

MOHI-UD-DIN ISLAMIC MEDICAL COLLEGE MIRPUR

DEPARTMENT OF MEDICAL EDUCATION



Blood & Immunology-I Module

1ST YEAR MBBS (BATCH-18)

BLOCK: A

DURATION: 6 WEEKS

FROM: 27 FEB TO 3 APRIL 2026

MODULE CODE: MB1-A-BLD-I-02

2025-26

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Disclaimer:

The development of study guides and the associated curriculum is an iterative process of quality enhancement, informed by stakeholder feedback. All elements—including content, delivery modes, scheduled hours, and assessment—are subject to periodic review and potential revision. Students are advised that the provided topics and learning outcomes represent the essential foundation for approximately 70% of examinations. The remainder will be derived from lecture content and directives issued by course instructors.

1. Instructions:

1. Maintain a minimum attendance of 85% in all scheduled academic activities otherwise will not be allowed to sit in annual exam.
2. Adhere strictly to the prescribed college uniform and professional dress code at all times.
3. Demonstrate professionalism and respect toward peers, faculty, staff, and patients.
4. Uphold academic integrity and ethical conduct in all learning and assessment activities.
5. Comply with all institutional policies regarding conduct, use of facilities, and digital etiquette.

2. Module Committee:

s.no	Name	Department	Role
1.	Prof.Dr.Col Shafqat Ali	Anatomy	HOD
2.	Prof. Dr. M. Naqib	Biochemistry	HOD
3.	Prof. Dr. Ayyaz Ahmed	Physiology	HOD
4.	Dr. M Junaid Khan	DME	HOD
5.	Dr. Zahira Bashir	Biochemistry	Block A Coordinator

OUR VISION STATEMENT

To be a renewed nationwide and world class academia maintaining a prominent role in medical education, innovative research and delivery of best health care services of international standards.

OUR MISSION STATEMENT

To take this medical college to the international ranking by providing healthcare professional's excellent knowledge, extraordinary skill sets, leadership in research and empathy with Islamic Spirit.

3. Module Mapping of MBBS Program

Module Mapping (MBBS Program) Tentative

Year	Blocks	Modules			Horizontal Module	
1 st year	A	Foundation-I (5-weeks)	Blood & Immunology -I (5-weeks)		Quran Kareem	
	B	Locomotor/MSK-I (8-weeks)				
	C	CVS – I (4-weeks)	RES – I (4-weeks)			
2 nd year	D	Gastrointestinal, Hepatobiliary and Metabolism Module -I (9-weeks)	Renal-I (3-weeks)			Pak_Study/Islamite
	E	Neurosciences 1A (6-weeks)	Neurosciences 1B (5-weeks)			
	F	Endocrine – I (4-weeks)	Repro – I (3-weeks)			
3 rd year	G	Foundation - II	Infection & Inflammation-II		English Expository Writing	
	H	Multisystem-I	Blood & Immunology-II	Locomotor/MSK-II		
	I	CVS - II	RES – II			
4 th year	J	Neurosciences-II			M1=ENT M2=EYE	Arts & Humanities
	K	GIT & Hepatobiliary - II				
	L	Renal-II	Endo & Repro- II			
PRIME Year	N	Foundation-III	Blood & Immunology-III	Locomotor/MSK-III	Clerkship, Electives, /Capstone/Observer ship	
	O	Cardiorespiratory-III				
	P	Renal-III	Endo & Repro-III			
	Q	Neurosciences-III	GIT & Hepatobiliary-III	Multisystem-III		

PRIME (Professionalism, Research, Identity formation, Management & leadership, Ethics)

- 1st Year MBBS: 3 blocks, 5 Modules-27 weeks (945 Hours/AY)
 - 2nd Year MBBS: 3 blocks 6 Modules – 30 weeks (1050 Hours/AY)
- Per week teaching hours=35
Total weeks/hours are tentative
PRIME Year: Year of Professionals Ready for Innovative Medical Excellence
PRIME: Professionalism, Research, Identity formation, Management & leadership, Ethics.

