

#### **BAQAI MEDICAL COLLEGE**

**SECOND YEAR M.B.B.S** 

ENDOCRINE MODULE
STUDY GUIDE - 2024
6 Weeks

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#### **BAQAI MEDICAL UNIVERSITY VISION STATEMENT**

To evolve as a nucleus for higher learning with a resolution to be socially accountable, focused on producing accomplished health care professionals for services in all spheres of life at the national and global level.



### **BAQAI MEDICAL UNIVERSITY MISSION STATEMENT**

University is dedicated to the growth of competencies in its potential graduates through dissemination of knowledge for patient care, innovation in scholarship, origination of leadership skills, and use of technological advancements and providing.



### **BAQAI MEDICAL COLLEGE MISSION STATEMENT**

The mission of the Baqai medical college is to produce medical graduates, who are accomplished and responsible individuals and have skills for problem solving, clinical judgment, research & leadership for medical practice at the international level and are also aware of the health problems of the less privileged rural and urban population of Pakistan.





Write and report focused history, perform physical examination, formulate a diagnosis and management plan for common health problems.

Acquire professional behaviours that embodies lifelong learning, altruism, empathy and cultural sensitivity in provision health care service.

Identify problems, critically review literature, conduct research and disseminate knowledge.

#### OUTCOMES OF THE M.B.B.S PROGRAM

Lead other team members as per situational needs for quality health service.

By the end of five years M.B.B.S. program, the Baqai Medical College graduate will be able to:

Apply evidence-based practices for protecting, maintaining and promoting the health of individuals, families and community.

Utilize knowledge of basic and clinical sciences for patient care.





#### **ENDOCRINE MODULE STUDY GUIDE - 2024**

#### CIC SPIRAL-1 2<sup>nd</sup> Year MBBS MODULAR TIME TABLE, STUDY GUIDE and CBL TEAM

NAME OF FACULTY	DEPARTMENT	DESIGNATION IN TEAM	EMAIL ADDRESS
Prof. Dr. Syed Inayat Ali	Anatomy	Head of CIC Spiral-1	drinayatali@baqai.edu.pk
Prof. Dr. Uzma	Anatomy	Class In-charge 2 <sup>nd</sup> Year MBBS	
Dr. Benish Zafar	Biochemistry	Coordinator of 2 <sup>nd</sup> Year MBBS Study Guide & Time Table Team	benishzafar@baqai.edu.pk
Dr. Mubashara Tahseen	Anatomy	Member	mubasharatahseen@baqai.edu.pk
Dr. Sobia	Physiology	Member	sobianabeel@baqai.edu.pk
Dr. Hina Masood	Pharmacology	Member	hinamasood@baqai.edu.pk
Dr. Rozeena	Pathology	Member	
Dr. Rafey Siddiqui	Forensic Medicine	Member	rafaya@baqai.edu.pk
Dr. Ammara	Community Medicine	Member	ammarasaeed@baqai.edu.pk
Dr. Aneeta / Dr. Saima Askari	Medicine	Members	haroonharoon@baqai.edu.pk / saimaaskari@baqai.edu.pk
Dr. Danish / Dr.Abdullah	Surgery	Member	drdanishmuneeb@baqai.edu.pk / dr.abdullah@baqai.edu.pk
Dr. Nikhat Ashraf	Gynaecology & Obstetrics	Member	dr.nikhatahsan@baqai.edu
Dr. Maria Rahim	Research	Member	maria.rahim@baqai.edu.pk
Dr. Mariam Ibrahim	Department of Medical Education	Member	mariamibrahim@baqai.edu.pk
Dr. Azra Shaheen	Behavioural Sciences	Member	azra@baqai.edu.pk
Dr. Danish/ Dr. Abdullah	Orthopeadics	Members	drdanishmuneeb@baqai.edu.pk / drabdullah@baqai.edu.pk
Dr. Mehwish	Radiology	Member	
Dr. Kahkashan Perveen	Biochemistry	Spiral-1 CBL Coordinator	dr.kahkashan@baqai.edu.pk
Dr. Shahid Pervez	Anatomy	CBL team member	sshaikh@baqai.edu.pk
Dr. Salimullah	Physiology	CBL team member	drsaleemullah@baqai.edu





#### INTRODUCTION TO ENDOCRINE MODULE GUIDE:

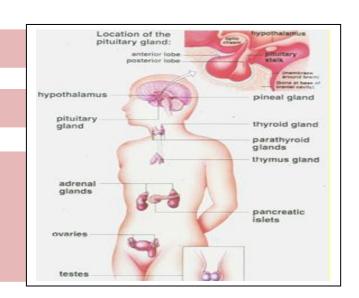
Year to be taught: Second Year M.B.B.S. 2023

**Placement of Reproductive Module: THIRD** 

**<u>Duration:</u>** 6 weeks (6+1 day)

Tentative Date: 20-05-2024 to 29-07-2024

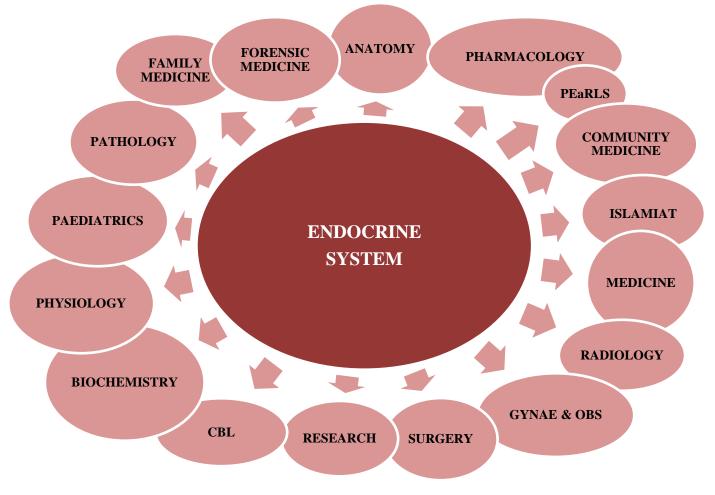
**Module Assessment Date: End of Module** 



The Endocrine Module is the third module for 2<sup>nd</sup> Year MBBS Integrated Modular Curriculum for MBBS program. It will give an introduction and awareness about the curriculum of endocrine system in general along with the teaching and learning environment. This module includes basic anatomical, physiological and biochemical concepts in relation to the endocrine system and its link with clinical aspects related to the diseases of Endocrine System.











#### **ENDOCRINE MODULE OUTCOME**

#### At the completion of the endocrine module, 2<sup>nd</sup> year MBBS students will be able to:

- 1. Explain the embryological development of endocrine glands along with their gross and microscopic feature with their respective hormones synthesis, mechanism of action, functions, and regulation with related disorders.
- 2. Describe the role of hypothalamic hormone in relation to pituitary gland.
- 3. Recall the biochemical structure, secretion, mode of action, functions, and common related disorders of pituitary hormones.
- 4. Recall the risk factors, public health aspect, biochemical analysis and prevention strategies of diabetes mellitus.



# BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE SECOND YEAR M.B.B.S. ENDOCRINE MODULE STUDY GUIDE - 2024 INTEGRATED TEACHING



TOPICS WITH OBJECTIVES	DEPARTMENT	DURATION	FACILITATOR	TEACHING STRATEGY	VENUE
<ul> <li>Anatomical Overview Of Endocrine Glands</li> <li>At the end of this lecture, 2<sup>nd</sup> year MBBS students will be able to:         <ul> <li>List different endocrine glands and their general features.</li> </ul> </li> <li>Discuss the locations of different endocrine glands.</li> </ul>	ANATOMY	60 minutes	Dr. Shahid	Lecture	Lecture hall – II, Ground floor, Block-A.
Overview Of Endocrines:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  • Discuss the Human Endocrine System.  • Identify the differences between endocrine and exocrine glands.	PHYSIOLOGY	60 minutes	Dr. Qamar	Lecture	Lecture hall – II, Ground floor, Block-A.
<ul> <li>List the hormones secreted by different endocrine glands.</li> <li>Discuss the positive and negative</li> </ul>					
feedback regulation of hormones.					
Endocrine Hormones & their modes of action:  At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:	BIOCHEMISTRY	120 minutes	Dr. Iffat	Lecture	Lecture hall – II,





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Define hormones					Ground
<ul> <li>Classify hormones according to their biochemical structure.</li> </ul>					floor, Block-A.
• Describe the modes of action employed by different hormones to execute their function.					
Identify the factors involved in hormonal regulation.					
Embryology Of Hypothalamus & Pituitary Gland:  At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:  • Define the sources of the development of hypothalamus and pituitary gland.	ANATOMY	60 minutes	Dr. Saba	Lecture	Lecture hall – II, Ground floor, Block-A.
<ul> <li>Describe the development of pituitary gland.</li> <li>Discuss the congenital anomalies of pituitary gland.</li> </ul>					
<ul> <li>Hypothalamus &amp; Pituitary gland: At the end of this lecture, 2<sup>nd</sup> year MBBS students will be able to: <ul> <li>Identify the location of hypothalamus and pituitary gland.</li> </ul> </li> <li>Describe the relation and external features of hypothalamus.</li> </ul>	ANATOMY	90 minutes	Dr. Sarosh	Lecture	Lecture hall – II, Ground floor, Block-A.





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Describe the relations and external features of pituitary gland.					
Describe the blood supply of hypothalamus and pituitary gland.					
Histology Of Hypothalamus & Pituitary Gland:  At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:  List the different parts of hypothalamus and pituitary gland.	ANATOMY	60 minutes	Dr. Inayat	Lecture	Lecture Hall-2 Block-A
Describe the histological features of hypothalamus and each part of pituitary gland.					
Discuss the histological features of different cells of hypothalamus and their secretions.					
Describe the characteristic features of different cells of pituitary gland and their secretions.					
Functions Of Hypothalamic Hormones:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  Discuss the function of the hypothalamus.  Describe the disorders of hypothalamic functions.	PHYSIOLOGY	60 minutes	Dr. Sobia	Lecture	Lecture Hall-2 Block-A
Posterior Pituitary Hormone:	PHYSIOLOGY	60 minutes	Dr. Saba	Lecture	





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At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -List the hormones produced by posterior pituitary gland.					Lecture Hall-2 Block-A
-Describe the physiological functions of vasopressin.					
- Explain the difference in the receptor types and the receptor specificity between vasopressin and desmopressin.					
Anterior Pituitary Hormone: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -List the anterior pituitary hormonesIdentify the site of action of anterior pituitary hormonesDescribe the mechanism of interaction of anterior pituitary with the hypothalamus	PHYSIOLOGY	120 minutes	Dr. Qamar	Lecture	Lecture Hall-2 Block-A
Functions Of Growth Hormone: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -List the types of growth hormoneDescribe its mechanism and site of actionExplain the functions of growth hormone on body.	PHYSIOLOGY	60 minutes	Dr. Ruqaya	Lecture	Lecture Hall-2 Block-A
-Discuss the factors that regulate the production of growth hormone.					





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Abnormalities Of Growth Hormone:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  -Define Gigantism & Dwarfism.  -Explain the Etiology & Pathogenesis of gigantism & dwarfism.  -Explain the clinical manifestations of gigantism & dwarfism.  -Enlist the laboratory findings of gigantism & dwarfism.	PATHOLOGY	120 minutes	Dr. Rozina	Lecture	Lecture Hall-2 Block-A
Acromegaly At the end of this small group teaching session, 2 <sup>nd</sup> year MBBS students will be able to:  Define acromegaly and gigantism List the clinical features of acromegaly Discuss the causes of acromegaly and gigantism	PHYSIOLOGY	120 minutes	Dr.Sobia	Small Group Teaching	Physiolog y Lab, 1 <sup>st</sup> Floor, Block-A
Abnormal Constituents Of Urine At the end of this practical session, 2 <sup>nd</sup> year MBBS students will be able to:  • List the common abnormal constituents of urine commonly seen in urine.  • Detect the presence of sugar by Benedicts test in the given sample.  • Detect the presence of proteins using acetic acid in the given sample.	BIOCHEMISTRY	120 minutes	Dr.Benish / Mr.Jamal	Practical	Biochemis try Lab, 1 <sup>st</sup> Floor, Block-A





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<ul> <li>Detect ketone bodies using Rothera's nitroprusside test in the given sample.</li> <li>Describe the principle of the reaction taking place in Benedicts test, acetic acid test and rothers's test with the reagents used.</li> <li>Recognize the importance of detecting glucose, proteins and ketone bodies in urine of diabetes mellitus patients</li> </ul>					
Overview of Pharmacology of Endocrine System:  At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:  List the physiologic role of various endocrine hormones.  Discuss the mechanistic pharmacology of endocrine disorders.  List the physiologic role of various endocrine hormones.	PHARMACOLOG Y	60 minutes	Dr. Hina Masood / Dr. Javeria	Lecture	Lecture Hall-2 Block-A
Embryology Of Thyroid & Parathyroid: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Describe the development of thyroid and parathyroid glandsDefine the congenital anomalies of thyroid and parathyroid glands.	ANATOMY	60 minutes	Dr. Saba	Lecture	Lecture Hall-2 Block-A





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Gross Anatomy Of Thyroid & Parathyroid:  At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:  -Identify the location of thyroid and parathyroid glands.	ANATOMY	60 minutes	Dr. Shahid	Lecture	Lecture Hall-2 Block-A
-Discuss the relations of thyroid and parathyroid gland.					
-Describe neurovascular supply of thyroid and parathyroid gland.					
Histology Of Thyroid & Parathyroid:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  -Describe the microscopic structure of thyroid and parathyroid gland.  -Discuss the types of cells found in thyroid	ANATOMY	60 minutes	Dr. Inayat	Lecture	Lecture Hall-2 Block-A
glandDescribes the cell found in parathyroid					
gland and their functions.  Synthesis Of Thyroid Hormones:  At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:	BIOCHEMISTRY	60 minutes	Dr. Iffat	Lecture	Lecture Hall-2 Block-A
<ul><li>List the hormones produced by the thyroid gland.</li><li>Describe the biosynthesis of thyroid</li></ul>					
hormones.					





