

AYUB MEDICAL COLLEGE ABBOTTABAD

DEPARTMENT OF MEDICAL EDUCATION



STUDY GUIDE ENDOCRINE & REPRODUCTION-II

4TH YEAR MBBS

BLOCK: L

CLASS OF 2024

DURATION: 8 WEEKS

STUDENT NAME

DISCLAIMER

- Developing a study guide is a dynamic process and undergoes iteration according to the needs and priorities.
- This study guide is subjected to the change and modification over the whole academic year.
 - However, students are advised to use it as a guide for respective modules.
- It is to declare that the learning objectives (general and specific) and the distribution of assessment tools (both theory and practical) are obtained from Khyber Medical University, Peshawar. These can be obtained from:
<https://kmu.edu.pk/examination/guidelines>
- The time tables are for guiding purpose. It is to advise that final timetables are always displayed over the notice boards of each lecture hall.

Students are encouraged to provide feedback via coordinator.

Contents

1	Module Committee:	2
2	What Is A Study Guide?	3
2.1	The study guide:	3
2.2	Module objectives.	3
2.3	Achievement of objectives.	3
2.4	CURRICULUM FRAMEWORK:	3
3	Recommended List Of Icons	4
4	Table Of Specification	5
5	Organization of Module	6
5.1	Introduction:	6
5.2	Rationale:	6
6	GENERAL LEARNING OUTCOMES	7
6.1	Knowledge	7
6.2	Skills	7
6.3	Attitude	8
7	SPECIFIC LEARNING OUTCOMES	9
8	Examination and Methods of Assessment:	34
9	Learning Opportunities and Resources	4
9.1	INSTRUCTION	4
9.2	BOOKS:	4
9.3	WEBSITE:	5
9.4	ARTICLES:	6
10	Timetable	43
11	For inquiry and troubleshooting	51
12	Course Feedback Form	53

1 Module Committee:

s.no	Name	Department	Role
1.	Prof. Dr. Umar Farooq		CEO & Dean
2.	Prof. Dr. Irfan U. Khattak		Director DME
Module Team			
3.	Dr. Zeeshan Haroon	Community Medicine	Block Coordinator (Developer)
4.	Dr. Adnan Rashid	Community Medicine	Module Coordinator (Developer)
5.	Dr. Zainab Nazneen	Community Medicine	Developer
6.	Dr. Umair	Community Medicine	Co-developer
7.	Dr. Basharat	Pathology	Co-developer
8.	Dr. Afsheen Siddiqi	Pharmacology	Co-developer
9.	Dr. Salma Shazia	Forensic Medicine	Co-developer
10.	Dr. Tauqeer Ahmed	Medicine	Co-developer
11.	DR. Saadia Irum	Gynaecology	Co-developer
12.	Dr Ghazala	Surgery	Co-developer
13.	Dr. Ali Raza	Paediatrics	Co-developer
14.	Dr. Baynazir Khan	Neurosurgery	Co-developer

2 What Is A Study Guide?

It is an aid to Inform students how student learning program of the module has been organized, to help students organize and manage their studies throughout the module and guide students on assessment methods, rules and regulations.

2.1 The study guide:

Communicates information on organization and management of the module.

This will help the student to contact the right person in case of any difficulty.

Defines the objectives which are expected to be achieved at the end of the module.

Identifies the learning strategies such as lectures, small group teachings.

2.2 Module objectives.

Provides a list of learning resources such as books, computer-assisted learning programs, weblinks, and journals, for students to consult in order to maximize their learning.

Highlights information on the contribution of continuous on the student's overall performance.

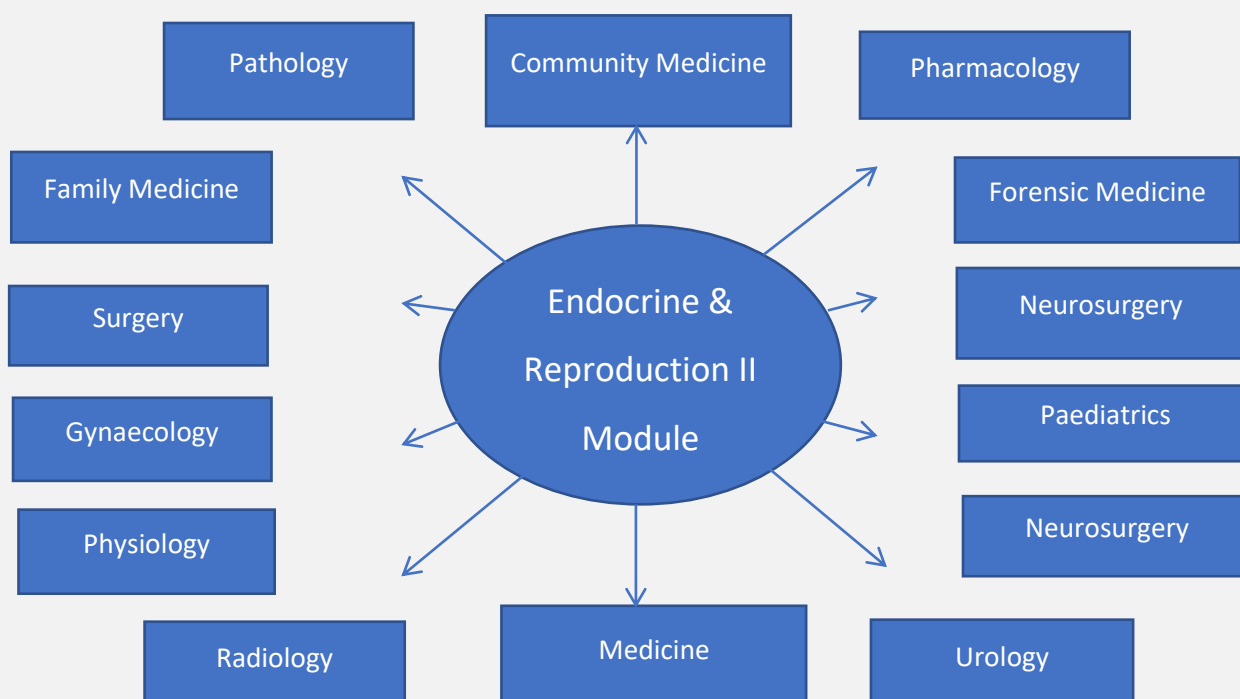
Includes information on the assessment methods that will be held to determine every student's performance.

2.3 Achievement of objectives.

Focuses on information pertaining to examination policy, rules and regulations.

2.4 CURRICULUM FRAMEWORK:

STUDENTS WILL EXPERIENCE INTEGRATED CURRICULUM.





3 Recommended List Of Icons



Introduction To Case



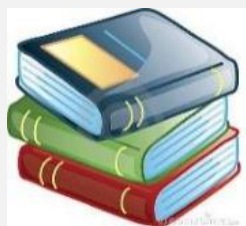
For Objectives



Critical Questions



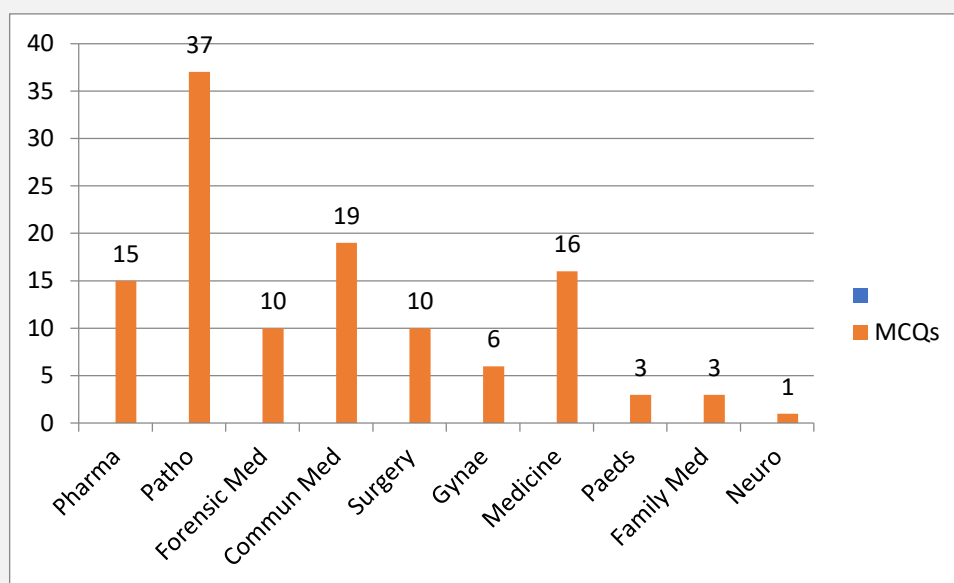
Assessment



Resource Material

4 Table Of Specification

S. No	Theme	Topics / region covered	Weightage No. of hours(%age)
1	Tall/short stature	Pituitary gland	20(17.24%)
2	Neck swelling and Muscle cramps	Thyroid and parathyroid glands	13(11.20%)
3	Excessive thirst and urination	Endocrine pancreas	15(12.93%)
4	Moon face	Adrenal cortex	22(18.96%)
5	Infertility and pregnancy	Female sexual organs	47(40.51%)
6	Breast lump	Breasts	09(7.75%)
Total			116(100%)



Number of MCQs from each discipline in the module

5 Organization of Module

5.1 Introduction:

Endocrine System:

The endocrine system is made up of glands that make hormones which regulate all the biological processes in the body from conception through adulthood and into old age. The function of the endocrine system is to coordinate and integrate cellular activity within the whole body by regulating cellular and organ function throughout life and maintaining homeostasis.

