGF	MCQs/SEQs
			Define bestiality	SGD/LGF	MCQs/SEQs
	Sexual perversions	1	Define sexual perversions	SGD/LGF	MCQs/SEQs
			Enumerate its different types	SGD/LGF	MCQs/SEQs
			Define and describe sadism	SGD/LGF	MCQs/SEQs

			Define and describe masochism	SGD/LGF	MCQs/SEQs
			Define and describe fetishism	SGD/LGF	MCQs/SEQs
			Define and describe exhibitionism	SGD/LGF	MCQs/SEQs
			Define and describe transvestism	SGD/LGF	MCQs/SEQs
			Define and describe uranism	SGD/LGF	MCQs/SEQs
			Define and describe voyeurism	SGD/LGF	MCQs/SEQs
			Define and describe frotteurism	SGD/LGF	MCQs/SEQs
			Define and describe urolagnia	SGD/LGF	MCQs/SEQs
	Abortion	1	Define abortion	SGD/LGF	MCQs/SEQs
			enumerate its different types	SGD/LGF	MCQs/SEQs
			enumerate salient features of natural abortion	SGD/LGF	MCQs/SEQs
			enumerate salient features of artificial abortion	SGD/LGF	MCQs/SEQs
			differentiate between natural and criminal abortion	SGD/LGF	MCQs/SEQs
			examine under supervision a case of criminal abortion and legal formalities to be fulfilled in such a case	SGD/LGF	MCQs/SEQs
Urology/Surgery	Causes of male infertility	1	Discuss the causes of male infertility	SGD/LGF	MCQs/SEQs
			Explain the diagnostic workup of a male infertile patient	SGD/LGF	MCQs/SEQs
Surgery	Cryptorchidism	1	Define Cryptorchidism	SGD/LGF	MCQs/SEQs

			Explain the etiology, complications and management of Cryptorchidism	SGD/LGF	MCQs/SEQs
	Hydrocele and varicocele		Explain the cause, clinical features, complications and surgical management of hydrocele and varicocele	SGD/LGF	MCQs/SEQs
	Benign Hyperplasia	1	Explain the etiology, clinical features, complications, and management of BPH	SGD/LGF	MCQs/SEQs
	Carcinoma of prostate		Explain the etiology, clinical features, complications, staging, management, and prognosis of carcinoma of the prostate	SGD/LGF	MCQs/SEQs
Community medicine	Safe motherhood	1	Define reproductive health	SGD/LGF	MCQs/SEQs
			Describe components of reproductive health	SGD/LGF	MCQs/SEQs
			Define safe motherhood	SGD/LGF	MCQs/SEQs
			Discuss pillars of safe motherhood	SGD/LGF	MCQs/SEQs
	Antenatal care	1	Discuss antenatal care	SGD/LGF	MCQs/SEQs
			Discuss antenatal visits as per WHO	SGD/LGF	MCQs/SEQs
	Family planning and post abortion care	1	Define family planning	SGD/LGF	MCQs/SEQs
			Discuss different methods of family planning	SGD/LGF	MCQs/SEQs
			Discuss contraceptive prevalence rate and factors responsible for low CPR	SGD/LGF	MCQs/SEQs
			Discuss Post abortion care	SGD/LGF	MCQs/SEQs
		2	Define IMNCI & IMCI	SGD/LGF	MCQs/SEQs

	Child promotion and development strategies (IMNCI, IMCI and growth monitoring)		Describe components of IMNCI	SGD/LGF	MCQs/SEQs
			Enumerate principles of IMNCI	SGD/LGF	MCQs/SEQs
			Discuss growth monitoring	SGD/LGF	MCQs/SEQs
	Prevention of reproductive health diseases	1	Discuss different reproductive health diseases	SGD/LGF	MCQs/SEQs
			Discuss STIs in detail	SGD/LGF	MCQs/SEQs
			Discuss risk factors and Prevention of CA cervix	SGD/LGF	MCQs/SEQs
Family medicine	Menstrual disorders	1	Enlist menstrual disorders	SGD/LGF	MCQs/SEQs
			Explain the etiology, investigations and management of menstrual disorders in primary care	SGD/LGF	MCQs/SEQs
	Menopause		Explain the clinical features, and management of menopausal symptoms and complications in primary care	SGD/LGF	MCQs/SEQs
	Contraception	1	Explain the types of contraception methods	SGD/LGF	MCQs/SEQs
			Explain the merits and demerits of different contraceptive techniques	SGD/LGF	MCQs/SEQs
			Describe the complications associated with the use of oral and injectable contraceptives	SGD/LGF	MCQs/SEQs
	Vaginal discharge and STDs	1	Explain the etiology of vaginal discharge	SGD/LGF	MCQs/SEQs
			Describe the diagnosis and management of vaginal discharge in primary care	SGD/LGF	MCQs/SEQs
			Classify Sexually transmitted infections in females	SGD/LGF	MCQs/SEQs