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-Associate the function of iodine with biosynthesis of thyroid hormones.					
-Explain the regulation of thyroid hormone synthesis through hypothalamo-pituitary-thyroid axis unit.					
Function Of Thyroid Hormones: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Describe the functions in the body of thyroid hormones.	PHYSIOLOGY	60 minutes	Dr. Sobia	Lecture	Lecture Hall-2 Block-A
-Discuss the types and their physiological levels in circulation.					
-Discuss the outcomes of raised levels of thyroid hormones.					
Thyroid Function Tests-1:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  -Classify thyroid function tests based on physiological and biochemical functions of the thyroid gland.	BIOCHEMISTRY	60 minutes	Dr. Iffat	Lecture	Lecture Hall-2 Block-A
-List the indications for performing thyroid function tests.					
-Summarize the interpretation of the results of blood levels of thyroid hormones i.e. T <sub>3</sub> , T <sub>4</sub> and TSH in thyroid and non-thyroidal diseases.					





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-Recognize the importance of					
immunological tests in diagnosis of					
autoimmune thyroid diseases.					
Thyroid Function Tests-2:	BIOCHEMISTRY	60 minutes	Dr. Benish	Lecture	
At the end of this lecture, 2 <sup>nd</sup> year MBBS					_
students will be able to:					Lecture
-Relate the importance of tests of assessing					Hall-2
the metabolic effects brought about by					Block-A
either high or low amount of thyroid					
hormones.					
-Summarize the interpretation of the results					
of tests involved in assessing primary					
function of thyroid gland.					
-Discuss about the indications and benefits					
of thyroid scans for assessing goitres in					
reference to hot or warm and cold nodules.					
Regulation Of Thyroid Hormones:	PHYSIOLOGY	60 minutes	Dr. Sobia	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS					Hall-2
students will be able to:					Block-A
-Describe the regulation of thyroid hormone					
secretion (endocrine axis).					
-Discuss the secretion of thyrotropin					
releasing hormone (TRH).					
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Abnormalities in thyroid gland:	PATHOLOGY	60 minutes	Dr. Sarah	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:					Hall-2 Block-A
					DIOCK-A
-Define Hypothyroidism &					
Hyperthyroidism.		I			





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-Explain the etiology & pathogenesis of hypothyroidism & hyperthyroidism.					
-Explain the clinical manifestations of hypothyroidism & hyperthyroidism.					
-Enlist the laboratory findings of hypothyroidism & hyperthyroidism.					
Congenital Hypothyroidism At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:	PAEDIATRICS	60 minutes	Dr. Saba Zohra	Lecture	Lecture Hall-2 Block-A
<ul> <li>Understand the etiology and pathophysiology of congenital hypothyroidism.</li> </ul>					
• Recognize the clinical signs and symptoms of congenital hypothyroidism in neonates.					
• Identify the diagnostic tests used to screen for and confirm congenital hypothyroidism.					
• Explain the importance of early detection and treatment of congenital hypothyroidism.					
Describe the management and treatment options for congenital hypothyroidism,					





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<ul> <li>including medication dosing and monitoring.</li> <li>Discuss the long-term consequences of untreated congenital hypothyroidism on growth, development, and neurocognitive function.</li> </ul>					
Neck Swellings And Thyroid Disorders:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  -Describe the development and anatomy of the thyroid glands.	SURGERY	60 minutes	Dr. Danish	Lecture	Lecture Hall-2 Block-A
-Summarize the physiology and investigation of thyroid disorders.					
-Explain the lymphatic drainage of neck -Discuss the causes of neck swellingClassify various types of neck swellingDiscuss investigations for neck swellingsDescribe the investigation and management of hyperparathyroidism.					
Regulation Of Calcium Metabolism:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  -Recall the mechanism of bone remodeling.	PHYSIOLOGY	60 minutes	Dr. Saba	Lecture	Lecture Hall-2 Block-A





-Describe the role of calcium & phosphate regulation in ECFRecognize the role of parathyroid hormone, Cholecalciferol, and calcitonin in calcium homeostasis.					
-Enumerate the effects of hypercalcemia & hypocalcaemia.					
Function Of Parathyroid Hormone:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  -List the hormones produced by parathyroid gland.	PHYSIOLOGY	90 minutes	Dr. Qamer	Lecture	Lecture Hall-2 Block-A
-Describe the rapid phase of ca mobilization from bone.					
-Describe the slow phase of bone reabsorption.					
- Explain the effects of PTH on kidney and GIT.					
-Explain the indirect effects of PTH on GIT.					
-Discuss the Regulation of PTH by serum Calcium.					
-Discuss the outcomes of deranged parathormone levels in our body.					
Role Of Vitamin D3:	PHYSIOLOGY	60 minutes	Dr. Ruqayya	Lecture	





At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:  -Describe the source of synthesis & release of vitamin D3.  -Explain the activation of vitamin D from sunlight.  -Discuss the functions of Vitamin D3.  Role Of Calcitonin:  At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:  -Identify the roles of PTH, vitamin D and calcitonin in calcium homeostasis and bone remodeling.  -Explain the role of calcitonin in osteoblastic activity.	PHYSIOLOGY	60 minutes	Dr. Sobia	Lecture	Lecture Hall-2 Block-A  Lecture Hall-2 Block-A
Parathyroid Disorders: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Describe the development and anatomy of the parathyroid glandsDiscuss the investigations of parathyroid functionExplain the consequences of parathyroid	SURGERY	60 minutes	Dr. Danish	Lecture	Lecture Hall-2 Block-A
excision or removal.  Embryology Of Pancreas: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:	ANATOMY	60 minutes	Dr.Mubashra	Lecture	Lecture Hall-2 Block-A





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-Describe the development of pancreas.					
-Define the congenital anomalies of pancreas.					
Gross Anatomy Of Pancreas: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Identify the location of pancreasDescribe the anatomical structure of pancreasDiscuss the relation of pancreas with other abdominal viscera.	ANATOMY	60 minutes	Dr. Sarosh	Lecture	Lecture Hall-2 Block-A
-Describe the neurovascular supply of pancreas.					
Histology Of Pancreas:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  -Discuss the histological components of pancreas.	ANATOMY	60 minutes	Dr. Inayat	Lecture	Lecture Hall-2 Block-A
-Describe the microscopic structure of pancreas.					
-Describe the histology of endocrine part of pancreas.					
-Identify the differences between exocrine and endocrine pancreas.					
Pancreatic Hormones:	PHYSIOLOGY	60 minutes	Dr. Qamer	Lecture	





At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:					Lecture Hall-2
-Discuss endocrine functions of pancreas.					Block-A
-List the hormones produced by the pancreas.					
-Describe the short term & long term effects of insulin.					
Insulin and its synthesis:  At the end of this lecture, 2 <sup>nd</sup> year MBBS	BIOCHEMISTRY	60 minutes	Dr. Benish	Lecture	Lecture
students will be able to: -Describe the structure of insulin.					Hall-2 Block-A
-Describe the biosynthesis of insulin.					
-Identify the biochemical technique of commercial production of insulin.					
Insulin and its metabolic effects:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  -Discuss the factors involved in regulation of insulin release.	BIOCHEMISTRY	60 minutes	Dr. Iffat	Lecture	Lecture Hall-2 Block-A
-Describe the mechanism of action of insulin.  -Describe the metabolic effects of insulin					
Islets Hormones & Its Regulation: At the end of this lecture, 2 <sup>nd</sup> year MBBS	PHYSIOLOGY	60 minutes	Dr. Saba	Lecture	Lecture Hall-2 Block-A
students will be able to: -Discuss the functions of insulin.					DIOCK-A
-Discuss the functions of glucagon.					