4. What Is A Study Guide?

The Purpose and Structure of a Study Guide

A study guide serves as the central contract and roadmap between the educational program and the student. Its primary purpose is to demystify the learning process by clearly communicating how a module is organized, managed, and assessed. It empowers students to take ownership of their learning by providing all necessary information to plan their studies, identify appropriate resources and support, and understand precisely how their performance will be evaluated.

Core Components of an Effective Study Guide:

Module Administration & Overview

This section provides the essential framework for the module. It includes:

- **Module Identification:** Code, title, teaching hours, and placement within the curriculum.
- **Personnel & Coordination:** Clear points of contact (Module Coordinator, teaching faculty) with roles and responsibilities defined, enabling students to seek the right help efficiently.
- **Timetable & Schedule:** A structured overview of the teaching sequence, including dates, topics, and formats (e.g., lectures, practicals).
- **Learning Objectives & Instructional Strategy**
This is the academic core of the guide, aligning intent with action.
- **Module & Theme Objectives:** A precise list of what students are expected to know, understand, and be able to do by the module's end, directly mapped to program and PMDC competencies.
- **Teaching-Learning Methods:** A description of the instructional strategies employed (e.g., interactive lectures, small group discussions, lab sessions, case-based learning) and their role in achieving the objectives.
- **Learning Resources & Support**
This component directs students to the tools for successful learning.
- **Curated Resource List:** A categorized list of essential and recommended resources, including core textbooks, key journal articles, vetted online links, and specific software or simulation tools.
- **Assessment Strategy:** A detailed breakdown of all formative (continuous) and summative assessments, including their format, weighting, schedule, and how they contribute to the final grade.
- **Rules and Policies:** Clear statements on examination rules, grading criteria, policy on late submissions, academic integrity, and the appeals process.

In summary, a well-constructed study guide transforms a module from a series of disjointed events into a coherent, transparent, and manageable learning journey. It is a fundamental tool for achieving constructive alignment and enhancing the student learning experience.



5. Recommended List Of Icons



Introduction To Case



For Objectives



Critical Questions



Assessment



Resource Material

6. Organization of Module

Introduction:

The Blood and Immunology-I Module is designed to outline the knowledge, skills, and attitudes required of first-year medical students in the Basic Medical Sciences, including Anatomy, Physiology, and Biochemistry. This module introduces Clinical Sciences with a focus on body defense mechanisms and immunological disorders. As the second module of the first year of the MBBS program, it will culminate in a block assessment.

Spanning five weeks, the Blood and Immunology-I Module adopts a theme-based approach and will be delivered through Lectures, Small Group Discussions (SGDs), Directed Self-Learning (DSLs), and Practical Work. The First session of the Journal club will also be conducted in this module. The Block coordinator, Physiology department will lead the session. For detail information, you can navigate through the

The module encompasses the following themes:

Blood and Immunology-I Module		
S. No	Theme	Duration
1.	Pallor and Fatigue	01 Week
2.	Fever (Infection and Immunity)	02 Weeks
3.	Excessive Bleeding	01 Week
4.	Transfusion Reaction	01 Week

6.1. Rationale:

The rationale for the this module, is to provide first-year medical students with a foundational understanding of hematopoiesis and hemostasis at the molecular level. The module will cover the basic pathological processes involved in the development of anemias and explore the pharmacological aspects of blood-related disorders, including their community prevalence.

Through this module, students will gain insights into the presentations and management principles of common hematological, immunological, inflammatory, and neoplastic disorders, equipping them with essential knowledge for their medical education.

6.2. Organization of the Study Guide:

The Blood & Immunology-I Module is a five-week, theme-based course organized into three key activities:

1. **“Pallor & Swelling” (one Weeks):** This segment introduces the hematopoietic system, blood, and porphyrins. Topics covered include the genesis of red blood cells, erythropoiesis, various types of anemia (including anemias of diminished erythropoiesis and hemolytic anemia), polycythemia, the epidemiology of blood-borne diseases, and the pharmacological treatment of anemia. It also addresses the chemistry of water-soluble vitamins, iron metabolism, the synthesis and degradation of heme, and hemoglobinopathies.