		Describe the clinical features, investigations, and management of STDs in females in primary care	SGD/LGF	MCQs/SEQs
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Theme-6: Breast lump					
Pathology	Fibrocystic changes <ul style="list-style-type: none"><li>• Cysts and fibrosis</li><li>• Epithelial hyperplasia</li><li>• Adenosis</li></ul>	1	Explain the fibrocystic changes in breast including cysts, fibrosis, epithelial hyperplasia and adenosis	SGD/LGF	MCQs/SEQs
	Fibro-adenoma		Explain the morphology of Fibro-adenoma of the breast	SGD/LGF	MCQs/SEQs
	Papilloma		Explain the morphology of papilloma of the breast	SGD/LGF	MCQs/SEQs
	Carcinoma of the breast	1	Explain the risk factors, etiopathogenesis,clinical features, staging, and complications of carcinoma of the breast	SGD/LGF	MCQs/SEQs
	Gynecomastia		Discuss the causes and morphology of Gynecomastia	SGD/LGF	MCQs/SEQs
Surgery	Investigations of breast Diseases	1	justify the investigations of a patient with a breast lesion	SGD/LGF	MCQs/SEQs
	Benign breast diseases		Classify benign breast diseases	SGD/LGF	MCQs/SEQs
	Malignant breast diseases	2	Classify malignant breast diseases	SGD/LGF	MCQs/SEQs
			Discuss the risk factors, etiology, clinical features, investigations, management,and prognosis of a patient with breast cancer	SGD/LGF	MCQs/SEQs

			Describe the role of hormone receptors in breast Cancer	SGD/LGF	MCQs/SEQs
			Explain the complications of breast cancer Surgery	SGD/LGF	MCQs/SEQs
			Discuss the role of pharmacological treatment options in breast cancer management	SGD/LGF	MCQs/SEQs
			Explain the role of selective estrogen receptors modulators in the prevention of breast cancer in high-risk women	SGD/LGF	MCQs/SEQs
Pharmacology	Selective Estrogen Receptor Modulators (SERMs)-Tamoxifen Others	1	Enlist Selective Estrogen Receptor Modulators (SERMs)	SGD/LGF	MCQs/SEQs
			Describe the mechanism of action and clinical uses of Tamoxifen	SGD/LGF	MCQs/SEQs
Community medicine	Breast feeding	1	Discuss advantages of breast feeding	SGD/LGF	MCQs/SEQs
			Discuss artificial feeding	SGD/LGF	MCQs/SEQs
			Discuss baby friendly hospital initiative	SGD/LGF	MCQs/SEQs
			Discuss guidelines on infant and child feeding	SGD/LGF	MCQs/SEQs
	Screening and prevention of breast cancer		Discuss different methods of screening for breast Cancer	SGD/LGF	MCQs/SEQs
			Discuss levels of prevention of breast cancer	SGD/LGF	MCQs/SEQs
Radiology	Radiological approaches to breast cancer	1	Explain the indications, procedure, and interpretation of ultrasound and mammography in the investigation of breast lumps	SGD/LGF	MCQs/SEQs



	screening				
PRIME/MEDICAL EDUCATION	Counselling- Breaking bad News	1	Explain the concept of SPICES model of breaking bad news.	SGD/LGF	MCQs/SEQs

Practical work					
Pharmacology	Graves' disease	1.5	Formulate prescription for a patient with Graves' Disease	Practical	OSCE
	Diabetes mellitus	1.5	Formulate prescription for a patient with type 1 and type 2 Diabetes mellitus	Practical	OSCE
Pathology	Glucose estimation	1.5	Check glucose in urine	Practical	OSCE
			Check blood glucose in each sample	Practical	OSCE
	Goitre	1.5	Identify the microscopic features of multinodular Goiter	Practical	OSCE
	Pap smear	1.5	Interpret a pap smear slide	Practical	OSCE
	Fibroids	1.5	Identify the microscopic features of uterine Fibroids	Practical	OSCE
	Carcinoma breast	1.5	Identify the microscopic features of carcinoma of the breast	Practical	OSCE
Forensic medicine	Examination of a	2	Take consent from a rape victim	Practical	OSCE
			Examine a rape victim/manikin	Practical	OSCE
			Describe the procedure of taking sample from the victim/manikin/item	Practical	OSCE
			Describe the procedure of Sealing and preservation of the specimen	Practical	OSCE
	Examination of victim and assailant	2	Describe the procedure of Examining a victim of Sodomy	Practical	OSCE