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-Describe insulin: glucagon molar ratio.					
-Explain the role of the pancreatic endocrine					
cells in the regulation of blood glucose.					
<b>Estimation Of Serum Glucose</b>	BIOCHEMISTRY	120 minutes	Dr.Benish /	Practical	Biochemis
At the end of this practical session, 2 <sup>nd</sup>			Mr.Jamal		try Lab, 1st
Year MBBS students will be able to:					Floor,
Name the reagents to be used in the experiment					Block-A
• Read the instructions to prepare the					
stock standard solutions and the sample					
for measuring optical density with					
spectrophotometer.					
Describe the principle of the reaction					
taking place in the experiment.					
Identify the importance of preparing a blank test tube					
<ul> <li>Record the readings of transmittance of</li> </ul>					
stock standard solutions and sample					
with the help of spectrophotometer.					
Refer to the transmittance chart for					
obtaining optical density values of 'S'					
and 'T' test tubes					
Insulin & its clinical effects:	MEDICINE	60 minutes	Dr. Sumayya	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS					Hall-2
students will be able to:					Block-A





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-Enumerates the clinical features of absolute					
insulin deficiency in Type I diabetes mellitus.					
-Describe the clinical effects of high insulin level					
Glucagon And Its Metabolic Effects:	BIOCHEMISTRY	60 minutes	Dr. Iffat	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS	DIOCHEMISTRI	00 illillutes	Di. Iliat	Lecture	Hall-2
students will be able to:					Block-A
-Recognize that glucagon is a single					Diock-A
polypeptide chain structure.					
-Identify the factors involved in stimulation					
and inhibition of secretion of glucagon.					
and minorion of secretion of gracagon.					
-Describe the mode of action of glucagon.					
-Describe the metabolic effects of glucagon.					
Homeostasis of Blood Glucose:	BIOCHEMISTRY	60 minutes	Dr. Farhan	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS	DIOCHEMISTRI	00 illillutes	Di. Faillali	Lecture	Hall-2
students will be able to:					Block-A
-State the normal range of fasting blood					Block 11
glucose and random blood glucose.					
-Identify the events which occur in the body					
as blood glucose rises and falls.					
-Describe the hormonal regulation of blood					
glucose.					
<b>Interpretation Of Serum Glucose Values</b>	BIOCHEMISTRY	120 minutes	Dr. Benish /	Practical	Biochemis
At the end of this practical session, 2 <sup>nd</sup>			Mr.Jamal		try Lab, 1st
year MBBS students will be able to:					





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• Calculate the concentration of stock standard solutions of 'S' test tubes.					Floor, Block-A
• Draw the graph to obtain the concentration of Serum glucose for the sample.					
• State the normal range of FBS and RBS.					
• Interpret the result of whether the sample is hypoglycemic/hyperglycemic or within the normal range.					
Discuss a few causes of hypoglycemia and hyperglycemia					
Hypoglycemia:	MEDICINE	60 minutes	Dr. Sumaya	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS					Hall-2
students will be able to:					Block-A
-Define hypoglycemia.					
-Classify levels of hypoglycemia.					
-List causes of hypoglycemia.					
Glycosuria:	BIOCHEMISTRY	60 minutes	Dr. Farhan	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:					Hall-2 Block-A
-Define Glycosuria.					
-Define renal threshold for glucose and state					
its range.					
-Classify types of Glycosuria					
-Enumerate the causes in each type of Glycosuria.					
Overview of Diabetes Mellitus:	MEDICINE	60 minutes	Dr. Sumaya	Lecture	
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At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:					Lecture Hall-2			
-Classify types of DM.					Block-A			
-List the sign and symptoms of DM.								
<b>Estimation Of Creatinine Clearance</b>	BIOCHEMISTRY	120 minutes	Dr. Benish /	Practical	Biochemis			
At the end of this practical, 2 <sup>nd</sup> year			Mr.Jamal		try Lab, 1 <sup>st</sup>			
MBBS students will be able to:					Floor, Block -A			
• State the normal range of creatinine clearance.								
Describe the principle of the reaction taking place in the experiment by means of the reagents used								
• Identify the importance of preparing a blank test tube.								
Record the readings of transmittance of stock standard solutions and sample with the help of spectrophotometer								
• Refer to the transmittance chart for obtaining optical density values of 'S' and 'T' test tubes.								
Diabetes Mellitus:	COMMUNITY	60 minutes	Dr. Ammara	Lecture	Lecture			
At the end of this lecture, 2 <sup>nd</sup> year MBBS	MEDICINE				Hall-2			
students will be able to:					Block-A			
-Discuss the public health aspects of								
diabetes mellitus.								
diacetes inclinus.								





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-List the risk factor for diabetes mellitus.					
-Describe the prevention strategies for diabetes mellitus.					
Diabetes Mellitus & Insulinoma: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Explain the relationship between metabolic syndrome and diabetes mellitus.	PHYSIOLOGY	60 minutes	Dr. Saba	Lecture	Lecture Hall-2 Block-A
-Differentiate Type 1 and Type 2 diabetes mellitus.					
-Explain the early signs of diabetes.					
-Compare the causes and development of hypoglycemia and hyperglycemiaDescribe the common degenerative effects of diabetes mellitus.					
- Define insulinoma.					
Insulinoma At the end of this small group teaching session, 2 <sup>nd</sup> year MBBS students will be able to:  Describe the role of insulin in blood glucose regulation.	PHYSIOLOGY	120 minutes	Dr. Sobia	Small Group Teaching	Physiolog y Lab, 1 <sup>st</sup> Floor, Block-A
Enumerate the clinical features of insulinoma					