2. **“Fever/Infection & Immunity” (Two Weeks):** This section explores the microscopic, developmental, and gross anatomy of the hematopoietic system. It includes the physiology of white blood cells, the reticuloendothelial system, inflammation, leukemia, immunity, the immune system, immune responses, humoral immunity, cell-mediated immunity, immunity across different ages, the complement system, allergy and hypersensitivity, the chemistry of antibodies, and immunization.
3. **“Excessive Bleeding & Transfusion Reactions” (Two Week):** This part introduces hemostasis, blood coagulation, bleeding disorders, thrombotic disorders, and coagulation-modifying drugs. It also covers blood grouping, transfusion reactions, erythroblastosis fetalis, the major histocompatibility complex, the medicolegal significance of blood groups, and the epidemiology of blood-borne diseases.

The content of the Blood & Immunology-I Module will be delivered through various instructional methods, including Large Group Interactive Sessions, Directed Self-Learning, Self-Directed Learning, Small Group Discussions, and Practical Demonstrations.

7. Teaching and learning strategies

How You Will Learn:

This guide outlines the diverse learning methods you will experience, each carefully chosen to help you grow from a student of science into a capable, independent future clinician. Think of this as your map to not only *what* you will learn, but *how* you will learn most effectively.

Part 1: Learning Together – Facilitated Sessions

These sessions provide the foundation, context, and interactive space to build knowledge with your peers and faculty.

- a. **Interactive Lectures:** These are not passive events. In lecture hall, your teacher will introduce core concepts and clinical principles using slides, animations, and real patient stories. We encourage you to engage—ask questions, respond to polls, and connect the dots live. This is where the roadmap for each topic is drawn.
- b. **Small-Group Sessions:** This is where knowledge becomes skill. In smaller classrooms, you will roll up your sleeves with a facilitator and a group of peers.
 - In **Tutorials**, you'll discuss clinical cases, clarify challenging concepts from lectures, and learn through discussion and debate.
 - In **anatomical dissection**, your group will engage directly with the reality of the human body from the very first session. Your mission is to explore, map, and trace the architecture of tissues—identifying key landmarks, surface contours, and gross anatomical features while following the precise pathways of neurovascular and lymphatic systems. This hands-on exploration actively animates and integrates the principles from your anatomy, histology, and embryology lectures, transforming theoretical knowledge into a tangible, three-dimensional understanding—mirroring the very essence of foundational discovery and clinical reasoning.
 - **Practical Demonstrations** in labs will bring the textbook to life, allowing you to see, touch, and understand the human body and its functions.
 - **Small Group Discussions (SGDs)**, here, you will engage in focused, collaborative exploration of core topics guided by a facilitator. These sessions emphasize dialogue, peer feedback, and the application of knowledge, helping you refine your clinical thinking and deepen your understanding in a supportive, interactive setting.
 - **Journal Club** sessions will train you to critically evaluate new medical research, a skill vital for a lifetime of evidence-based practice.

Part 2: Learning on Your Own – The Engine of Mastery

True expertise in medicine requires you to become the director of your own learning. These are your key tools.

- **Directed Self-Learning (DSL):** Consider this structured, independent practice. For specific modules, you will be given clear tasks, objectives, and a list of resources. Your job is to work through them independently. This builds the disciplined study habits and foundational understanding you need. Faculty are there to guide you if you hit a roadblock.
- **Self-Directed Learning (SDL):** This is the ultimate goal of your professional development in which you take full responsibility. You will identify your own learning gaps (“I don’t understand heart murmurs well enough”), set your own goals, seek out your own resources, and assess your progress. The college provides the support—the library, online databases, and faculty office hours—but you drive the process. This is the skill that will sustain your clinical competence for decades.

We are here to guide you in this transition from learning what we teach, to learning what you need to know. Embrace each method—the collaborative and the independent—as essential parts of your growth into a physician.