			Describe the procedure of Taking sample from the victim/manikin/item	Practical	OSCE
			Describe the procedure of Sealing and preservation of the specimen	Practical	OSCE
Community medicine	Contraception	1.5	Identify the contraceptive device/drug	Practical	OSCE
			Explain the merits and demerits	Practical	OSCE
			Discuss the method of administration of the given device/drug	Practical	OSCE
	Mother and child health	1.5	Identify the chart	Practical	OSCE
			Devise a schedule plan for antenatal visits as per WHO criteria	Practical	OSCE
	EPI schedule	1.5	Counsel the mother for EPI schedule	Practical	OSCE
	Vaccination	1.5	Identify the vaccine	Practical	OSCE
			Explain its uses	Practical	OSCE
			Discuss its schedule of administration	Practical	OSCE
			Discuss the results of VVM (vaccine vial monitor) and its uses in epidemics	Practical	OSCE
	IMCI- anthropometric measures / Shakir`s tape	1.5	Identify the model	Practical	OSCE
			Measure the mid-arm circumference	Practical	OSCE
			Calculate the weight and height of the child	Practical	OSCE
			Interpret the results	Practical	OSCE

	Growth chart	1.5	Identify the chart	Practical	OSCE
			Plot the graph using a scenario	Practical	OSCE
			Interpret different parts of the chart	Practical	OSCE
	Demographic indicators	1.5	Interpret the given demographic indicator(population pyramid, HDI, PQLI, Growth rate and dependency ratio)	Practical	OSCE

## Learning Resources

**Table 4: References Textbooks**

S#	Subjects	Resources
1.	Anatomy	<b>A. GROSS ANATOMY</b> 1. K.L. Moore, Clinically Oriented Anatomy <b>B. EMBRYOLOGY</b> 1. KeithL. Moore. The Developing Human 2. Langman’s Medical Embryology
2.	Community Medicine	1. Community Medicine by Parikh 2. Community Medicine by M Ilyas 3. Basic Statistics for the Health Sciences by Jan W Kuzma
3.	OBGYN	1. Obstetrics by Ten Teachers, Louise C. Kenny, Jenny E. Myers 2. Gynaecology by Ten Teachers, Louise Kenny, Helen Bickerstaff 3. Hacker & Moore's Essentials of Obstetrics and Gynecology 4. Textbook of Gynecology, Rashid Latif Khan 5. Fundamentals of Gynaecology, Dr Arshad Chohan
4.	Pathology	1. Robbins & Cotran, Pathologic Basis of Disease,9 th edition. 2. Rapid Review Pathology,4 th edition by Edward F. Goljan MD
5.	Physiology	1. Textbook Of Medical Physiology by Guyton And Hall 2. Ganong’s Review of Medical Physiology 3. Human Physiology by Lauralee Sherwood 4. Berne & Levy Physiology 5. Best & Taylor Physiological Basis of Medical Practice
6.	Paeds	Basis of Pediatrics (8th Edition Pervez Akbar)

## Assessment Plan – 4<sup>th</sup> Year MBBS

**The year-4 will be assessed in 4 blocks**

- 1) Block-1 (Neurosciences-2 module) will be assessed in **paper-J**
- 2) Block-2 (GIT and hepatobiliary module) will be assessed in **paper-K**
- 3) Block-3 (Renal-2, Endocrine & Reproduction-2 module) will be assessed in **paper-L**
- 4) Block-4 (ENT and EYE modules) will be assessed in **paper-M**
- 5) Each written paper consists of 120 MCQs.
- 6) Internal assessment will be added to final marks in KMU as shown in below table.
- 7) In OSPE, each station will be allotted 6 marks, and a total of 120 (+10% marks of internal assessment) marks are allocated for each OSPE/OSCE examination.

Table 04

<b>4<sup>th</sup> Year MBBS Modules Assessment Plan</b>						
<b>Theory paper</b>	<b>Modules</b>	<b>Theory marks</b>	<b>Internal assessment theory (10%)</b>	<b>OSPE/OSPE</b>	<b>Internal assessment OSPE/OSPE (10%)</b>	<b>Total Marks</b>
<b>Paper J</b>	Neurosciences-2	120	13	120	13	266
<b>Paper K</b>	GIT-2	120	13	120	13	266
<b>Paper L</b>	Renal-2, Endocrine & Reproduction-2	120	14	120	13	267
<b>Paper M</b>	ENT and EYE	120	13	120	13	266
<b>Research*</b>				20	15	35
<b>Total Marks</b>		<b>480</b>	<b>53</b>	<b>500</b>	<b>67</b>	<b>1100</b>

\*Research viva of 20 marks will be conducted in paper-L. However, the rest of 15 marks will be decided by the concerned department internally for the contribution of the students in research project/thesis.