<b>Biochemical Derangements in Diabetes</b>	BIOCHEMISTRY	60 minutes	Dr. Iffat	Lecture	Lecture
Mellitus:					Hall-2
At the end of this lecture, 2 <sup>nd</sup> year MBBS					Block-A
students will be able to:					
-Discuss the metabolic derangements that					
occur in diabetes mellitus.					
-Correlate clinical features of diabetes					
mellitus with derangements in biochemical					
parameters.					
Complication of Diabetes Mellitus:	BIOCHEMISTRY	60 minutes	Dr. Benish	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS					Hall-2
students will be able to:					Block-A
-Discuss the short term and long-term					
complications of diabetes mellitus occurring					
due to biochemical derangements.					
Interpretation Of Creatinine Clearance	BIOCHEMISTRY	120 minutes	Dr.Benish /	Practical	Biochemis
Values			Mr.Jamal		try Lab, 1 <sup>st</sup>
At the end of this practical, 2 <sup>nd</sup> year					Floor,
MBBS students will be able to:					Block-A
Calculate the concentration of stock					
standard solutions of 'S' test tubes.					
<ul> <li>Draw the graph to obtain the</li> </ul>					
concentration of urinary creatinine for					
the sample.					
• Calculate the rate of flow of urine 'v'					
with the help of the given 24 hour urine					
volume of the urinary sample.					
• Apply the formula of (UV/P) using the					
value of 'P'and 'U' from the practical of					





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estimation of serum creatinine and estimation of creatinine clearance respectively to calculate the value of Creatinine clearance.  • Discuss the stages of chronic kidney disease based on the values of GFR.  • Interpret the result of creatinine clearance test obtained from the performance of experiment to categorize the stage of chronic kidney disease.					
Overview of Pharmacology Of	PHARMACOLOG	60 minutes	Dr. Javeria / Dr.	Lecture	Lecture
Hyperglycemia:	Υ		Hina Masood	2000010	Hall-2
At the end of this lecture, 2 <sup>nd</sup> year MBBS			Tima Wasood		Block-A
students will be able to:					DIOCK 71
<ul> <li>Describe the physiology of hyperglycemia.</li> <li>Explain the pathophysiology of</li> </ul>					
hyperglycemia.					
Discuss the mechanistic pharmacology of hyperglycemia.					
Acute Pancreatitis:	SURGERY	60 minutes	Dr. Danish	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS					Hall-2
students will be able to:					Block-A
-Summarize the surgical anatomy and					
physiology of pancreas.					
-Classify congenital abnormalities of the pancreas.					





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-Enumerate the causes of Acute Pancreatitis.					
-Discuss the differential diagnosis of acute pancreatitis.					
<ul> <li>Basic Interpretation Of Endocrine Imaging Of Thyroid Gland &amp; Pancreas         At the end of this lecture, 2<sup>nd</sup> year MBBS students will be able to:     </li> <li>Recall the gross Anatomy of thyroid gland and pancreas.</li> <li>Interpret the findings of diseases of thyroid gland and pancreas in various radiological tests.</li> </ul>	RADIOLOGY	60 minutes	Dr. Mehwish	Lecture	Lecture Hall-2 Block-A
Embryology of Adrenal Gland: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Explain the embryological origin and development of adrenal glandDiscuss the congenital anomalies of adrenal gland.	ANATOMY	60 minutes	Dr. Saba	Lecture	Lecture Hall-2 Block-A
Gross Anatomy Of Adrenal Gland: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Identify the location of adrenal glandDescribe the gross anatomical structure of adrenal gland & relations.	ANATOMY	90 minutes	Dr. Sarosh	Lecture	Lecture Hall-2 Block-A





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-Describe the neurovascular supply of adrenal gland.					
Histology Of Adrenal Gland: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Describe the microscopic structure of adrenal gland.	ANATOMY	60 minutes	Dr. Inayat	Lecture	Lecture Hall-2 Block-A
-Discuss the cells found in cortex and medulla of adrenal gland.					
Adrenal Hormones: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Describe the hormones produced by the adrenal cortex and adrenal medulla.	PHYSIOLOGY	60 minutes	Dr. Sobia	Lecture	Lecture Hall-2 Block-A
-Summarize the target cells and effects.					
Adrenosteroid Hormone Synthesis:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  -Describe the synthesis and degradation of steroid hormones produced by adrenal cortex.	BIOCHEMISTRY	60 minutes	Dr. Iffat	Lecture	Lecture Hall-2 Block-A
Function of Aldosterone: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Discuss the functions of Aldosterone in fluid & electrolyte regulationExplain the Rennin-Angiotensin-Aldosterone system.	PHYSIOLOGY	60 minutes	Dr. Saba	Lecture	Lecture Hall-2 Block-A





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-Define Hyperaldosteronism and					
Hypoaldosteronism.					
<b>Function of Cortisol:</b>	PHYSIOLOGY	60 minutes	Dr. Nida	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS					Hall-2
students will be able to:					Block-A
-Explain the functions of cortisol in the					
body.					
-Describe the anti-inflammatory & anti					
histamine effects of cortisol.					
-Recognize cortisol as a 'stress hormone'.					
recognize contisor as a sucess normone.					
-Explain the difference between Cushing					
syndrome & Cushing disease.					
-Describe afferent mineralocorticoid excess					
(AME).  Function Of Adrenal Androgen:	PHYSIOLOGY	60 minutes	Dr. Adnan	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS	FILISIOLOGI	00 minutes	Di. Adilali	Lecture	Hall-2
students will be able to:					Block-A
-Discuss the role in secondary sexual					DIOCK-71
characteristic development.					
-					
-Define adrenogenital syndrome.	GIDLLE 0 ODG		D 37711	-	-
Tanner's Classification	GYNAE & OBS	60 minutes	Dr. Nikhat	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS					Hall-2
students will be able to:					Block-A
<ul> <li>Define tanner's classification</li> </ul>					





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<ul> <li>Discuss the normal development of female secondary characteristics during puberty.</li> <li>Identify the clinical features regarding tanner's classification.</li> <li>Catecholamine Synthesis:</li> </ul>	BIOCHEMISTRY	60 minutes	Dr. Iffat	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:  -Describe the synthesis and degradation of catecholamine's produced by adrenal medulla.	BIOCHEMISTRI	60 minutes	Dr. mat	Lecture	Hall-2 Block-A
Adrenal Medulla: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Discuss the functions of catecholamines.  -Describe abnormalities of adrenal medulla.	PHYSIOLOGY	60 minutes	Dr. Sobia	Lecture	Lecture Hall-2 Block-A
Abnormalities Of Adrenal Gland-1: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to:  Define Addison's Disease.  Explain the pathophysiology of Addisons Disease.  Describe the clinical features of Addisons disease.	PATHOLOGY	60 minutes	Dr. Munazza	Lecture	Lecture Hall-2 Block-A





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PATHOLOGY	60 minutes	Dr. Sarah	Lecture	Lecture
				Hall-2
				Block-A
PHYSIOLOGY	120 minutes	Dr.Sobia	Small Group	Physiolog
			Teaching	y Lab, 1 <sup>st</sup> Floor, Block-A
PHYSIOLOGY	120 minutes	Dr.Sobia	Small Group	Physiolog
			Teaching	y Lab, 1 <sup>st</sup>
				Floor,
				Block-A
		PHYSIOLOGY 120 minutes	PHYSIOLOGY 120 minutes Dr.Sobia	PHYSIOLOGY 120 minutes Dr. Sobia Small Group Teaching



thymus.