Reproductive system:

Reproductive health (RH) is a state of complete physical, mental and social well-being in all matters relating to the reproductive system. Reproductive Health is essential for peoples' overall well being. Hence Reproductive health and specifically women's reproductive health is given prime importance at a global level.

5.2 Rationale:

The endocrine system is responsible for many amazing processes: growth, sexual development, the fight or flight response to danger, and maintaining cellular energy and blood sugar levels. Its work is complicated, but these activities will help the medical students understand how the endocrine system gets the job done and how the defects in hormone production and/or action can lead to profound clinical conditions and syndromes.

In this module, topics related to endocrine and reproduction will be taught to the students in an integrated fashion with reference to common diseases occurring in our community alongwith their prevention.

Regarding reproductive system, this module will address common Maternal and child health issues including safe motherhood, contraception, abortion, Infant health care, Sexually Transmitted Diseases and HIV/AIDS, infertility. It will also address the RH related issues of men.



atives

6 GENERAL LEARNING OUTCOMES

By the end of this module the students of 4th year MBBS would be able to;

6.1 Knowledge

Theme 1:

- Describe the pathology, clinical features, investigations and treatment of Hyper and hypopituitarism
- Describe the pathology, clinical features, investigations and treatment of Hyper and hypothyroidism
- Describe the pathology, clinical features, investigations and treatment of hyper and hypoparathyroidism
- Classify the risk factors and describe the pathogenesis, clinical features, investigations and treatment of Diabetes mellitus
- Explain the pathology, clinical features, investigations and treatment of Hyper and hypoadrenalism
- Discuss the causes of male and female infertility and its management
- Describe the classification, pathology and management of testicular tumors
- Explain benign and malignant breast disease
- Discuss the etiology, risk factors, clinical features, investigations and treatment of carcinoma of breast
- Discuss the role of natural and synthetic hormones and antagonists in the management of relevant disease conditions
- Explain the laws related to sexual offenses, and management of a rape victim in forensic aspects
- Describe the pathophysiology and surgical management of benign prostatic hyperplasia and carcinoma of the prostate

6.2 Skills

- Write and formulate prescriptions for Graves' disease and Diabetes mellitus patients
- Check glucose in urine, sample of blood and interpret pap smear slide
- Identify the microscopic features of multinodular goiter, uterine fibroids and breast carcinoma
- Examining a rape victim on manikin, taking sample, sealing and preservation of the specimen

- Examining, taking sample, sealing and preservation of the specimen of a victim of sodomy

6.3 Attitude

- Taking consent from a rape victim
- Ethics involved while examining, taking sample, sealing and preservation of the specimen of a rape victim and a victim of sodomy



7 SPECIFIC LEARNING OUTCOMES

Theme 1		Tall/short stature (18LGDs)		
Subject		Learning Outcomes	MIT	No. of hours
Pathology (3LGDS)				
1	Physiological anatomy	<ul style="list-style-type: none"> • Explain the gross and microscopic structure of pituitary gland • Explain the functions of hormones of the anterior and posterior pituitary gland and their regulation by the Hypothalamus 	Large group discussion (LGD)	1
2	Hyperpituitarism/Pituitary adenomas: <ul style="list-style-type: none"> • Prolactinomas • Somatotrophic tumors • Corticotrophic tumors • others 	<ul style="list-style-type: none"> • Explain the causes of hyperpituitarism • Discuss the gross and microscopic structure of pituitary adenomas, and the hormones secreted from these • Explain the clinical manifestations of different types of pituitary adenomas 	Large group discussion (LGD)	1
3	Hypopituitarism	<ul style="list-style-type: none"> • Describe the etiology and clinical manifestations of hypopituitarism 	Large group discussion (LGD)	1
Medicine (2LGDS)				
1	Acromegaly/Gigantism Hyperprolactinemia	<ul style="list-style-type: none"> • Explain the etiology, clinical features, investigations, treatment and complications of Acromegaly/gigantism • Discuss the etiology, clinical features, investigations and treatment of hyperprolactinemia 	Large group discussion (LGD)	1
2	Hypopituitarism/Sheehan's syndrome	<ul style="list-style-type: none"> • Explain the etiology, clinical features, investigations and treatment of Hypopituitarism and Sheehan's syndrome 	Large group discussion (LGD)	1
Pharmacology (1LGD)				

1	Growth hormone Growth hormone antagonists (Octreotide and others) Bromocriptine Vasopressin/Desmopressin	<ul style="list-style-type: none"> Describe the sources of Growth hormone (old and new sources) Describe the mechanism of action, clinical uses and adverse effects of Growth hormone Enlist Growth hormone antagonists Describe the clinical role of Octreotide in acromegaly Describe the route of administration, dosage and adverse effects of octreotide in acromegaly and gigantism Describe the mechanism of action, clinical uses and adverse effects of Bromocriptine Describe the mechanism of action, clinical use and adverse effects of Desmopressin Enlist the drugs used in nephrogenic diabetes insipidus 	Large group discussion (LGD)	1
Pediatrics (1LGD)		<ul style="list-style-type: none"> Describe the method to measure and plot height Calculate height velocity and midparental target height to allow early diagnosis of growth disorders in paediatric patients Explain the diagnostic criteria that allows to differentiate causes of growth deficiency. Discuss the toolbars for better communication with patients and families and coordination of multidisciplinary care. Discuss treatment of growth hormone deficiency or other diseases responsible for short stature and their appropriate management. 	Large group discussion (LGD)	1
1	Short stature			
Neurosurgery(1LGD)		<ul style="list-style-type: none"> Enumerate and describe the surgical treatments and complications of pituitary macro/microadenomas. 	Large group discussion (LGD)	1
1	Surgical management of pituitary adenoma.			

Community Medicine (9LGDs)				
1	Occupational Health: Introduction	<ul style="list-style-type: none"> Define Occupational health. Discuss importance of occupational health. Describe ergonomics. Describe principles and responsibilities of occupational health officer[OHO]. 	Large group discussion (LGD)	1
2	Physical Hazards	<ul style="list-style-type: none"> Enumerate physical hazards (heat, cold, noise, light, vibrations, pressure effect, radiations). Discuss its ill effects on health. Discuss its preventive measures. 	Large group discussion (LGD)	1
3	Chemical Hazards	<ul style="list-style-type: none"> Enumerate chemical hazards (inorganic dust diseases, organic dust diseases, metals and chemicals). Discuss its ill effects on health. Discuss its preventive measures. 	Large group discussion (LGD)	1
4	Mechanical, Biological & Psychosomatic hazards	<ul style="list-style-type: none"> Describe mechanical hazards. Discuss control measures of mechanical hazards. Discuss control measures of biological hazards. Describe psychosomatic stressors. Discuss control measures of psychosomatic stressors. 	Large group discussion (LGD)	1
5	Animal hazards	<ul style="list-style-type: none"> Describe types, prevalence and statistics of snake bite. Discuss causes of poor management with respect to awareness and vaccination. 	Large group discussion (LGD)	1
6	Preventive measures, health insurance, social security schemes	<ul style="list-style-type: none"> Describe various preventive measures of occupational hazards (Medical engineering and legal measure). Discuss role and benefits of health insurance. Discuss social security and its benefits. 	Large group discussion (LGD)	1
7	Demography: Introduction	<ul style="list-style-type: none"> Define demography and various related terms. 	Large group	1

		<ul style="list-style-type: none"> Explain and interpret population pyramid. Explain demographic transition. Describe the causes of high and low fertility and mortality. 	discussion (LGD)	
8	Growth rate	<ul style="list-style-type: none"> Define population growth rate, CDR, CBR. Describe growth rate . Describe population explosion & its implications. 	Large group discussion (LGD)	1
9	Demographic indicators	<ul style="list-style-type: none"> Explain advantages of population control. Describe the demographic indicators of Pakistan. 	Large group discussion (LGD)	1
Medical Education (1LGD)		<ul style="list-style-type: none"> Serve the patient as an individual, taking into account lifestyle, beliefs and support system. Identify the health care needs of community. 	Large group discussion (LGD)	1
1	Dealing with patients Community Need analysis			