8. Learning Objectives

General Learning Outcomes

By the end of this module the students would be able to;

Knowledge

1. Identify & describe the various cellular and non-cellular components of blood in relation to its Anatomy, Physiology & Biochemistry
2. Describe structure, synthesis and degradation of Hemoglobin
3. Describe the regulatory mechanisms of normal hemostasis and coagulation
4. Describe the conditions associated with dysfunction of cellular and non-cellular components of blood
5. Describe the basic characteristics of immune system.
6. Discuss the structure, functions and biochemical aspects of the Lympho-reticular system.
7. Explain the principles and clinical significance of ABO/RH blood grouping system
8. Explain the pathophysiology of various bleeding disorders
9. Identify the role of pharmacology in anemia and bleeding disorders.

Skills

1. Carry out practical work as instructed in an organized and safe manner
2. Make and record observations carefully & accurately.
3. Identify slide of Lymph node, thymus, tonsils and spleen under microscope
4. Determine percentage of formed blood elements.
5. Identify RBC and should be able to do its counting on counting chamber and to know normal values. And also classify Anemia morphologically. Determine the Hemoglobin with the apparatus and have knowledge of normal and abnormal value.
6. Identify WBC morphology and its different types, should be able to count them on counting chamber and to know the normal values. Diagnostic importance of each WBC.
7. Identify Platelets and should be able to do its counting on counting chamber and to know normal values. Its diagnostic importance in relation to bleeding disorders
8. Perform bleeding time and clotting time and to know normal values and its diagnostic importance in relation to bleeding disorders.
9. Perform Blood groups typing and Rh factor.
10. Perform ESR and to know its normal value and prognostic importance.

Attitude

1. Follow the basic laboratory protocols.
2. Demonstrate ability to give and receive feedback, respect for self and peers.
3. Demonstrate empathy and care to patients.
4. Develop respect for the individuality and values of others - (including having respect for oneself) patients, colleagues and other health professionals

5. Organize & distribute tasks
6. Exchange opinion & knowledge
7. Develop communication skills and etiquette with sense of responsibility.
8. To equip themselves for teamwork.

Specific learning objectives

THEME–I: Pallor and Swelling

S No.	Topic	Learning Objectives	Teaching Strategy	Hours	Assessment Tools
ANATOMY					
1	Introduction to hematopoietic system/ Immune system	Define hematopoiesis and immunity. Classify the components of the hematopoietic system. Identify primary and secondary lymphoid organs. Describe the basic organization of the immune system. Correlate structure of immune organs with their general functions.	LGIS	1	MCQs/ SAQs Viva
2	Hematopoiesis	Define hematopoiesis and describe its stages. Identify sites of hematopoiesis during fetal and postnatal life. Describe the structure of bone marrow. Explain the differentiation pathways of myeloid and lymphoid stem cells. Correlate anatomical sites with common clinical conditions (e.g., bone marrow biopsy sites).	LGIS	1	MCQs/ SAQs Viva
PHYSIOLOGY					
3	Introduction to Blood	Describe the composition and functions of blood Define Hematocrit Enlist the components of plasma Explain the difference between Serum and plasma	LGIS	1	MCQs/S AQs Viva
4	Red Blood Cells	Describe the structure, function, life span and normal count of Red Blood Cells. Define Haemopoiesis Classify haematopoietic stem cells Summarize the erythropoiesis sites	LGIS	1	MCQs/S AQs Viva