-Discuss the relation of thymus.



<ul> <li>Define Cushings syndrome</li> <li>List the clinical manifestation of cushings syndrome.</li> <li>Explain the feature of hypertension in cushings syndrome.</li> </ul>					
Hypertension: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Define hypertensionList down the endocrine causes of hypertensionEnumerates the complications of untreated hypertension.	MEDICINE	60 minutes	Dr. Sumayya	Lecture	Lecture Hall-2 Block-A
Obesity:  At the end of this lecture, 2 <sup>nd</sup> year MBBS  students will be able to:  -List the risk factor of obesity.  -Describe the prevention strategies for obesity.	COMMUNITY MEDICINE	60 minutes	Dr. Nazia	Lecture	Lecture Hall-2 Block-A
Thymus: At the end of this lecture, 2 <sup>nd</sup> year MBBS students will be able to: -Describe the anatomical structure of	ANATOMY	90 minutes	Dr. Shahid	Lecture	Lecture Hall-2 Block-A



### BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE SECOND YEAR M.B.B.S.



### **ENDOCRINE MODULE STUDY GUIDE - 2024**

-Describe the blood supply and nerve					
supply of thymus.  Pineal Gland:	ANATOMY	60 minutes	Dr. Sarosh	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS	ANATOWIT	00 minutes	Di. Salosii	Lecture	Hall-2
students will be able to:					Block-A
-Describe the development and congenital					
anomalies of pineal gland.					
-Summarize the location, structure, relation,					
blood supply, venous drainage and					
lymphatic drainage of pineal gland.					
-Describe the microscopic features of pineal					
gland in detail.					
Thymus & Pineal Glands:	PHYSIOLOGY	60 minutes	Dr. Saba	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS					Hall-2
students will be able to:					Block-A
-Describe their respective functions in our					
body.					
-Discuss the types of cells in thymus gland					
and the hormone releasedDiscuss the function of melatonin.					
Study Design-1	RESEARCH	60 minutes	Dr. Maria	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS	RESEARCH	00 minutes	Di. Maria	Lecture	Hall-2
students will be able to:					Block-A
statents will be able to:					Block 11
Define study design					
Discuss the types of study design					
Study Design-2	RESEARCH	60 minutes	Dr. Maria	Lecture	Lecture
At the end of this lecture, 2 <sup>nd</sup> year MBBS					Hall-2
students will be able to:					Block-A





Explain the types of study designs with the help of case studies from research articles.			

### **REFERENCE BOOKS AND OTHER READING RESOURCES:**

<b>Gross Anatomy</b>	BD Chaurasia's Handbook of GENERAL ANATOMY



### BAQAI MEDICAL UNIVERSITY BAQAI MEDICAL COLLEGE SECOND YEAR M.B.B.S.



### **ENDOCRINE MODULE STUDY GUIDE - 2024**

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Netter Atlas of HumanAnatomy
Snell's Clinical Anatomy by Regions
Gray's Anatomy for Students.
Langman's Medical Embryology
The Developing Human by Keith L.Moore
Histology by Laiq Hussain Siddiqui
Guyton and Hall. Textbook of Medical Physiology, 13 <sup>th</sup> Edition.
Ganong's Review of Medical Physiology, 24 <sup>th</sup> Edition.
Essentials of Medical Physiology by K.Sembulingam
Textbook of Medical Biochemistry M.N.Chatterjee and Rana Shinde
Textbook of Biochemistry for Medical Students Damodaran M Vasudevan and S. Sreekumari
Harper's Illustrated Biochemistry
Robin`s BasicPathology-10 <sup>th</sup> Edition
<u>Essential</u>
- Bertram G. Katzung. Basic and Clinical Pharmacology, 14 <sup>th</sup> Edition. 2017.
- Katzung and Trevor's pharmacology Examination and Board Review 11 <sup>th</sup> Edition 2015.
Recommended
- Lippincott's illustrated review of Pharmacology. 6 <sup>th</sup> Edition. 2015.
1. Burki, Shahid Javed. State & Dociety in Pakistan, The Macmillan Press Ltd 1980.
2. Akbar, S. Zaidi. Issue in Pakistan's Economy. Karachi: Oxford University Press, 2000.
3 SM. Burke and Lawrence Ziring. Pakistan's Foreign policy: An Historical analysis.
Karachi: Oxford University Press, 1993.
4. Mehmood, Safdar. Pakistan Political Roots & Development. Lahore, 1994.
5. Wilcox, Wayne. The Emergence of Bangladesh., Washington: American Enterprise, Institute
of Public Policy Research, 1972.
6. Mehmood, Safdar. Pakistan KayyunToota, Lahore: Idara-e-Saqafat- e-Islamia, Club Road,
nd.
7. Amin, Tahir. Ethno - National Movement in Pakistan, Islamabad: Institute of Policy Studies,
Islamabad.
8. Ziring, Lawrence. Enigma of Political Development. Kent England: WmDawson& sons Ltd,





1980.
9. Zahid, Ansar. History & Diture of Sindh. Karachi: Royal Book Company, 1980.
10. Afzal, M Rafique. Political Parties in Pakistan, Vol. I, II & Samp; III. Islamabad: National Institute
of Historical and cultural Research, 1998.
Ilyas M, Public Health and Community Medicine, 7 <sup>th</sup> Edition, Karachi, Pakistan, Time Publisher, 2007.
Maxcy-Rosenau-Last, public Health and Preventive Medicine, 13 <sup>th</sup> Edition, USA, Prentice-Hall International
Inc, 1992.
K.Park, Preventive and Social Medicine, 20 <sup>th</sup> Edition, Jabalpur (India), M/s BanarsidasBhanot, Publisher, 2009.
Davidson's Principles and Practice of Medicine-22 <sup>nd</sup> Edition
Talley and O'Connor's Clinical Examination-6 <sup>th</sup> Edition
Bailey And Love Short Practice Of Surgery, 27 <sup>th</sup> Edition
Last's anatomy 12 <sup>th</sup> edition
Snell's anatomy by regions 10 <sup>th</sup> edition
Introduction to Research in Health Sciences- Stephen Polgar, Shane A. Thomas.
Biomedical Research Proposal Writing- Syed Sharaf Ali Shah, ZarfshanTahir, Rozina Karmaliani.
Epidemiology - Leon Gordis; Fifth Edition.
https://www.mededportal.org/publication/10610/
Nelson Textbook of Pediatric 21 <sup>st</sup> edition.
Textbook of Paediatrics (PPA) Fifth edition.
Basis of Pediatrics (Pervez Akbar Khan) 10 <sup>th</sup> edition

### **ASSESSMENT METHODS:**

**THEORY:** 





- **Essay Questions- Short Essay Questions (SEQs)** are used to assess objectives covered in each module.
  - 6 SEQs are given (no choice).
  - Time duration 90 minutes.
  - Students write the answer in the provided answer sheet.
- **Multiple Choice Questions (MCQs)** are used to assess objectives covered in each module.
  - An MCQ has a statement or clinical scenario followed by four options (likely answer).
  - Students after reading the statement/scenario select ONE, the most appropriate response from the given list of options.
  - Correct answer carries one mark, and incorrect 'zero mark'. There is no negative marking.
  - Students mark their responses on specified computer-based/OMR sheet designed for BMC, BMU.