## Assessment Blueprints

Table 5

Subject	Renal-2	Endocrine and Reproduction-2	Total MCQs
Community medicine	11	12	23
Pharmacology	02	13	15
Pathology	11	22	33
Forensic medicine	01	09	10
Surgery	06	03	09
Gynaecology	01	09	10
Medicine	05	09	14
Pediatrics	02	01	03
Family medicine	01	02	03
<b>Total</b>	<b>40</b>	<b>80</b>	<b>120</b>



**Table 06: Paper L OSPE/OSCE distribution**

<b>Subject</b>	<b>Viva stations</b>	<b>OSPE/OSCE stations</b>	<b>Total</b>
Pharmacology	2	1	3
Pathology	2	2	4
Forensic medicine	2	1	3
Community medicine	2	6	10
Research viva	2* *	X	
Medicine (endocrine examination)	X	1	1
Surgery (physical/local examination)	X	1	1
<b>Total</b>	<b>10</b>	<b>12</b>	<b>22</b>

\* A minimum of 22 stations will be used in final exams. Total marks will be 120 (6 marks for each station).

\*\*there will be 2 allocated stations for research viva (one internal and one external) at one time for which the number of marks for each station will be 10 (with a total of 20 marks) allocated for research viva plus 15 marks for conduction of research). A total of 35 marks have been allocated for thesis (research project)

## Structured Time Tables

The timetables for the module are shared via Students and Teacher Whatsapps Groups

## Teaching and learning strategies:

The following teaching learning methods are used to promote better understanding:

- Interactive Lecture
- Hospital Clinic visits
- Small Group Discussion
- Skills session
- Self-Directed Study

## Interactive lectures:

An interactive lecture is an easy way for instructors to intellectually engage and involve students as active participants in a

lecture-based class of any size. Interactive lectures are classes in which the instructor breaks the lecture at least once per class to

have students participate in an activity that lets them work directly with the material.

- The instructor might begin the interactive segment with an engagement trigger that captures and maintains student attention.
- Then the instructor incorporates an activity that allows students to apply what they have learned or give them a context for upcoming lecture material.
- As the instructor feels more comfortable using interactive techniques he or she might begin to call upon a blend of various interactive techniques all in one class period.

### **Hospital/Clinic visits:**

In small groups, students observe patients with signs and symptoms in hospital or clinical settings. This helps students to relate knowledge of basic and clinical sciences of the relevant module.

### **Small group discussion (SGD):**

The shy and less articulate are more able to contribute. Students learn from each other. Everyone gets more practice at expressing their ideas. A two way discussion is almost always more creative than individual thoughts. Social skills are practiced in a 'safe' environment e.g. tolerance, cooperation. This format helps students to clarify concepts acquire skills or attitudes. Students exchange opinions and apply knowledge gained from lectures, tutorials and self-study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.

### **Skills/Practical session:**

Skills relevant to respective module are observed and practiced where applicable in skills laboratory or Laboratories of various departments.

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

Self-directed learning, which involves studying without direct supervision in a classroom/Library, is a valuable way to learn and is quickly growing in popularity among parents and students. Students' assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Centre, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.

## **Assessment tools:**

Theoretical knowledge is tested by a written examination system constituted by multiple choice questions (MCQs). The assessment of practical knowledge involves oral, spot, or objective structured practical examinations (OSPE)

## Multiple Choice Questions (MCQs):

- ❑ Multiple choice questions (MCQs) are a form of assessment for which students are asked to select the best choice from a list of answers.
- ❑ MCQ consists of a stem and a set of options. The stem is usually the first part of the assessment that presents the question as a problem to be solved; the question can be an incomplete statement which requires to be completed and can include a graph, a picture or any other relevant information. The options are the possible answers that the student can choose from, with the correct answer called the key and the incorrect answers called distractors.
- ❑ Correct answer carries one mark, and incorrect 'zero mark'. There is NO negative marking.
- ❑ Students mark their responses on specified computer-based sheet designed for the college.
- ❑ The block exam will comprise of 120 MCQs and will be compiled according to the shared blueprint.
- ❑ Requires specific, definite, exact information.
- ❑ Can be used to discriminate whether errors can be detected in a diagram, for example

## Objective Structured Practical Examination (OSPE)

The content may assess application of knowledge, or practical skills. Student will complete task in define time at one given station.

All the students are assessed on the same content by the same examiner in the same allocated time.

A structured examination will have observed, unobserved, interactive and rest stations. Observed and interactive stations will be assessed by internal or external examiners.

Unobserved will be static stations in which students will have to answer the questions related to the given pictures, models or specimens the provided response sheet.