		during pre-natal and post-natal periods.			
5	Red Blood Cells Genesis Erythropoiesis	Illustrate the stages of RBC development from pluripotent hematopoietic stem cells to a mature RBC. Describe the erythropoiesis and factors regulating Erythropoiesis Describe the role of Vitamin B12 and Folic acid in RBC maturation. Describe the effects of deficiency of Vitamin B12 and Folic acid on RBC maturation.	LGIS	1	MCQs/S AQs Viva
6	Erythropoietin	Describe source, control / regulation and functions of Erythropoietin Explain the role of Erythropoietin in RBC production. Describe the effects of high altitude and exercise on RBC production.	LGIS	1	MCQs/S AQs Viva
7	Anemia	Define and describe the different types of anemia Define hemolysis Describe the various red cell indices Interpret the diagnosis of anemia by using red cell indices Describe the effects of anemia on functions of circulatory system / human body	LGIS	0.5	MCQs/S AQs Viva
8	Polycythemia	Define and classify polycythemia Differentiate between primary and secondary Polycythemia	LGIS	0.5	MCQs/S AQs Viva
BIOCHEMISTRY					
9	Introduction of Porphyrins	Define Porphyrins Describe Chemistry of Porphyrins. Enlist the types, metabolic causes and clinical presentation of different types of Porphyria's.	LGIS	1	MCQs/S AQs Viva
10	Iron metabolism	Describe the iron metabolism	LGIS	1	MCQs/ SAQs
11	Introduction to heme synthesis	Define heme and describe its structure and functions Describe the biochemical features of the hemoglobin molecules Describe Heme Synthesis on cellular and molecular level	LGIS	1	MCQs/S AQs Viva

12	Heme degradation	Describe Heme Degradation Describe the Regulation of Heme Synthesis. Describe the concept of Oxygen binding with hemoglobin Describe the normal picture of blood chemistry.	LGIS	1	MCQs/S AQs Viva
13	Haemoglobinopathies	Define Hemoglobinopathies and enlist the variants of hemoglobin Describe causes of Hemoglobinopathies Describe two major categories of hemoglobinopathies Describe the amino acid substitution in sickle cell disease. Define and classify thalassemia's. Explain the genetic defects in α and β thalassemia's. Enlist the clinical features of α and β thalassemia's	LGIS	1	MCQs/S AQs Viva
14	Water soluble vitamins	Discuss the chemistry of Water-Soluble Vitamins including Vitamin B complex Vitamin C Folic Acid	LGIS	1	MCQs/S AQs Viva
PATHOLOGY					
15	Anemias of diminished erythropoiesis	Define anemia List the factors for regulation of erythropoiesis Enlist the types of anemia	LGIS	1	MCQs/S AQs
16	Hemolytic anemia's	Define hemolytic anemia. Enlist types of hemolytic anemia.	LGIS	1	MCQs/S AQs
COMMUNITY MEDICINE					
17	Epidemiology of blood borne diseases	Describe Epidemiology of Iron Deficiency Anemia Describe prevention of different types of anemias in community	LGIS	1.5	MCQs/S AQs
PHARMACOLOGY					
18	Drugs used in the treatment of anemias	Enlist the drugs used in the treatment of iron deficiency & Megaloblastic anemia Describe the pharmacological basis/ role of iron in iron deficiency anemia (hypochromic normocytic anemia) Describe the pharmacological basis/	LGIS	1	MCQs/S AQs

		role of vit B12 and folic acid in megaloblastic anemia Describe the role of Erythropoietin in the treatment of Anemia (normochromic normocytic anemia)			
LAB WORK					
HISTOLOGY					
19	Spleen	Identify and describe the microscopic anatomy of spleen under microscope Compare the histological features of spleen	Demonstration / Practical	1.5	OSPE
IT LAB					
20	LMS	Navigate the Learning Management System (LMS) to log in and access key features, including the dashboard, lectures, and attendance records.	Demonstration / Practical	1.5	OSPE
PHYSIOLOGY					
21	Clinical approach to a patient with Pallor	Proper history taking and physical examination in clinical evaluation of a patient with pallor Understand the different morphological features of Red blood cell Classify anemia on the basis of red cell morphology Understand the specific laboratory investigations to confirm and find out the cause of anemia	Demonstration / Practical	1.5	OSPE
22	ESR	Estimation of erythrocyte sedimentation rate (ESR) using the standard laboratory method and understanding its physiological and clinical significance	Demonstration / Practical		OSPE
23	Hematocrit	Explain the principle of hematocrit estimation by the microhematocrit method. Perform hematocrit estimation using capillary blood and a centrifuge. Interpret normal and abnormal values.	Demonstration / Practical		OSPE
24	Hemoglobin determination	Assist in phlebotomy while practicing aseptic procedure. Determine the hemoglobin (Hb) concentration in the given sample	Demonstration / Practical	1.5	OSPE