Theme 2		Neck swelling and muscle cramps (14LGDs)		
Subject		Learning Outcomes	MIT	No. of hours
Physiology (1LGD)		<ul style="list-style-type: none"> Explain the gross and microscopic structure of Thyroid gland Explain the synthesis and functions of hormones of the thyroid gland and their regulation by the anterior pituitary 	Large group discussion (LGD)	1
1	Physiological anatomy of the Thyroid gland			
Pathology (4LGDs)		<ul style="list-style-type: none"> Discuss the etiology, pathogenesis and morphology of Hyperthyroidism and Grave`s disease 	Large group discussion (LGD)	1
1	Hyperthyroidism including Grave`s disease			
2	Hypothyroidism			
		<ul style="list-style-type: none"> Discuss the etiology, pathogenesis, morphology and clinical features of Hypothyroidism 	Large group discussion (LGD)	1

3	Thyroiditis Multinodular goiter	<ul style="list-style-type: none"> • Discuss the classification, morphology and presentations of Thyroiditis • Explain the etiology, clinical features, and complications of multinodular goitre 	Large group discussion (LGD)	1
4	Thyroid malignancies	<ul style="list-style-type: none"> • Classify thyroid malignant disorders • Explain morphology, clinical features and prognosis of thyroid malignancies 	Large group discussion (LGD)	1
Medicine (5LGDs)		<ul style="list-style-type: none"> • Discuss the etiology, clinical features, investigations and treatment and prognosis of Hyperthyroidism and Grave's disease • Explain the pathogenesis, clinical features and management of Grave's Ophthalmopathy 	Large group discussion (LGD)	1
1	Hyperthyroidism including Grave's disease			
2	Hypothyroidism	<ul style="list-style-type: none"> • Discuss the types, etiology, clinical features, investigations and treatment of Hypoparathyroidism 	Large group discussion (LGD)	1
3	Thyroiditis	<ul style="list-style-type: none"> • Describe the classification, etiology, clinical features, investigations and treatment of Thyroiditis 	Large group discussion (LGD)	1
4	Multinodular goiter Thyroid malignancies	<ul style="list-style-type: none"> • Discuss the etiology, clinical features, investigations and management approach to a patient with multinodular goiter • Classify thyroid malignant disorders • Discuss the pathogenesis, clinical features, investigations and management of Thyroid malignancies 	Large group discussion (LGD)	1
5	Hyperparathyroidism Hypoparathyroidism	<ul style="list-style-type: none"> • Discuss the types, etiology, clinical features, investigations and treatment of Hyperparathyroidism • Discuss the types, etiology, clinical features, investigations and treatment of Hypoparathyroidism 	Large group discussion (LGD)	1
Pharmacology (2LGDs)		<ul style="list-style-type: none"> • Enlist thyroid preparations (used clinically as well as older-obsolete ones) • Describe the mechanism of action, pharmacological effects, clinical use and adverse effects of Thyroxine 	Large group discussion (LGD)	1
1	Thyroid hormones			

		(T ₄) and Tri-iodothyronine (T ₃)		
2	Antithyroid drugs	<ul style="list-style-type: none"> Classify Antithyroid drugs Describe the mechanism of action, clinical use and adverse effects of Thioamides Describe the mechanism of action, clinical use and adverse effects of Potassium iodide Describe Lugol's iodine solution Describe the mechanism of action, clinical use and adverse effects of Radioactive iodine (¹³¹I) Describe the use of β-blockers in hyperthyroid patients 	Large group discussion (LGD)	1
Pediatrics (1LGD)		<ul style="list-style-type: none"> Discuss the types and clinical features of hypothyroidism Discuss investigations and treatment of Hypothyroidism 	Large group discussion (LGD)	1
1	Congenital hypothyroidism			
Community Medicine (1LGD)		<ul style="list-style-type: none"> Discuss sources of iodine and goitrogens Discuss iodine deficiency disorders and daily requirement of Iodine Discuss iodine deficiency disorders and daily requirement of Iodine 	Large group discussion (LGD)	1
1	Iodine deficiency / Goitre			

Theme 3		Excessive thirst and urination (13LGDs)		
Subject		Learning Outcomes	MIT	No. of hours
Pathology (2 LGDs)		<ul style="list-style-type: none"> Classify Diabetes mellitus Explain the diagnostic criteria of DM Explain the mechanisms of insulin resistance Explain the mechanisms of beta cell dysfunction Explain the acute and chronic complications of DM 	Large group discussion (LGD)	1
1	Diabetes Mellitus <ul style="list-style-type: none"> Classification Diagnosis Insulin resistance Beta cell dysfunction Complications <ul style="list-style-type: none"> Acute Chronic 			
2	Pancreatic neuroendocrine tumors	<ul style="list-style-type: none"> Describe the types and clinical presentations of pancreatic 	Large group	1

		neuroendocrine tumors	discussion (LGD)	
Medicine (6 LGDs)		<ul style="list-style-type: none"> • Explain the different types of DM • Discuss the mechanism presentation, and management of insulin resistance • Discuss the clinical features of DM • Explain the diagnostic workup of a patient with DM • Classify the pharmacological treatment of DM • Explain life style modifications in the management of DM • Discuss the acute and chronic complications of DM 	Large group discussion (LGD)	3
1	Diabetes mellitus <ul style="list-style-type: none"> • Types • Insulin resistance syndromes • Clinical features investigations • Treatment • Complications 			
2	Hypoglycemic coma	<ul style="list-style-type: none"> • Explain the etiology, clinical features and management of hypoglycemic coma 	Large group discussion (LGD)	1
3	Diabetic ketoacidosis Hyperosmolar non-ketotic diabetic coma Lactic acidosis	<ul style="list-style-type: none"> • Explain the precipitating factors, diagnostic work up, and treatment of a patient with diabetic ketoacidosis • Explain the precipitating factors, diagnostic work up, and treatment of a patient with Hyperosmolar non-ketotic diabetic coma • Explain the precipitating factors, diagnostic work up, and treatment of a patient with Lactic acidosis 	Large group discussion (LGD)	1
4	Posterior pituitary gland SIADH	<ul style="list-style-type: none"> • Discuss the functions of hormone Vasopressin secreted by the posterior pituitary gland • Explain the etiology, clinical features, investigations and treatment of Diabetes insipidus • Explain the etiology, and pathogenesis of SIADH secretion 	Large group discussion (LGD)	1
Pharmacology (3 LGDs)		<ul style="list-style-type: none"> • Classify Insulins • Describe the sources of Insulin • Describe the differences between the human, bovine and porcine Insulins • Describe the mechanism of action and clinical uses of Insulin 	Large group discussion (LGD)	1
1	Insulin Glucagon			

		<ul style="list-style-type: none"> • Describe the complications of Insulin therapy • Describe the management of hypoglycemia caused by Insulin • Describe the management of diabetic ketoacidosis • Describe the mechanism of action and clinical use of Glucagon 		
2	Oral hypoglycemic drugs	<ul style="list-style-type: none"> • Classify oral hypoglycemic drugs • Enlist euglycaemic drugs • Describe the mechanism of action and adverse effects of Sulphonylureas • Describe the mechanism of action and clinical use of Meglitinides • Describe the mechanism of action, clinical use and adverse effects of Biguanides • Describe the mechanism of action, clinical use and adverse effects of Thiazolidinediones • Describe the mechanism of action, clinical use and adverse effects of α-glucosidase inhibitors • Describe the mechanism of action and clinical use of Pramlintide, Exenatide and Sitagliptin 	Large group discussion (LGD)	2
Pediatrics (1 LGD)				
1	Management of Type 1 Diabetes mellitus in children	<ul style="list-style-type: none"> • Enumerate the blood glucose parameters and the clinical signs for an early diagnosis of diabetes in a child. • Recognize how diabetes may present in young children or babies, in order to make the diagnosis and prevent coma or death • Plan investigations and management plan for a newly diagnosed and a known diabetic child. • Enumerate the different types of insulins. 	Large group discussion (LGD)	1
Community Medicine (1 LGD)				
1	Non-communicable	<ul style="list-style-type: none"> • Discuss Prevalence of diabetes mellitus globally and in Pakistan • Discuss modifiable and non- 		

diseases: Prevention of diabetes mellitus	modifiable risk factors for diabetes mellitus <ul style="list-style-type: none"> • Describe epidemiological determinants of diabetes mellitus • Discuss screening methods for diabetes mellitus • Discuss the prevention (Primary, secondary and tertiary) and care of diabetes mellitus 	Large group discussion (LGD)	1
--	---	------------------------------	---