Rest station is a station where there is no task given, and in this time student can organize higher thoughts.

### Internal Evaluation:

Internal evaluation is a process of quality review undertaken within an institution for its own ends. 10% marks of internal evaluation will be added to final marks. This 10% will be based on

<b>Marks obtained</b>	<b>13 out of total 40 marks of internal assessment in block G Paper</b>
<b>Marks obtained</b>	<b>13 out of total 40 marks of internal assessment in block G OSPE</b>



## Attendance Requirement:

More than 75% attendance is mandatory to sit for the examinations.

## Learning Sites

- Digital library
- Virtual Learning Environment (VLE)
- Ambulatory care settings which may be outside the hospital
- Accident and Emergency/Casualty departments
- Clinical Skills Laboratory
- Community Settings
- Electives in own and other Institutions
- Experimental Laboratories
- Hospital Wards
- Out Patient Departments
- Medical College setting

## RECOMMENDED BOOKS

Pathology

Text Books

1. Robbins Pathologic Basis of Disease

*Reference Books:*

1. Walter & Israel's General Pathology"
2. Harsh Mohan's "Textbook of Pathology".
3. Pathology Illustrated
4. Stefan Silbernagl's "Color Atlas of Pathophysiology"
5. Muir's Textbook of Pathology

*Textbook for Microbiology*

1. Jawetz, Melnick & Adelberg's "Medical Microbiology"

*Reference Books:*

1. Levinson's "Medical Microbiology & Immunology"
2. Sherris Medical Microbiology
3. Lippincott's Illustrated Reviews: Microbiology

**Week – 1 (Revised)**

**Theme-1 - 2: Tall/short stature / Neck swelling and muscle cramps**

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM - 01:30PM	01:30PM 03:00PM
Monday 04/07/2022	Physiology – L1 Pituitary gland – Physiological anatomy Prof. Dr. Rashid Ahmad	C.M – L1 Occupational Health: Introduction Prof. Dr. Qarib Ullah	Literary Society Day			
Tuesday 05/07/2022	Pharma – L1 Antithyroid drugs Dr. Rahman Shah	Patho – L1 Hyperpituitarism Dr. Shabir Ahmad	HOSPITAL WORK	C.M – L2 Physical hazards Dr. M. Munib	PRAYER BREAK	Practical Patho Group A Dr. Bilal Iqbal Pharma Group B Dr. Safeena
Wednesday 06/07/2022	CPC Clinical Pathological Conference	Med – L1 Thyroid disorder Dr. Sardar Ali		Patho – L2 Hypopituitarism Dr. Ihtisham Khan		Practical Patho Group B Dr. Bilal Iqbal Pharma Group A Dr. Safeena
Thursday 07/07/2022	F. M – L1 Impotence and sterility Dr. Hidyat Ur Rahman	Med – L2 Pituitary disorders Prof. Dr. Aziz Ahmad		C.M – L3 Chemical hazards Dr. M. Munib		Practical C.M Group A Dr. Nasir Ullah F. M Group B Dr. Shahkar Ali
Friday 08/07/2022	EID HOLIDAYS					

**Week – 2**

**Theme-2 - 3: Neck swelling and muscle cramps/ Excessive thirst and urination**

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM - 01:30PM	01:30PM 03:00PM
Monday 01/08/2022	Physiology – L2 Physiologic anatomy of the Thyroid gland Prof. Dr. Rashid Ahmad	Patho – L3 Hypothyroidism Dr. Saad Hussain	HOSPITAL WORK	C.M – L4 Mechanical, Biological & Psychosomatic hazards Dr. M. Munib	PRAYER BREAK	Practical Patho Group A Dr. Aurangzeb Khan/ Dr. Saad Hussain Pharma Group B Dr. Faiza
Tuesday 02/08/2022	C.M – L5 Animal hazards Dr. Rafi Ullah	Med – L3 Thyroid disorder - II Dr. Sardar Ali		Gyne – L1 Anatomy of the reproductive tract Dr. Maryam		Practical Patho Group B Dr. Aurangzeb Khan/ Dr. Saad Hussain Pharma Group A Dr. Faiza
Wednesday 03/08/2022	Paed – L1 Short stature Dr. Izhar Ali	Med – L4 Pituitary disorders - II Prof. Dr. Aziz Ahmad		Patho – L4 Thyroid Malignances Dr. Aurangzeb Khan		Practical C.M Group A Dr. Zarak F. M Group B Dr. Azmat
Thursday 04/08/2022	Pharma – L2 Growth Hormone Dr. Fawad Khalid	Gyne – L2 PCOS/Female infertility/Endometriosis Dr. Maryam		F. M – L2 Sterilization Prof. Dr. Iftikhar Ahmad		Practical C.M Group B Dr. Zarak F.M Group A Dr. Azmat
Friday 05/08/2022	C.M – L6 Preventive measures, health insurance, social security schemes Prof. Dr. Qarib Ullah	Patho – L5 Hyperthyroidism including Grave`s disease Prof. Dr. Mukammil Shah		12:30 – 01:30 PM	01: 30 – 2:30 PM	02 :30 – 3:30 PM
				PRAYER BREAK	F. M – L3 Artificial insemination Prof. Dr. Iftikhar Ahmad	Pharma – L3 Insulin Dr. Rahman Shah