		Estimation of hemoglobin by Sahli's method Determination of packed cell volume			
25	Haemocytometer and Blood Cells count	Identify the different parts of a haemocytometer and describe the procedure for loading a blood sample for cell counting. Observe and demonstrate the counting of red blood cells or white blood cells using a haemocytometer, and calculate the total cell count	Demonstration/ Practical	1.5	OSPE
BIOCHEMISTRY					
26	Spectrophotometer	Determine the principle of Spectrophotometry and to accurately measure the absorbance of a solution using a Spectrophotometer for quantitative biochemical analysis	Demonstration/ Practical	1.5	OSPE
SMALL GROUP DISCUSSION (SGD)					
PHYSIOLOGY					
27	Types of anemia & interpretation of CBC/Hb	Define anemia and classify its main types (microcytic, normocytic, macrocytic) based on the MCV value in a CBC report.	SGD	1	OSPE
ANATOMY					
28	Spleen	Identify the white pulp and red pulp of the microscopic picture of spleen · Describe the histological features of the spleen, including the central artery, periarteriolar lymphatic sheath (PALS), and splenic sinuses.	SGD	1	OSPE
BIOCHEMISTRY					
29	Jaundice	Describe the biochemical basis of jaundice in relation to abnormalities in heme degradation. Correlate increased heme breakdown with elevated unconjugated bilirubin levels in hemolytic jaundice. Differentiate between pre-hepatic, hepatic, and post-hepatic jaundice	SGD	1	OSPE

		based on underlying biochemical defects.			
DIRECTED SELF LEARNING					
ANATOMY					
30	Surface & Applied Anatomy of the main organs of hematopoietic system	Describe surface anatomy and applied anatomy of main organs of hematopoietic system	DSL	1.5	MCQs/S AQs
PHYSIOLOGY					
31	Red Blood Cells Genesis	Illustrate the stages of RBC development from pluripotent hematopoietic stem cells to a mature RBC. Describe the erythropoiesis and factors regulating erythropoiesis Describe the role of Vitamin B12 and Folic acid in RBC maturation. Describe the effects of deficiency of Vitamin B12 and Folic acid on RBC maturation.	DSL	1	MCQs/S AQs
BIOCHEMISTRY					
32	Chemistry of Hemoglobin	Describe the biochemical features of the hemoglobin molecules Describe the concept of Oxygen binding with hemoglobin Describe the normal picture of blood chemistry.	DSL	1.5	MCQs/S AQs

Theme-2 Fever (Infection and Immunology)

S. No	Topic	Learning Objectives	MIT	Hours	Assessment
ANATOMY					
1	Gross anatomy of hematopoietic system/ Central & Peripheral lymphoid organs	Classify lymphoid organs into primary (central) and secondary (peripheral). Describe the anatomical location of thymus and bone marrow. Describe the anatomical distribution of lymph nodes, spleen, and MALT. Compare structural differences between central and peripheral lymphoid organs.	LGIS	1	MCQs/SAQs Viva

		Explain their roles in immune cell maturation and activation.			
2	Lymph Node	Describe the gross anatomy of a lymph node. Identify cortex, paracortex, and medulla in a lymph node. Trace the pathway of lymph flow through a lymph node. Describe blood and lymphatic supply. Correlate lymph node enlargement with infection and malignancy.	LGIS	1	MCQ s/SA Qs Viva
3	Spleen	Describe the location, size, and relations of the spleen. Identify white pulp and red pulp histologically. Explain the functions of spleen in filtration and immunity. Describe the blood supply and its clinical importance. Discuss applied anatomy (splenomegaly, splenic rupture).	LGIS	1	MCQ s/SA Qs Viva
4	Thymus Gland & Tonsils	Describe the location and gross features of the thymus. Explain age-related changes (involution) of the thymus. Identify different types of tonsils and their location. Describe Waldeyer's ring. Correlate thymic and tonsillar pathology with immune dysfunction and infections.	LGIS	1	MCQ s/SA Qs Viva
5	Mucosa-Associated Lymphoid Tissue (MALT)	Define MALT and its components (GALT, BALT, etc.). Identify anatomical locations of MALT in the body. Describe Peyer's patches and appendix as lymphoid structures. Explain the role of MALT in mucosal immunity. Correlate MALT with clinical conditions (e.g., appendicitis, mucosal infections).	LGIS	1	MCQ s/SA Qs Viva
6	Clinical Aspects of Lymphoid Organs	Describe anatomical basis of lymphadenopathy. Explain routes of spread of infections and malignancies via lymphatics. Correlate splenic enlargement with hematological disorders. Discuss thymic disorders (e.g.,	LGIS	1	MCQ s/SA Qs Viva