Theme 4		Moon Face (19LGDs)		
Subject		Learning Outcomes	MIT	No. of hours
Physiology (1LGD)		<ul style="list-style-type: none"> • Explain the gross and microscopic structure of Adrenal gland • Explain the synthesis and functions of hormones of the adrenal cortex and their regulation by the anterior pituitary 	Large group discussion (LGD)	1
1	Physiology of the Adrenal cortical hormones			
Pathology (5LGDs)		<ul style="list-style-type: none"> • Discuss the etiology of Hypercortisolism • Explain the etiology and clinical features, of Cushing`s syndrome 	Large group discussion (LGD)	1
1	Hypercortisolism and Cushing`s syndrome			
2	Hyperaldosteronism Adrenogenital syndrome			
3	Adrenal insufficiency <ul style="list-style-type: none"> • Primary (Acute and Chronic) • Secondary 			
4	Adrenal neoplasms	<ul style="list-style-type: none"> • Classify adrenal insufficiency in the context of its etiology • Discuss the clinical presentations and complications of adrenal insufficiency 	Large group discussion (LGD)	1
		<ul style="list-style-type: none"> • Discuss the types of adrenal neoplasms • Explain the morphology, and clinical features of adrenal neoplasms 	Large group discussion (LGD)	1

5	Pheochromocytoma Multiple Endocrine Neoplasia syndromes (MEN)	<ul style="list-style-type: none"> • Explain the morphology, and clinical features of Pheochromocytoma • Classify Multiple endocrine neoplasia syndrome • Explain the morphology and clinical features of MEN 	Large group discussion (LGD)	1
Medicine (6LGDs)		<ul style="list-style-type: none"> • Explain the etiology, clinical features, diagnostic workup and management of Hypercortisolism/Cushing`s syndrome 	Large group discussion (LGD)	1
1	Hypercortisolism and Cushing`s syndrome			
2	Primary Hyperaldosteronism	<ul style="list-style-type: none"> • Explain the etiology, clinical features, diagnostic workup and management of Primary Hyperaldosteronism 	Large group discussion (LGD)	1
3	Adrenogenital syndrome	<ul style="list-style-type: none"> • Explain the etiology, clinical features, diagnostic workup and management of Adrenogenital syndrome 	Large group discussion (LGD)	1
4	Adrenal insufficiency <ul style="list-style-type: none"> ○ Primary (Acute and Chronic) ○ Secondary 	<ul style="list-style-type: none"> • Classify adrenal insufficiency • Explain the etiology, clinical features, investigations and treatment of primary Addison`s disease • Explain the etiology, clinical features, investigations and treatment of pituitary adrenal insufficiency 	Large group discussion (LGD)	1
5	Adrenal neoplasms	<ul style="list-style-type: none"> • Explain the types of adrenal tumors • Discuss the clinical presentations, diagnostic workup and treatment of adrenal tumors 	Large group discussion (LGD)	1
6	Pheochromocytoma Gastro-entero-pancreatico-neuroendocrine tumors (GEP-NETs) including Carcinoid tumors	<ul style="list-style-type: none"> • Explain the clinical features, investigations, management and complications of Pheochromocytoma • Explain the clinical features, investigations, management of GEP-NETs/Carcinoid tumors 	Large group discussion (LGD)	1

Pharmacology (2LGDs)				
1	Glucocorticoids	<ul style="list-style-type: none"> Classify Glucocorticoids Describe the mechanism of action, pharmacological effects, clinical uses and adverse effects of glucocorticoids Describe dexamethasone suppression test 	Large group discussion (LGD)	2
2	Glucocorticoid antagonists/synthesis inhibitors Aldosterone antagonists	<ul style="list-style-type: none"> Enlist Glucocorticoid antagonists/synthesis inhibitors Describe the mechanism of action, clinical uses and adverse effects of Mifepristone, Ketoconazole, Metyrapone and Aminoglutethimide Describe the mechanism of action, clinical uses and adverse effects of Spironolactone (apart from being used as diuretic) 	Large group discussion (LGD)	1
Community Medicine (5LGDs)				
1	Introduction to nutrition, basic measurements & allowances Macronutrients	<ul style="list-style-type: none"> Classify nutrients Discuss quality of nutrients in diet Discuss the balanced diet Discuss energy value of different nutrients Describe classification of macronutrients Discuss the functions and importance of various macronutrients Discuss daily allowance of macro nutrients Discuss the diseases caused by their deficiency and excess 	Large group discussion (LGD)	1
2	Micronutrients -Vitamin deficiencies allowances & control	<ul style="list-style-type: none"> Describe classification of micronutrients Discuss the function and importance of various vitamins Discuss daily allowances of vitamins Discuss diseases caused by their deficiency 	Large group discussion (LGD)	1
3	Micronutrients -mineral deficiencies allowances and control	<ul style="list-style-type: none"> Discuss the function and importance of various minerals essential for health Discuss daily allowance of 	Large group discussion (LGD)	1

		minerals intake <ul style="list-style-type: none"> • Discuss diseases caused by their deficiency 		
4	Undernutrition – Protein calorie malnutrition and control	<ul style="list-style-type: none"> • Define undernutrition and its classification • Discuss protein calorie malnutrition & its causes • Describe the various classifications for assessment of PEM • Discuss control strategies of malnutrition 	Large group discussion (LGD)	1
5	Over-nutrition / obesity and it's control	<ul style="list-style-type: none"> • Define Obesity • Calculate BMI • Discuss epidemiology of Obesity • Enumerate causes of Obesity • Explain the complications of Obesity • Formulate the management plan for Obesity • Discuss prevention of Obesity 	Large group discussion (LGD)	1

Theme 5	Infertility and Pregnancy (43LGDs)
----------------	---

Subject		Learning Outcomes	MIT	No. of hours
Pathology (10LGDs)				
1	Testicular tumors	<ul style="list-style-type: none"> • Classify testicular tumors • Explain the gross and microscopic morphology of benign and malignant testicular tumors • Discuss the staging and prognosis of testicular malignant tumors 	Large group discussion (LGD)	1
2	Prostatic disorders <ul style="list-style-type: none"> • Prostatitis • Benign prostatic hyperplasia (BPH) • Prostatic carcinoma 	<ul style="list-style-type: none"> • Explain the etiology and morphology of Prostatitis • Explain the gross and microscopic morphology and complications of BPH • Explain the clinical features, types and staging of prostatic carcinoma 	Large group discussion (LGD)	2

3	Sexually transmitted diseases (STDs) <ul style="list-style-type: none"> • Syphilis • Gonorrhoea 	<ul style="list-style-type: none"> • Explain the types of STDs • Explain the stages, morphology, clinical features and complications of Syphilis • Name the organisms causing Gonorrhoea and its clinical features 	Large group discussion (LGD)	1
4	Introduction to gynecological cancers	<ul style="list-style-type: none"> • Enlist different types of gynecological cancers 	Large group discussion (LGD)	1
5	Cervical carcinoma	<ul style="list-style-type: none"> • Explain the gross and microscopic morphology, clinical features and staging of Cervical carcinoma 	Large group discussion (LGD)	1
6	Endometritis Uterine fibroids Endometriosis	<ul style="list-style-type: none"> • Explain the etiology and pathogenesis of endometritis • Explain the etiology and morphology of uterine fibroids • Explain the etiology, pathogenesis and morphology of endometriosis 	Large group discussion (LGD)	1
7	Endometrial hyperplasia and endometrial carcinoma	<ul style="list-style-type: none"> • Explain the etiology, pathogenesis, morphology of Endometrial hyperplasia /carcinoma 	Large group discussion (LGD)	1
8	Polycystic ovarian disease	<ul style="list-style-type: none"> • Explain the etiology, risk factors, clinical features and morphology of Polycystic ovary syndrome 	Large group discussion (LGD)	1
9	Tumors of the ovary <ul style="list-style-type: none"> • Benign • Malignant 	<ul style="list-style-type: none"> • Classify benign and malignant tumors of the ovary • Explain the gross and microscopic morphology, clinical features, staging and complications of ovarian carcinoma 	Large group discussion (LGD)	1
Gynaecology (6LGDs)		<ul style="list-style-type: none"> • Describe the anatomy of the perineum, the vagina, cervix and uterus, the adnexa and ovary 	Large group discussion (LGD)	1
1	Anatomy of the reproductive tract			
2	Menopause			