**Week – 3**

**Theme - 3 - 4: Excessive thirst and urination/Moon Face**

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM - 01:30PM	01:30PM 03:00PM
<b>Monday 08/08/2022</b>	<b>Muharram Holiday</b>					
<b>Tuesday 09/08/2022</b>	<b>Muharram Holiday</b>					
<b>Wednesday 10/08/2022</b>	<b>C.M – L7</b> Demography Introduction <b>Prof. Dr. Qarib Ullah</b>	<b>Patho – L6</b> Diabetes Mellitus <b>Dr. Bilal Iqbal</b>	<b>HOSPITAL WORK</b>	<b>Pharma – L4</b> Oral hypoglycemic drugs <b>Dr. Rahman Shah</b>	<b>PRAYER BREAK</b>	<b>Practical</b> Patho Group A <b>Dr. Sehrish</b> Pharma Group B <b>Dr. Safeena</b>
<b>Thursday 11/08/2022</b>	<b>CPC</b> Clinical Pathological Conference	<b>Med – L5</b> Thyroid disorder – III <b>Dr. Sardar Ali</b>		<b>Gyne – L3</b> Genital tract cancers – I <b>Dr. Shumaila</b>		<b>Practical</b> Patho Group B <b>Dr. Sehrish</b> Pharma Group A <b>Dr. Safeena</b>
<b>Friday 12/08/2022</b>	<b>F. M – L4</b> Virginity <b>Dr. Hidyat Ur Rahman</b>	<b>Med – L6</b> Diabetes mellitus - I <b>Prof. Dr. Aziz Ahmad</b>		<b>12:30 – 01:30 PM</b>	<b>01: 30 – 2:30 PM</b>	<b>02 :30 – 3:30 PM</b>
				<b>PRAYER BREAK</b>	<b>Patho – L7</b> Thyroiditis, Multinodular goitre <b>Prof. Dr. Mukammil Shah</b>	<b>Practical</b> C.M Group A <b>Dr. Zarak</b> <b>Dr. Dawood</b> F. M Group B <b>Dr. Azmat</b>

**Week – 4**  
**Theme - 4 - 5: Moon Face/Infertility and Pregnancy**

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM - 01:30PM	01:30PM 03:00PM
Monday 15/08/2022	C.M – L8 Growth rate Dr. M. Munib	Patho – L8 Pancreatic neuroendocrine Tumors Dr. Aurangzeb Khan	HOSPITAL WORK	F. M – L5 Pregnancy Dr. Hidyat Ur Rahman	PRAYER BREAK	Practical Patho Group A Dr. Aurangzeb Dr. Sehrish C.M Group B Dr. Zarak
Tuesday 16/08/2022	C.M – L9 Demographic indicators Dr. M. Munib	Med – L7 Thyroid disorder – IV Dr. Sardar Ali		Gyne – L4 Genital tract cancers – II Dr. Shumaila		Practical Patho Group B Dr. Aurangzeb Dr. Sehrish C.M Group A Dr. Zarak
Wednesday 17/08/2022	Pharma – L5 Glucagon, Vasopressin/Desmopressin Dr. Fawad Khalid	Med – L8 Diabetes mellitus - II Prof. Dr. Aziz Ahmad		Prime – L1 Dealing with patients, Community Need analysis Dr. Ubaid Ullah		Practical Patho Group A Dr. Sehrish C.M Group B Dr. Dawood
Thursday 18/08/2022	F.M – L6 Delivery Dr. Hidyat Ur Rahman	Gyne – L5 Pelvic Organ Prolapse Dr. Maryam		Patho – L9 Pheochromocytoma / MEN Dr. Shabir Ahmad		Practical Patho Group B Dr. Sehrish C.M Group A Dr. Dawood
Friday 19/08/2022	Patho – L10 Prostatic disorder – I Prof. Dr. Mukammil Shah	Surgery – L1 Cryptorchidism Dr. Muhammad Usman		12:30 – 01:30 PM		01: 30 – 2:30 PM
				PRAYER BREAK	C.M – L10 Iodine deficiency / Goitre Prof. Dr. Qarib Ullah	Pharma – L6 Glucocorticoids Dr. Rahman Shah