#### **OSPE/OSCE:** Objective Structured Practical/Clinical Examination:

- Each student will be assessed on the same content and have same time to complete the task.
- Comprise of 05 stations.
- Each station may assess a variety of clinical tasks; these tasks may include history taking, physical examination, skills and application of skills and knowledge.
- Stations are 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 there may be an X-ray, Labs reports, pictures, Biochemical estimation tests graph construction tasks or clinical scenarios with related questions for students to answer.
- Rest station is a station where there is no task given and in this time student can organize his/her thoughts.

#### **INTERNAL EVALUATION:**

- Students will be assessed to determine achievement of module objectives through the following:
- **Module Examination:** will be scheduled on completion of each module. The method of examination comprises theory exam which includes MCQs and OSPE (Objective Structured Practical Examination).
- Formative Assessment of students combined: Quiz, viva, practical, assignment, small group activities such as CBL, online assessment, and Practical journal work.

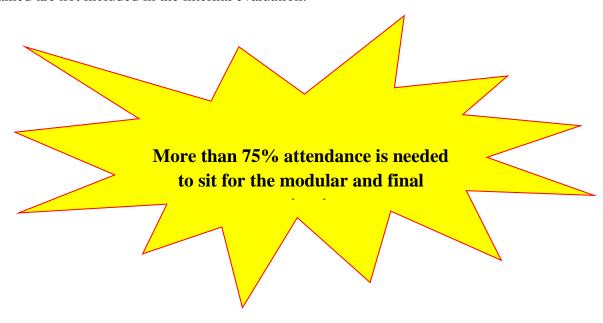




Marks and attendance of modular examination and formative assessment respectively will constitute 20% weightage which will be added to the marksheet of Second Professional Annual Examination.

#### FORMATIVE ASSESSMENT:

- Individual departments or group pf departments may hold quiz or short answer questions to help students assess their own learning.
- The marks obtained are not included in the internal evaluation.











#### BAQAI MEDICAL COLLEGE 2nd YEAR MBBS ENDOCRINE MODULE 2024 Week 1(20. 05.2024-24. 05.2024)

DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00-1:00	1:00- 1:30	1:30-2:30	2:30-4:00
MONDAY 20-05-2024	ANATOMY Anatomical over view of endocrine glands	BIOCHEM Endocrine Hormones & their mode of action Dr.Benish	Tea Break		VE RANG VAL 2024		TENTATIVE	RANG FESTIVAL 2024
TUESDAY 21-05-2024	PHYSIOLOGY Overview of endocrine system	ANATOMY Embryology of hypothalamus & pituitary gland			IVE RANG /AL 2024		TENTATIVE	RANG FESTIVAL 2024
WEDNESDAY 22-05-2024	ANATOMY Hypothalamus & pituitary gland	PHYSIOLOGY Functions of hypothalamic hormones	Tea Break		VE RANG VAL 2024	Lunch & Prayer	TENTATIVE	RANG FESTIVAL 2024
THURSDAY 23-05-2024	PHYSIOLOGY Posterior pituitary hormone	RESEARCH Study Design-1	reak		IVE RANG /AL 2024		TENTATIVE	RANG FESTIVAL 2024
FRIDAY 24-05-2024	ANATOMY Histology Hypothalamus & pituitary gland	PHYSIOLOGY Anterior pituitary hormone		0.000 2000 0000	VE RANG VAL 2024		TENTATIVE	RANG FESTIVAL 2024









#### BAQAI MEDICAL COLLEGE 2nd YEAR MBBS ENDOCRINE MODULE 2024 Week 2(27.05.2024-31.05.2024)

DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00-1:00	1:00- 1:30	1:30-2:30	2:30-4:00
MONDAY 27-05-2024	PHYSIOLOGY Functions of growth hormone	DME	Tea Break	ANATOMY SGT LRC Model of pituitary gland			SDL	ANATOMY Applied anatomy of pituitary gland
TUESDAY 28-05-2024	ANATOMY Developmental anomalies of pituitary gland	PATHOLOGY Abnormalities of growth hormone		ANATOMY Embryology of thyroid & parathyroid gland	PAK Studies		SDL	ANATOMY Gross anatomy of thyroid gland & parathyroid gland
WEDNESDAY 29-05-2024	ANATOMY Histology of thyroid & parathyroid gland	MEDICINE Hypoglycemia		SDL	PHYSIOLOGY Function of thyroid hormones	Lunch	FORMATIVE ASSESSMENT	BIOCHEM Synthesis of thyroid hormones
THURSDAY 30-05-2024	Group A: Histology gland Group B: Biochemi Constituents of Urin	PRACTICAL/SGT A,B & C Group A: Histology-Slide of Thyroid		СВІ	al	& Prayer	1:30-2:00 SDL	2:00-4:00 PRACTICAL/SGT A,B & C Group C: Histology- Slide of Thyroid gland Group A: Biochemistry- Abnormal Constituents of Urine Group B (SGT): Acromegaly
FRIDAY 31-05-2024	PHYSIOLOGY Regulation OF thyroid hormones	PATHOLOGY Abnormalities of thyroid gland		ANAT SG LR Model of th	T C		1:30-2:00 SDL	2:00-4:00 PRACTICAL/SGT A,B & C Group B: Histology- Slide of Thyroid gland Group C: Biochemistry- Abnormal Constituents of Urine Group A (SGT): Acromegaly

Tentative BMU Summer Vacations: 1st June, 2024 till 30th June, 2024









#### BAQAI MEDICAL COLLEGE 2nd YEAR MBBS ENDOCRINE MODULE 2024 Week 3(01.7.2024-05.7.2024)

DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00-1:00	1:00- 1:30	1:30-2:30	2:30-4:00
MONDAY 01-07-2024	BIOCHEM Thyroid function tests-1	PHYSIOLOGY Regulation of calcium metabolism	Tea Break	PHARMA Overview of pharmacology of endocrine system	SDL		PHYSIOLOGY Role of calcitonin	BIOCHEM Thyroid function tests-2
TUESDAY 02-07-2024	PHYSIOLOGY Role of vitamin D3	PAEDS Congenital Hypothyroidism		SDL	PAK Studies		SURGERY Neck swellings and thyroid disorders	PHYSIOLOGY Functions of parathyroid hormone
WEDNESDAY 03-07-2024	ANATOMY Gross anatomy of pancreas	MEDICINE Insulin & its clinical effects		SDL	SURGERY Parathyroid Disorders	Lunch & Prayer	FORMATIVE ASSESSMENT	PHYSIOLOGY Pancreatic hormone
THURSDAY 04-07-2024	Group A : Histolog Group B: Biochemi Serum Glucose	PRACTICAL A,B & C Group A: Histology-Slide of pancreas Group B: Biochemistry- Estimation of Serum Glucose Group C (SGT): Hyperthyroidism		CE	SL-2	rayer	1:30-2:00 SDL	2:00-4:00 PRACTICAL/SGT A,B & C Group C: Histology- Slide of Thyroid gland Group A: Biochemistry- Estimation of Scrum Glucose Group B (SGT): Hyperthyroidism
FRIDAY 05-07-2024	ANATOMY Histology of pancreas	BIOCHEM Insulin and its synthesis		ANATOMY Embryology of Pancreas	PHYSIOLOGY islets hormones and its Regulation	ě	1:30-2:90 SDL	2:00-4:00 PRACTICAL/SGT A,B & C Group B: Histology- Slide of Thyroid gland Group C: Biochemistry- Estimation of Serum Glucose Group A (SGT): Hyperthyroidism