		<ul style="list-style-type: none"> Outline the assessment of menopausal women, based on modifiable and non-modifiable risk factors. Explain the management of menopause Describe the types, side-effects, relative and absolute contraindications of hormone replacement therapy (HRT) 	Large group discussion (LGD)	1
3	Contraception	<ul style="list-style-type: none"> Define contraception Classify contraceptive methods Explain their mechanisms of action, efficacy and failure rates Explain the risks and benefits of each method Identify the complications of different contraceptive methods 	Large group discussion (LGD)	1
4	Polycystic ovary syndrome Uterine fibroids	<ul style="list-style-type: none"> Explain the risk factors, etiology, clinical features, investigations, treatment, complications and prognosis of polycystic ovary syndrome Explain the risk factors, clinical features, and management of uterine fibroids 	Large group discussion (LGD)	1
5	Endometrial cancers Cervical carcinomas	<ul style="list-style-type: none"> Explain the risk factors, clinical features, investigations, prognosis and management of endometrial carcinoma Explain the risk factors, clinical features, investigations, prognosis and management of cervical carcinoma 	Large group discussion (LGD)	1
6	Causes of female infertility	<ul style="list-style-type: none"> Define infertility Discuss the causes of female infertility 	Large group discussion (LGD)	1
Pharmacology (4LGDs)		<ul style="list-style-type: none"> Describe the mechanism of action, clinical uses and adverse effects of Gonadotropins (FSH & LH) and human chorionic gonadotropin (hCG) Describe the role of gonadotropins in male infertility Describe the mechanism of 	Large group discussion (LGD)	2
1	Gonadotropins (FSH & LH) and human chorionic gonadotropin Gonadotropin-releasing hormone and analogues (Gonadorelin and others)			

		action, clinical uses and adverse effects of Gonadotropin-releasing hormone and analogues (Gonadorelin and others)		
2	Oxytocin	<ul style="list-style-type: none"> Describe the mechanism of action, clinical uses and adverse effects of Oxytocin 	Large group discussion (LGD)	1
3	Oestrogens, Progestins, Oral contraceptives, Parenteral and implantable contraceptives, Ovulation-inducing agent, Mifepristone, Danazol, Androgens & anabolic steroids, Antiandrogens, Male contraception, Selective Estrogen Receptor Modulators	<ul style="list-style-type: none"> Classify Oestrogens Describe the mechanism of action, organ system effects, clinical uses, adverse effects and contraindications of Oestrogens Classify Progestins Describe the mechanism of action, organ system effects, clinical uses, adverse effects and contraindications of Progestins Classify Oral contraceptives Describe the mechanism of action, organ system effects, clinical uses, adverse effects and contraindications of oral contraceptive pills Describe mini pills with their advantages and disadvantages Describe post-coital contraceptives Describe the use of Parenteral (Medroxyprogesterone) and implantable (Norplant system) contraceptives Describe the mechanism of action, clinical use and adverse 	Large group discussion (LGD)	1

		<p>effects of Clomiphene</p> <ul style="list-style-type: none"> • Describe the mechanism of action, clinical uses and adverse effects of Mifepristone • Describe the mechanism of action, clinical uses and adverse effects of Danazol • Enlist Androgens and anabolic steroids • Describe the mechanism of action, clinical uses and adverse effects of androgen preparations • Classify antiandrogens • Describe the role of Ketoconazole as steroid synthesis inhibitor, its clinical uses and adverse effects • Describe the mechanism of action and clinical use of Finasteride • Describe the mechanism of action and clinical use of Cyproterone acetate • Describe the role of Spironolactone as androgen receptor blocker and its use in this context • Enlist the drugs used for male contraception • Describe the role of Gossypol as male contraceptive agent • Enlist Selective Estrogen Receptor Modulators (SERMs). • Describe the mechanism of action and clinical uses of Tamoxifen. 		
Forensic Medicine (12LGDs)				
1	Impotence and sterility	<ul style="list-style-type: none"> • Define impotence • Define sterility • Examine under supervision a case of sterility and impotence • Describe important causes leading to sterility and impotence in males as well as in females 	Large group discussion (LGD)	1

		<ul style="list-style-type: none"> • Appreciate difference between sterility and impotence • Medicolegal importance of sterility and impotence 		
2	Sterilization	<ul style="list-style-type: none"> • Define sterilization • Medicolegal importance of sterilization • Discuss the technique of sterilization in males and females • enumerate legal formalities before sterilization 	Large group discussion (LGD)	1
3	Artificial insemination	<ul style="list-style-type: none"> • Define artificial insemination • Enumerate its different types • Describe medicolegal aspects of artificial insemination • Define test tube baby • Define surrogate motherhood and enumerate its medicolegal importance 	Large group discussion (LGD)	1
4	Virginitv	<ul style="list-style-type: none"> • Define virginitv • Discuss signs of virginitv • Enumerate different types of hymen 	Large group discussion (LGD)	1
5	Pregnancy	<ul style="list-style-type: none"> • Define pregnancy • Describe presumptive signs of pregnancy • Discuss probable signs of pregnancy • Appreciate conclusive signs of pregnancy • Enumerate signs of pregnancy in dead • Discuss Medicolegal aspects of pregnancy • Describe Isqat e Haml & Isqat E Janin as per PPC 	Large group discussion (LGD)	1
6	Delivery	<ul style="list-style-type: none"> • Define delivery • Appreciate signs of recent delivery in living • Appreciate or identify signs of recent delivery in dead • Identify signs of remote delivery in living and dead • Enumerate medicolegal aspects 	Large group discussion (LGD)	1

		of delivery		
7	Legitimacy & dissolution of marriage	<ul style="list-style-type: none"> Define legitimacy Define illegitimate child Enumerate medicolegal aspects of legitimacy Define superfetation Enumerate medicolegal aspects of affiliation/ adoption Enlist legal grounds for nullity and dissolution of marriage 	Large group discussion (LGD)	1
8	Natural sexual offences: Rape & Incest	<ul style="list-style-type: none"> Define rape as per CrPC Enumerate medicolegal aspects of rape Examine under supervision a case of rape victim Examine under supervision examination of the accused Define incest 	Large group discussion (LGD)	1
9	Zina	<ul style="list-style-type: none"> Define Muhsan as per Hudood ordinance 1979. Define Zina according Huddod ordinance 1979. Enumerate the conditions required for liability in case of Zina. Enlist punishment of Zina Enumerate steps of proof of Zina in the court Describe steps of complaint in case of Zina as per Cr PC 	Large group discussion (LGD)	1
10	Unnatural sexual offences Sodomy	<ul style="list-style-type: none"> Define sodomy Enumerate steps of examination of passive agent in sodomy Enumerate steps of examination of active agent Define and describe buccal coitus Define and describe tribadism Define bestiality 	Large group discussion (LGD)	1

11	Sexual perversions	<ul style="list-style-type: none"> • Define sexual perversions • Enumerate its different types • Define and describe sadism • Define and describe masochism • Define and describe fetishism • Define and describe exhibitionism • Define and describe transvestism • Define and describe uranism • Define and describe voyeurism • Define and describe frotteurism • Define and describe urolagnia 	Large group discussion (LGD)	1
12	Abortion	<ul style="list-style-type: none"> • Define abortion • enumerate its different types • enumerate salient features of natural abortion • enumerate salient features of artificial abortion • differentiate between natural and criminal abortion • examine under supervision a case of criminal abortion and legal formalities to be fulfilled in such a case 	Large group discussion (LGD)	1
Urology(1LGD)		<ul style="list-style-type: none"> • Discuss the causes of male infertility • Explain the diagnostic workup of a male infertile patient 	Large group discussion (LGD)	1
1	Causes of male infertility			
Surgery (2LGDs)		<ul style="list-style-type: none"> • Define Cryptorchidism • Explain the etiology, complications and management of Cryptorchidism • Explain the cause, clinical features, complications and surgical management of hydrocele and varicocele. 	Large group discussion (LGD)	1
1	Cryptorchidism Hydrocele and varicocele			
2	Benign prostatic hyperplasia Carcinoma of prostate			

		carcinoma of the prostate.					
Community Medicine (5LGDs)		<ul style="list-style-type: none"> • Define reproductive health. • Describe components of reproductive health. • Define safe motherhood. • Discuss pillars of safe motherhood. 	Large group discussion (LGD)	1			
1	Safe motherhood						
2	Antenatal care and Post abortion care				<ul style="list-style-type: none"> • Discuss antenatal care. • Discuss antenatal visits as per WHO. • Discuss Post abortion care. 	Large group discussion (LGD)	1
3	Family planning and				<ul style="list-style-type: none"> • Define family planning. • Discuss different methods of family planning. • Discuss contraceptive prevalence rate and factors responsible for low CPR. 		
4	Child promotion and development strategies (IMNCI, IMCI and growth monitoring)				<ul style="list-style-type: none"> • Define IMNCI & IMCI. • Describe components of IMNCI. • Enumerate principles of IMNCI. • Discuss growth monitoring. 		
5	Prevention of reproductive health diseases.	<ul style="list-style-type: none"> • Discuss different reproductive health diseases. • Discuss STIs in detail. • Discuss risk factors and Prevention of CA cervix. 					
Family medicine (3LGDs)		<ul style="list-style-type: none"> • Enlist menstrual disorders. • Explain the etiology, investigations and management of menstrual disorders in primary care. • Explain the clinical features, and management of menopausal symptoms and complications in primary care 	Large group discussion (LGD)	1			
1	Menstrual disorders Menopause						
2	Contraception				<ul style="list-style-type: none"> • Explain the types of contraception methods. • Explain the merits and demerits of different contraceptive techniques. • Describe the complications 	Large group discussion (LGD)	1

		associated with the use of oral and injectable contraceptives.		
3	Vaginal discharge and STDs	<ul style="list-style-type: none"> • Explain the etiology of vaginal discharge. • Describe the diagnosis and management of vaginal discharge in primary care. • Classify Sexually transmitted infections in females. • Describe the clinical features, investigations and management of STDs in females in primary care. 	Large group discussion (LGD)	1