**Week – 5**  
**Theme – 5: Infertility and Pregnancy**

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM - 01:30PM	01:30PM 03:00PM
Monday 22/08/2022	Physiology – L3 Physiology of the Adrenal cortical hormones Prof. Dr. Rashid Ahmad	Patho – L11 Hypercortisolism and Cushing`s syndrome Prof. Dr. Imran Uddin	HOSPITAL WORK	Blood Donation Seminar		
Tuesday 23/08/2022	Gyne – L6 Urinary Incontinence/ Menopause Dr. Maryam	Pharma – L7 Gonadotropins (FSH & LH) and human chorionic gonadotropin Dr. Fawad Khalid		Patho – L12 Diabetes Mellitus – II Dr. Bilal Iqbal	PRAYER BREAK	Practical C.M Group A C.M Group B Dr. Dawood
Wednesday 24/08/2022	C. M – L11 Non-communicable diseases Prevention of diabetes Mellitus – I Dr. M. Munib	Med – L9 Diabetes mellitus - III Prof. Dr. Aziz Ahmad		Gyne – L7 Pregnancy/Miscarriage Ectopic gestation Dr. Zulfiqar		Research Symposium Prof. Dr. Zahid Iqbal
Thursday 25/08/2022	C. M – L12 Non-communicable diseases Prevention of diabetes Mellitus – II Dr. M. Munib	Med – L10 Hypercortisolism and Cushing`s syndrome Dr. Sardar Ali		Patho – L13 Hyperaldosteronism Adrenogenital syndrome Prof. Dr. Imran Uddin		Practical C.M Group A C.M Group B Dr. Zarak
Friday 26/08/2022	Pharma – L8 Glucocorticoid antagonists/synthesis inhibitors Dr. Rahman Shah	DME Feedback and Survey		12:30 – 01:30 PM	01: 30 – 2:30 PM	02 :30 – 3:30 PM
				PRAYER BREAK	Patho – L14 Prostatic disorder – II Prof. Dr. Mukammil Shah	Family Medicine – L1 Menstrual disorders/ Menopause Dr. Maryam Afridi

**Week – 6**  
**Theme – 5: Infertility and Pregnancy**

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM - 01:30PM	01:30PM 03:00PM
Monday 29/08/2022	Surgery – L2 Hydrocele and varicocele Dr. Muhammad Usman	Pharma – L9 Oestrogens & Progestins Dr. Fawad Khalid	HOSPITAL WORK	Patho – L15 Adrenal insufficiency Prof. Dr. Imran Uddin	PRAYER BREAK	Practical C.M Group A C.M Group B Dr. Zarak
Tuesday 30/08/2022	F.M – L7 Natural sexual offences Prof. Dr. Iftikhar Ahmad	Med – L11 Primary hyperaldosteronism Dr. Sardar Ali		Patho – L16 Testicular Tumors Dr. Shabir Ahmad		Prime – L2 Counselling- Breaking bad News Dr. Ubaid Ullah
Wednesday 31/08/2022	C. M – L13 Introduction to nutrition, basic measurements & allowances Macronutrients Dr. M. Munib	Med – L12 Diabetes mellitus - IV Prof. Dr. Aziz Ahmad		Gyne – L8 Gestational trophoblastic disease Dr. Zulfiqar		F.M – L8 Unnatural sexual offences sodomy sexual perversions Prof. Dr. Iftikhar Ahmad
Thursday 01/09/2022	C. M – L14 Micronutrients -Vitamin deficiencies allowances & control Dr. M. Munib	Med – L13 Adrenogenital syndrome Dr. Sardar Ali		Patho – L17 Adrenal Neoplasia Dr. Aurangzeb Khan		Practical C.M Group A C.M Group B Dr. Dawood
Friday 02/09/2022	Pharma – L10 Oral contraceptives/ Parenteral and implantable Contraceptives Dr. Rahman Shah	Gyne – L9 Vaginal discharge and STDs – I Dr. Maryam		12:30 – 01:30 PM	01: 30 – 2:30 PM	02 :30 – 3:30 PM
				PRAYER BREAK	Surgery – L3 Benign prostatic Hyperplasia, Carcinoma of prostate Dr. Muhammad Usman	Patho – L18 Fibrocytic changes - I Prof. Dr. Mukammil Shah