#### BAQAI MEDICAL COLLEGE 2nd YEAR MBBS ENDOCRINE MODULE 2024 Week 4(08.7.2024-12.7.2024)

DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00-1:00	1:00- 1:30	1:30-2:30	2:30-4:00
MONDAY 08-07-2024	BIOCHEM Insulin and its metabolic effect	DME	Tea Break	BIOCHEM Glucagon & its metabolic effects	SDL		SURGERY Acute pancreatitis	BIOCHEM Homeostasis of blood glucose
TUESDAY 09-07-2024	BIOCHEM Glycosuria	SDL		ANATOMY Embryology of adrenal gland	PAK Studies		COMMUNITY MEDICINE Public health aspect of Diabetes Mellitus	PHYSIOLOGY Diadetes mellitus and insulinoma
WEDNESDAY 10-07-2024	ANATOMY Gross anatomy of adrenal gland	MEDICINE Overview of diabetes mellitus		FORMATIVE ASSESSMENT	SDL	Lunch & Prayer	BEHAVIOURAL SCIENCES	BIOCHEM Biochemical derangements in Diabetes Mellitus
THURSDAY 11-07-2024	gland	A: Histology-Slide of Adrenal  B: Biochemistry- Interpretation of Glucose Values		С	BL-3	rayer	1:30-2:00 SDL	2:00-4:00 PRACTICAL/SGT A,B & C Group C: Histology- Slide of Thyroid gland Group A: Biochemistry- Interpretation of Serum Glucose Values Group B (SGT): Insulinoma
FRIDAY 12-07-2024	BIOCHEM Complications of diabetes mellitus	BIOETHICS-1		ANATOMY Histology of adrenal gland	PHARMA Overview of pharmacology of hyperglycemia		1:30-2:00 SDL	2:00-4:00 PRACTICAL/SGT A,B & C Group B: Histology- Slide of Thyroid gland Group C: Biochemistry- Interpretation of Serum Glucose Values Group A (SGT): Insulinoma









#### BAQAI MEDICAL COLLEGE 2nd YEAR MBBS ENDOCRINE MODULE 2024 Week 5(15.7.2024-19.7.2024)

DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00-1:00	1:00- 1:30	1:30-2:30	2:30-4:00
MONDAY 15-07-2024	PHYSIOLOGY Introduction to Adrenal hormones	BIOCHEM Adrenosteroid hormone synthesis	Tea Break	SDL	BEHAVIOURAL SCIENCES		FORMATIVE ASSESSMENT	PHYSIOLOGY Functions of Aldosterone
TUESDAY 16-07-2024 WEDNESDAY 17-07-2024		VE ASHURA IDAYS		TENTATIV HOLI		Li Li	TENTATIV	E ASHURA HOLIDAYS
THURSDAY 18-07-2024	Group A: Hist	le& prostate gland stry-Estimation of	Tea Break	CBL-4		Lunch & Prayer	1:30-2:00 SDL	2:00-4:00 PRACTICAL/SGT A,B & C Group C: Histology- Slide of Thyroid gland Group A: Biochemistry-Estimation of Creatinine Clearance Group B (SGT): Conn's syndrome
FRIDAY 19-07-2024	PHYSIOLOGY Functions of adrenal androgen	RESEARCH- Study Design-2		GYNAE & OBS Tanners Classification	COMMUNITY MEDICINE Obesity		1:30-2:00 SDL	2:00-4:00 PRACTICAL/SGT A,B & C Group B: Histology- Slide of Thyroid gland Group C: Biochemistry- Estimation of Creatinine Clearance Group A (SGT): Conn's syndrome









#### BAQAI MEDICAL COLLEGE 2nd YEAR MBBS ENDOCRINE MODULE 2024 Week 6(22.7.2024-26.7.2024)

DAYS	8:30-9:30	9:30-10:30	10:30- 11:00	11:00-12:00	12:00-1:00	1:00- 1:30	1:30-2:30	2:30-4:00
MONDAY 22-07-2024	PHYSIOLOGY Functions of cortisol	PATHOLOGY Abnormalities of adrenal gland-1	Tea Break	FORMATIVE ASSESSMENT	SDL		BIOETHICS-2	PHYSIOLOGY Adrenal medulla Hormones
TUESDAY 23-07-2024	RADIOLOGY Endocrine Imaging of thyroid gland & pancreas	BIOCHEM Catecholamine synthesis		SDL	PAK Studies		PATHOLOGY Abnormalities of adrenal gland-II	ANATOMY Pineal gland
WEDNESDAY 24-07-2024	ANATOMY Thymus	MEDICINE Hypertension		СВ	L-5	Lun	SDL	PHYSIOLOGY Thymus & pineal gland
THURSDAY 25-07-2024	PRACTICAL A,B & C Group A: Histology-Slide of Seminal Vesicle& prostate gland Group B: Biochemistry-Interpretation of Creatinine Clearance Result Group C (SGT): Cushings syndrome		Group A: Histology-Slide of Seminal Vesicle& prostate gland up B: Biochemistry- Interpretation of tinine Clearance Result		TOMY V CLASS	Lunch & Prayer	1:30-2:00 SDL	2:00-4:00 PRACTICAL/SGT A,B & C Group C: Histology- Slide of Thyroid gland Group A: Biochemistry- Interpretation of Creatinine Clearance Result Group B (SGT): Cushings syndrome
FRIDAY 26-07-2024		BIOCHEM REVIEW CLASS  PHYSIOLOGY REVIEW CLASS		REVIEW CLASS			1:30-2:00 SDL	2:00-4:00 PRACTICAL/SGT A,B & G Group B: Histology- Slide of Thyroid gland Group C: Biochemistry- Interpretation of Creatinine Clearance Result Group A (SGT): Cushings syndrome
MONDAY 29-07-2024				ENDOCRINE MO	DDULE ASSESSM	MENT EX	AM	





**Disclaimer:** The above time table is a tentative time table of endocrine module. It can get updated due to any unexpected change of dates of extra-curricular activities or unexpected government announced holidays