Theme 6		Breast Lump (7LGDs)		
Subject		Learning Outcomes	MIT	No. of hours
Pathology (2LGDs)				
1	Fibrocystic changes <ul style="list-style-type: none"> • Cysts and fibrosis • Epithelial hyperplasia • Adenosis Fibro-adenoma Papilloma	<ul style="list-style-type: none"> • Explain the fibrocystic changes in breast including cysts, fibrosis, epithelial hyperplasia and adenosis. • Explain the morphology of Fibro-adenoma of the breast. • Explain the morphology of papilloma of the breast. 	Large group discussion (LGD)	1
2	Carcinoma of the breast Gynecomastia	<ul style="list-style-type: none"> • Explain the risk factors, etiopathogenesis, clinical features, staging, and complications of carcinoma of the breast. • Discuss the causes and morphology of Gynecomastia. 	Large group discussion (LGD)	1
Surgery (2LGDs)				

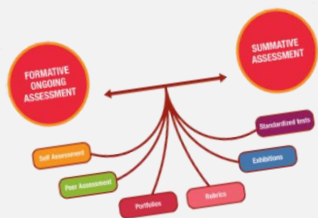
1	Investigations of breast diseases Benign breast diseases	<ul style="list-style-type: none"> Justify the investigations of a patient with a breast lesion. Classify benign breast diseases. 	Large group discussion (LGD)	1
2	Malignant breast diseases	<ul style="list-style-type: none"> Classify malignant breast diseases. Discuss the risk factors, etiology, clinical features, investigations, management and prognosis of a patient with breast cancer. Describe the role of hormone receptors in breast cancer. Explain the complications of breast cancer surgery. Discuss the role of pharmacological treatment options in breast cancer management. Explain the role of selective estrogen receptors modulators in the prevention of breast cancer in high risk women. 	Large group discussion (LGD)	2
Community Medicine (1LGD)		<ul style="list-style-type: none"> Discuss advantages of breast feeding. Discuss artificial feeding. Discuss baby friendly hospital initiative. Discuss guidelines on infant and child feeding. Discuss different methods of screening for breast cancer. Discuss levels of prevention of breast cancer. 	Large group discussion (LGD)	1
1	Breast feeding Screening and prevention of breast cancer			
Radiology (1LGD)		<ul style="list-style-type: none"> Explain the indications, procedure, and interpretation of ultrasound and mammography in the investigation of breast lumps 	Large group discussion (LGD)	1
1	Radiological approaches to breast cancer screening			
Prime/Medical Education (1LGD)		<ul style="list-style-type: none"> Explain the concept of SPICES model of breaking bad news. 	Large group discussion (LGD)	1
1	Counselling- Breaking bad news			

Practical work

Subject: Pharmacology		Learning Outcomes	No. of hours
1	Prescription for Graves' disease, Hypothyroidism	<ul style="list-style-type: none"> Formulate prescription for a patient with Graves' disease. 	2
2	Prescription for Diabetes mellitus	<ul style="list-style-type: none"> Formulate prescription for a patient with type 1 and type 2 Diabetes mellitus. 	2
Subject: Pathology			
1	Glucose estimation	<ul style="list-style-type: none"> Check glucose in urine. Check blood glucose in a given sample 	2
2	Goitre	<ul style="list-style-type: none"> Identify the microscopic features of multinodular goitre 	2
3	Pap smear	<ul style="list-style-type: none"> Interpret a pap smear 	2
4	Fibroids	<ul style="list-style-type: none"> Identify the microscopic features of uterine fibroids 	2
5	Carcinoma breast	<ul style="list-style-type: none"> Identify the microscopic features of carcinoma of the breast 	2
3	Aldosterone antagonists	<ul style="list-style-type: none"> Describe the mechanism of action, clinical uses and adverse effects of Spironolactone (apart from being used as diuretic) 	2
Subject: Forensic Medicine			
1	Examination of a rape victim and assailant	<ul style="list-style-type: none"> Take consent from a rape victim Examine a rape victim/manikin Describe the procedure of taking sample from the victim/manikin/item Describe the procedure of Sealing and preservation of the specimen 	2
2	Examination of sodomy victim and assailant	<ul style="list-style-type: none"> Describe the procedure of Examining a victim of sodomy Describe the procedure of Taking sample from the 	2

		victim/manikin/item <ul style="list-style-type: none"> Describe the procedure of Sealing and preservation of the specimen. 	
Subject: Community Medicine		<ul style="list-style-type: none"> Identify the contraceptive device/drug Explain the merits and demerits Discuss the method of administration of the given device/drug 	2
1	Contraception		
2	Mother and child health IMCI- Shakir`s tape Growth chart	<ul style="list-style-type: none"> Identify the chart Devise a schedule plan for antenatal visits as per WHO criteria Identify the model Measure the mid-arm circumference Identify the chart Plot the graph using a scenario Interpret different parts of the chart Calculate the weight and height of the child Interpret the results 	2
3	EPI schedule Vaccination and immunization Tetanus Toxide	<ul style="list-style-type: none"> Counsel the mother for EPI schedule Identify the vaccine Explain its uses Discuss its schedule of administration Discuss the results of VVM (vaccine voile monitor) and its uses in epidemics 	2
4	Demographic indicators	<ul style="list-style-type: none"> Interpret the given demographic indicator (population pyramid, HDI, PQLI, Growth rate and dependency ratio) 	2

Hours Distribution	
Theory	
Discipline	No. of hours
Physiology	02
Pathology	26
Pharmacology	12
Forensic Medicine	12
Community Medicine	22
General Medicine	19
Eye	16
ENT	23
Pediatrics	03
Surgery	04
Gynae & Obs	06
Neurosurgery	01
Urology	01
Family Medicine	03
Radiology	01
PRIME/DME	02
Total	153
Practical/ SGDs	
Pathology	12
Pharmacology	04
Forensic Medicine	04
Community Medicine	08
Total	28



8 Examination and Methods of Assessment:

The year-4 will be assessed in 5 blocks.

- 1) Block-1 (Neurosciences-2 module) will be assessed in **paper-J**.
- 2) Block-2 (GIT and hepatobiliary module-2 will be assessed in **paper-K**.
- 3) Block-3 (Renal-2, Endocrine and Reproduction-2 module) will be assessed in **paper-L**.
- 4) Block-4 (ENT module) will be assessed in **paper M-1**.
- 5) Block-5 (Eye module) will be assessed in **paper M-2**.
- 6) Each written paper consists of 120 MCQs except for ENT & Eye papers which includes 90 MCQs each.
- 7) Internal assessment will be added to final marks in KMU.
- 8) For ENT (M-1 module) and Eye (M-2 module), the marks allocated for each OSCE station will be 5, while the rest of the modules are allotted 6 marks per OSCE station.
- 9) Practical assessment will be in the form of OSPE/OSCE which will also include embedded viva stations.
- 10) The details of each section are given in the tables below.

Assessment Plan for 4th Year MBBS

Theory paper	Modules	Theory marks	Internal assessment theory (10%)	OSPE/OSPE	Internal assessment OSPE/OSPE (10%)	TOTAL MARKS
Paper J	Neurosciences-2	120	13	120	13	266
Paper K	GIT-2	120	13	120	13	266
Paper L	Renal-2 and Endocrine and Reproduction	120	14	120	13	267
Paper M-1	ENT	90	10	75*	8	183
Paper M-2	EYE	90	10	75*	8	183
Research**						35
Total Marks		480	53	500	67	1200

*For ENT (M-1 module) and Eye (M-2 module), the marks allocated for each OSCE station will be 5, while the rest of the modules are allotted 6 marks per OSPE/OSCE station.

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

Paper-L (Renal-2, and Endocrine and Reproduction-2)

MCQs

Subject	Renal-2	Endocrine and Reproduction-2	Total MCQs
Community medicine	11	6	17
Pharmacology	02	07	09
Pathology	11	12	23
Forensic medicine	01	06	07
Surgery	06	03	09
Gynaecology	01	39	40
Medicine	05	05	10
Pediatrics	02	01	03
Family medicine	01	01	02
Total	40	80	120

OSPE/OSCE

Subject	Viva stations	OSPE/OSCE stations	Total
Pharmacology	2	1	3
Pathology	2	2	4
Forensic medicine	2	1	3
Community medicine	2	4	8
Research viva	2**	x	
Gynecology	1	2	3
Medicine (Endocrinology/DM)	0	1	1
Total	11	11	22

* A minimum of 22 stations will be used in final exams. The 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 conducting research. A total of 35 marks have been allocated for the thesis (research project).