**Week – 7**  
**Theme – 5: Infertility and Pregnancy**

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM - 01:30PM	01:30PM 03:00PM
<b>Monday</b> <b>05/09/2022</b>	<b>Patho – L19</b> Endometritis, Endometriosis <b>Dr. Sehrish</b>	<b>C. M – L15</b> Safe motherhood <b>Prof. Dr. Qarib Ullah</b>	<b>HOSPITAL WORK</b>	<b>Pharma – L11</b> Ovulation-inducing agent (Clomiphene)/ Mifepristone/ Danazol <b>Dr. Zeeshan</b>	<b>PRAYER BREAK</b>	<b>Patho – L20</b> Polycystic ovarian disease <b>Dr. Bilal Iqbal</b>
<b>Tuesday</b> <b>06/09/2022</b>	<b>Surgery – L4</b> Investigations of breast Diseases & Benign breast diseases <b>Dr. Manzoor Ahmad</b>	<b>Med – L14</b> Adrenal Insufficiency <b>Dr. Sardar Ali</b>		<b>Patho – L21</b> Sexually STD, s <b>Prof. Dr. Shah Jehan</b>		<b>F.M – L9</b> Legitimacy and dissolution of marriage <b>Dr. Hidyat Ur Rahman</b>
<b>Wednesday</b> <b>07/09/2022</b>	<b>CPC</b> Clinico Pathological Conference	<b>Med – L15</b> <b>Prof. Dr. Aziz Ahmad</b>		<b>Paed – L2</b> Congenital hypothyroidism <b>Prof. Dr. Fayaz Burki</b>		<b>Gyne – L10</b> Contraception <b>Dr. Zulfiqar</b>
<b>Thursday</b> <b>08/09/2022</b>	<b>C. M – L16</b> Over-nutrition / obesity and it's control <b>Dr. M. Munib</b>	<b>Med – L16</b> Adrenal Neoplasms <b>Dr. Sardar Ali</b>		<b>Gyne – L11</b> Vaginal discharge and STDs – II <b>Dr. Maryam</b>		<b>Pharma – L12</b> Androgens and anabolic Steroids/ Antiandrogens/ Male contraception <b>Dr. Fawad Khalid</b>
<b>Friday</b> <b>09/09/2022</b>	<b>C. M – L17</b> Micronutrients -mineral deficiencies allowances and control <b>Dr. M. Munib</b>	<b>Gyne – L12</b> Abnormal uterine bleeding <b>Dr. Zulfiqar</b>		<b>12:30 – 01:30 PM</b>	<b>01: 30 – 2:30 PM</b>	<b>02 :30 – 3:30 PM</b>
				<b>PRAYER BREAK</b>	<b>Patho – L22</b> Fibrocystic changes - II <b>Prof. Dr. Mukammil Shah</b>	<b>C. M – L18</b> Antenatal Care <b>Prof. Dr. Qarib Ullah</b>

**Week – 8 (Revised)**  
**Theme – 6: Breast Lump**

Day/Date	08:00AM - 09:00AM	09:00AM - 10:00AM	10:00AM 12:00PM	12:15PM – 01:15 PM	01:15PM - 01:30PM	01:30PM 03:00PM
Monday 12/09/2022	Surgery – L5 Malignant breast diseases Dr. Manzoor Ahmad	C. M – L19 Family planning and post abortion care Prof. Dr. Qarib Ullah	HOSPITAL WORK	Pharma – L13 (SERMs)- Tamoxifen and Others Dr. Fawad Khalid	PRAYER BREAK	Patho – L24 Tumors of the ovary Dr. Aurangzeb Khan
Tuesday 13/09/2022	Patho – L25 Carcinoma of the breast Gyneconomastia Dr. Aurangzeb Khan	Med – L17 Lactic Acidosis Prof. Dr. Aziz Ahmad		Gyne – L13 Anatomy of the reproductive tract Dr. Maryam		C. M – L20 Child promotion and development strategies Prof. Dr. Qarib Ullah
Wednesday 14/09/2022	C. M – L21 Breast feeding/ Breast cancer Dr. M. Munib	Paed – L3 Management of Type 1 Diabetes mellitus in Children Dr. Ibrahim		Patho – L26 Endometrial hyperplasia and endometrial carcinoma Dr. Sehrish		F.M – L10 Abortion Dr. Hidyat Ur Rahman
Thursday 15/09/2022	C. M – L22 Undernutrition – Protein calorie malnutrition and control Dr. M. Munib	Med – L18 Hypoglycemic coma Prof. Dr. Aziz Ahmad		Surgery – L6 Causes of male infertility Dr. Muhammad Usman		DSL/Pharma Dr. Safeena
Friday 16/09/2022	C. M – L23 Prevention of reproductive health diseases Prof. Dr. Qarib Ullah	DSL/Patho Dr. Ayaz Hussain		12:30 – 01:30 PM	01: 30 – 2:30 PM	02 :30 – 3:30 PM
				PRAYER BREAK	DSL/F.M Dr. Shahkar Ali	DSL/C.M Dr. Zarak