Exam. Roll No. _____

DEPARTMENT OF COMMUNITY MEDICINE

AYUB MEDICAL COLLEGE

ABBOTTABAD

Class Roll No: _____

Mr/Miss: _____

Father's Name: _____ Domicile: _____

Present Address: _____


 Photograph
RECORD OF ATTENDANCE

MONTHS	SESSION STARTED	TOTAL HOURS TAKEN	TOTAL ATTENDANCE	PERCENTAGE
March	2021			
June	2021			
July	2021			
August	2021			
September	2021			
October	2021			
November	2021			
December	2021			
R/Project	2021			
TOTAL	2021			

VISIT TEST/ R. PROJECT

Visit Test (=/20)			
Research project (=/25)			

RECORD OF PERFORMANCE

TEST	MARKS	REMARKS
Test No. 1		

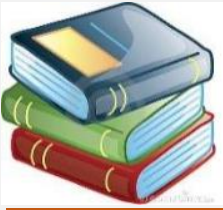
Test No. 2		
Test No. 3		
Test No. 4		
Total (= /10)		

PAST ACADEMIC RECORD

2nd Professional Exam Session Result

3rd Professional Exam Session Result

Remarks by the Tutor _____



9 Learning Opportunities and Resources

9.1 INSTRUCTION

Dear students! NEVER use guides and substandard books for learning and exam preparation. Following are the books , website links and articles recommended for you.

9.2 BOOKS:

Pathology

Robbins basic Pathology first south Asia edition

Chemical Pathology for the beginner by Ammir Ejaz

Community Medicine:

Park K. Park's textbook for preventive and social medicine. 23rd ed. Bhanot publishers: Jabalpur;2015

Ansari I. Textbook of Community Medicine

NCBI Books. Contraception and Reproduction: Health Consequences for Women and Children in the Developing World. National Research Council (US) Committee on Population. Washington (DC): National Academies Press (US); 1989.

Pharmacology

Basic & Clinical Pharmacology, 14th edition

Goodman Gilman's The Pharmacological Basis of Therapeutics, 13th edition

Lippincott Illustrated Reviews Pharmacology, 7th edition

Neurosurgery

Greenberg. Handbook of neurosurgery.20th ed.

Forensic Medicine:

Principles & Practice of Forensic Medicine Nasib R. Awan

Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology

Textbook of Forensic Medicine & Toxicology Nageshkumar G. Rao, Jaypee.

Surgery

Bailey and Love's short practice of surgery

Gynaecology

Rashid Latif Khan. Textbook of Gynaecology. 7th edition

Paediatrics

Nelson textbook of Paediatrics, 21st edition

Textbook of paediatrics, Pakistan Paediatrics association

Parvez Akbar Khan. Basis of Paediatrics. 9th ed

Medicine

Davidson's Principles and practice of Medicine

Physiology

Guyton and Hall's textbook of Medical Physiology

9.3 WEBSITE:

Community Medicine:

Link for free download PDF Park's textbook for preventive and social medicine:

[https://medicalstudyzone.com/download-parks-textbook-of-preventive-and-social-medicine-25th-edition-pdf-](https://medicalstudyzone.com/download-parks-textbook-of-preventive-and-social-medicine-25th-edition-pdf-free/#Download_Park8217s_Textbook_of_Preventive_and_Social_Medicine_PDF_free)

[free/#Download Park8217s Textbook of Preventive and Social Medicine PDF free](https://medicalstudyzone.com/download-parks-textbook-of-preventive-and-social-medicine-25th-edition-pdf-free/#Download_Park8217s_Textbook_of_Preventive_and_Social_Medicine_PDF_free)

Pakistan Demographic and Health Survey, Pakistan (2017-18):

<https://dhsprogram.com/pubs/pdf/FR354/FR354.pdf>

[IMNCI: IMNCI Management of Childhood Illness Chart Booklet Pakistan WHO 2019.pdf](#)

Baby friendly Hospital Initiative: https://www.who.int/elena/titles/bbc/implementation_bfhi/en/

Infant and Child Feeding:

<https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding>

Shakir's Tape or Midupper arm circumference:

<https://www.unicef.org/supply/media/1421/file/mid-upper-arm-circumference-measuring-tapes-technical-bulletin.pdf>

Forensic Medicine:

<https://worldofmedicalsaviours.com/textbook-of-forensic-medicine-and-toxicology-by-nagesh-kumar-rao-pdf-free-download/>

Punjab Forensic science agency (PFSA) Guidelines:

https://pfsa.punjab.gov.pk/guidelines_for_evidence

9.4 ARTICLES:**Community Medicine:**

Moore ML. Breastfeeding Benefits Support -Research. Sci J of Gyne and Obste 2018; 1(1): 001-002

Zubin G, Looi E. Protein Energy Malnutrition. Pediatric clinics of North America 2009; 56: 1055-68.

10.1016/j.pcl.2009.07.001.

Imetables

AYUB MEDICAL COLLEGE, ABBOTTABAD

Department of Medical Education**Time Table 4th Year MBBS****Class Session 2024****Block-L: (Endocrine & Reproduction-II Module)****Hours allocation of disciplines**

S. No	Subject	Hours allocated
1	Pathology	26(LGDs)+12(SGDs)=38
2	Community medicine	22(LGDs)+8(SGDs)=30
3	Medicine	19(LGDs)
4	Pharmacology	13(LGDs)+4(SGDs)=17
5	Forensic medicine	12(LGDs)+4(SGDs)=16
6	Research*	14**
7	Gynaecology	06(LGDs)
8	Surgery	05(LGDs)
9	Pediatrics	03(LGDs)
10	Family medicine	03(LGDs)
11	PRIME/MEDICAL EDUCATION	02(LGDs)
12	Physiology	01(LGD)
13	Urology	01(LGD)
14	Neurosurgery	01(LGD)
15	Radiology	01(LGD)
	Total	115(LGDs)+28(SGDs)=143

* 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

10 Timetable

AYUB MEDICAL COLLEGE, ABBOTTABAD
Endocrinology & Reproduction II, Block L, 4th Year MBBS
Class Session 2024

Day	8:00am-9:00 am	9:00am-10:00 am	10:00am - 12:00pm	12:00pm-12:45pm	12:45pm - 1:15pm	1:15pm-2:00pm	2:00pm-3:00pm
Mon	Pathology LGIS:L1 Pit Anat/Physio	Medicine LGIS:L1 Acromegaly & Hyperprolactinemia	Hospital Wards	Community Medicine LGIS:L1 Occ Health intro Dr Zeeshan	Prayer break	Practical work Pharm/ EPI schedule Vaccination and immunization Tetanus Toxide	
Tues	Pharmacology LGIS:L1 GH & Antagonists Dr. Jamila Sahir	Pathology LGIS:L2 Hypopituitarism		Medicine LGIS:L2 Hypopituitarism		Practical work Pharm/ EPI schedule Vaccination and immunization Tetanus Toxide	
Wed	Paediatrics LGIS:L1 Short stature	Community Medicine LGIS:L2 Physical Hazard Dr Zeeshan		Pathology LGIS:L3 Hyperpituitarism		Research/Path	
Thurs	Community Medicine LGIS:L3 Chemical Hazard Dr Zeeshan	Neurosurgery LGIS:L1 Pituitary Adenoma		Med Edu LGIS Dealing with patients		Research/Path	
Fri	Physiology LGIS:L1 Thyroid	Community Medicine LGIS:L4 Mech hazard Dr Zeeshan		Pharmacology LGIS:L2 Thyroid Hormones Dr. Afsheen		Half Day	

AYUB MEDICAL COLLEGE, ABBOTTABAD
Endocrinology & Reproduction II, Block L, 4th Year MBBS
Class Session 2024

Day	8:00am-9:00 am	9:00am-10:00 am	10:00am-12:00pm	12:00pm-12:45pm	12:45pm-1:15pm	1:15pm-2:00pm	2:00pm-3:00pm
Mon	Pathology LGIS:L4 Hyperthyroidism	Medicine LGIS:L3 Hyperthyroidism	Hospital Wards	Community Medicine LGIS:L5 Animal Hazard	Prayer break	Practical work Demographic indicators /Path goitre	
Tues	Pharmacology LGIS:L3 Antithyroid drugs Dr. Afsheen	Community Medicine LGIS:L6 Social security Dr Zeeshan		Pathology LGIS:L5 Hypothyroidism		Practical work Demographic indicators /Path goitre	
Wed	Community Medicine LGIS:L7 Demo intro Dr. Sobia	Medicine LGIS:L4 Hypothyroidism		Paediatrics LGIS Cong hypothyroidism		Research/Path	
Thurs	Medicine LGIS:L4 Thyroiditis	Pathology LGIS:L5 Thyroiditis		Community Medicine LGIS:L8 Growth rate Dr. Sobia		Research/Path	
Fri	Pathology LGIS:L5 Thyroid malignancies	Community Medicine LGIS:L9 Demo indi Dr. Sobia		Medicine LGIS:L4 Thyroid malignancies		Half Day	

AYUB MEDICAL COLLEGE, ABBOTTABAD
Endocrinology & Reproduction II, Block L, 4th Year MBBS
Class Session 2024

Day	8:00am-9:00 am	9:00am-10:00 am	10:00am - 12:00pm	12:00pm-12:45pm	12:45pm - 1:15pm	1:15pm-2:00pm	2:00pm-3:00pm
Mon	Medicine LGIS:L3 Hyper/hypo parathyroidism	Community Medicine LGIS:L10 IDD Dr. Zainab	Hospital Wards	Pathology LGIS DM	Prayer break	Practical work Pharm/Path glucose estimation	
Tues	Medicine LGIS:L3 DM	Paediatrics DM in children		Community Medicine LGIS:L11 DM prevention Dr. Zainab		Practical work Pharm/Path glucose estimation	
Wed	Pharmacology Insulin/glucagon Dr. Mehwish Gul	Pathology Pancreatic tumors		Medicine LGIS:L3 Hypoglycemic coma		Research/Path	
Thurs	Medicine LGIS:L4 ketoacidosis	Pharmacology Oral Hypoglycemics 1 Dr. Adeel Alam		Medicine SIADH		Research/Path	
Fri	Pharmacology Oral Hypoglycemics 2 Dr. Adeel Alam	Physiology Adrenal cortex		Pathology Hypocortisolism		Half Day	

AYUB MEDICAL COLLEGE, ABBOTTABAD
Endocrinology & Reproduction II, Block L, 4th Year MBBS
Class Session 2024

Day	8:00am-9:00 am	9:00am-10:00 am	10:00am - 12:00pm	12:00pm-12:45pm	12:45pm - 1:15 pm	1:15pm-2:00pm	2:00pm-3:00pm
Mon	Medicine Hypercortisolism	Community Medicine LGIS:L12 Nutrition intro Macronutrients Dr. Zainab	Hospital ards	Pathology LGIS Hyperaldosteronism	Prayer break	Practical work IMCI- Shakir's tape /Path aldosterone antagonists	
Tues	Medicine LGIS:L3 Primary Hyperaldosteronism	Community Medicine LGIS:L13 Micronutrients Dr. Zainab		Pathology LGIS Adrenal insufficiency		Practical work IMCI- Shakir's tape /Path aldosterone antagonists	
Wed	Pathology Adrenal neoplasms	Community Medicine LGIS:L14 Micronutrients 2 Dr. Zainab		Medicine LGIS:L3 Adrenogenital syndrome		Research	
Thurs	Medicine LGIS:L4 Adrenal insufficiency	Pharmacology Glucocorticoid 1 Dr. Sumbal		Community Medicine LGIS:L15 Undernutrition Dr. Zainab		Research	
Fri	Medicine Adrenal neoplasms	Pathology Pheochromocytoma		Community Medicine LGIS:L16 Overnutrition Dr. Zainab		Half Day	

AYUB MEDICAL COLLEGE, ABBOTTABAD
Endocrinology & Reproduction II, Block L, 4th Year MBBS
Class Session 2024

Day	8:00am-9:00 am	9:00am-10:00 am	10:00am - 12:00pm	12:00pm-12:45pm	12:45pm - 1:15pm	1:15pm-2:00pm	2:00pm-3:00pm
Mon	Medicine Pheochromocytoma	Community Medicine LGIS:L17 Safe motherhood Dr. Rizwana	Hospital Wards	Pharmacology Glucocorticoids 2 Dr. Sumbal	Prayer break	Practical work Mother and child health Growth chart	
Tues	Pharmacology Glucocorticoids Antagonists Dr. Sumbal	Community Medicine LGIS:L18 Antenatal/Post abortion care Dr. Rizwana		Gynaecology Anatomy of the reproductive tract		Practical work Mother and child health Growth chart	
Wed	Family med Menstrual disorders Menopause	Community Medicine LGIS:L19 Family planning Dr. Sobia		Gynaecology Menopause		Research/Path	
Thurs	Pharmacology Gonadotropins 1 Dr. Nisar	Family med Contraception		Community Medicine LGIS:L20 IMNCI Dr. Rizwana		Research/Path	
Fri	Community Medicine LGIS:L21 Prevention of reproductive health diseases Dr. Rizwana.	Pharmacology Gonadotropins 2 Dr. Nisar		Forensic Med Impotence and sterility Dr. Omair		Half Day	

AYUB MEDICAL COLLEGE, ABBOTTABAD
Endocrinology & Reproduction II, Block L, 4th Year MBBS
Class Session 2024

Day	8:00am-9:00 am	9:00am-10:00 am	10:00am - 12:00pm	12:00pm-12:45pm	12:45pm - 1:15pm	1:15pm-2:00pm	2:00pm-3:00pm
Mon	Forensic Med Sterilization Dr. Omair	Pharmacology Oxytocin Dr. Mehwish	Hospital Wards	Urology Causes of male infertility	Prayer break	Practical work CM contraception/Path Pap smear	
Tues	Forensic Med Artificial insemination Dr. Sadia	Gynaecology Polycystic ovary syndrome Uterine fibroids		Pathology Testicular tumors		Practical work CM contraception/Path Pap smear	
Wed	Pathology Prostatic disorders	Forensic Med Virginity Dr. Salma Shazia		Surgery Cryptorchidism Hydrocele and varicocele		Research/Path	
Thurs	Surgery BPH/Prostate Ca	Pathology STDs		Family Med Vaginal discharge and STDs		Research/Path	
Fri	Forensic Med Pregnancy Dr. Salma Shazia	Pathology Introduction to gynecological cancers		Gynaecology Endometrial cancers Cervical carcinomas		Half Day	

AYUB MEDICAL COLLEGE, ABBOTTABAD
Endocrinology & Reproduction II, Block L, 4th Year MBBS

Class Session 2024

Day	8:00am-9:00 am	9:00am-10:00 am	10:00 am-12:00 pm	12:00pm-12:45pm	12:45pm - 1:15 pm	1:15pm-2:00pm	2:00pm-3:00pm
Mon	Pathology Endometritis Uterine fibroids Endometriosis	Forensic Med Delivery Dr. Salma Shazia	Hospital Wards	Gynaecology Contraception	Prayer break	Practical work Forensic Med Rape/Path fibroids	
Tues	Forensic Med Legitimacy & dissolution of marriage Dr. Salma Shazia	Pathology Endometrial hyperplasia and endometrial carcinoma		Pharmacology Contraceptives Dr. Saima Bukhari		Practical work Forensic Med Rape /Path Fibroids	
Wed	Forensic Med Natural sexual offences: Rape & Incest Dr. Salma Shazia	Pathology Polycystic ovarian disease		Gynaecology Causes of female infertility		Research/	
Thurs	Pathology Polycystic ovarian disease	Forensic Med Zina Dr. Salma Shazia		SDL		Research/	
Fri	Forensic Med Unnatural sexual offences Sodomy	Pathology Tumors of the ovary		SDL		Half Day	

AYUB MEDICAL COLLEGE, ABBOTTABAD
Endocrinology & Reproduction II, Block L, 4th Year MBBS
Class Session 2024

Day	8:00am-9:00 am	9:00am-10:00 am	10:00am-12:00pm	12:00pm-12:45pm	12:45pm-1:15pm	1:15pm-2:00pm	2:00pm-3:00pm
Mon	Forensic Med Sexual perversions Dr. Inayat	Prime/Med edu Counselling- Breaking bad news		Community Med Breast feeding Screening and prevention of breast cancer Dr. Zainab	Prayer break	Practical work Forensic Med sodomy /Path Ca breast	
Tues	Forensic Med Abortion Dr. Salma Shazia	Pathology Fibrocystic changes		Surgery Investigations of breast diseases Benign breast diseases		Practical work Forensic Med sodomy /Path Ca breast	
Wed	Pathology Carcinoma of the breast Gynecomastia	Surgery Malignant breast diseases		Radiology Radiological approaches to breast cancer screening		Research	
Thurs	SDL	SDL		SDL		Research	
Fri	SDL	SDL	SDL	Half Day			

11 For inquiry and troubleshooting

Please contact

Dr. Adnan Rasheed(0333-9974207)

Module Coordinator

dr.adnanrashid@gmail.com

Please give overall rating of the course

90% - 100%	()	60% - 70%	()
80% - 90%	()	50% - 60%	()
70% - 80%	()	below 50%	()

Please comment on the strengths of the course and the way it was conducted.

Please comment on the weaknesses of the course and the way it was conducted.

Please give suggestions for the improvement of the course.

Optional – Your name and contact address:

Thank you!!