		thymoma, myasthenia gravis – anatomical basis). Apply anatomical knowledge in interpreting clinical findings of hematological diseases.			
PHYSIOLOGY					
7	White Blood Cells	Classify white blood cells Describe the structure, function, life span and normal count of White Blood Cells Describe the stages of differentiation of white blood cells Describe the characteristics of WBCs	LGIS	1	MCQ s/SA Qs Viva
8	Reticulo-endothelial (Monocyte-Macrophage) system	Describe the components of reticulo-endothelial system (monocyte-macrophage system) Describe the role of monocyte macrophage system in immunity Explain the role of neutrophils, macrophages, basophils, eosinophils and monocytes in providing immunity against infections (immune system)	LGIS	1	MCQ s/SA Qs Viva
9	Inflammation	Define inflammation Describe characteristics of inflammation (hallmark of inflammation) Describe the causes, sequence of events and cardinal signs of inflammation	LGIS	1	MCQ s/SA Qs Viva
10	Abnormal leukocyte counts/ Leukemia	Define Leukopenia and Leukocytosis and Leukemia	LGIS	1	MCQ s/SA Qs Viva
11	Introduction to immunity	Define and classify immunity Define antigen Define pathogen Enlist the tissues that contribute to immunity and explain their function Describe the functions of immune system Describe the structure and function of lymphatic system	LGIS	1	MCQ s/SA Qs Viva
12	Immune system	Enlist the three lines of defenses and outline their properties Describe the characteristics, origin and functions of cells of immune system Describe the types of immunity	LGIS	1	MCQ s/SA Qs Viva

		Enlist the innate defenses List the substances and cells that participate in adaptive immunity Compare the characteristics innate and acquired immunity Compare the active and passive immunity mechanism			
13	Immune response	Differentiate between primary and secondary immune response Describe the roles of cytokines, chemokines, and colony-stimulating factors in the immune response	LGIS	1	MCQ s/SA Qs Viva
14	Humoral and cell mediated immunity	Describe the role of T and B lymphocytes in immunity Describe the role of B lymphocytes in humoral immunity Describe cell mediated and humoral immunity Explain how helper T cells regulate the immune system Explain the function of cytotoxic T cells Describe the role of helper T cells Differentiate between humoral and cell mediated immunity	LGIS	1	MCQ s/SA Qs Viva
15	Complement system	Describe the complement system Explain how the complement system elicits the inflammatory response, lyses foreign cells, and increases phagocytosis Describe the two pathways that activate the complement system Compare Classic and alternate pathways of complement activation.	LGIS	1	MCQ s/SA Qs Viva
16	Immunity: extremes of ages	Compare the active and passive immunity Explain the transfer of passive immunity from mother to fetus and from mother to infant during breast-feeding Describe changes in immune response that occurs with aging	LGIS	1	MCQ s/SA Qs Viva
17	Allergy & Hypersensitivity	Define allergy and allergen Describe the pathophysiology of allergy and hypersensitivity Define and classify the hypersensitivity reaction Compare the immediate and delayed hypersensitivity reactions	LGIS	1	MCQ s/SA Qs Viva

		List the diseases associated with hypersensitivity reactions			
BIOCHEMISTRY					
18	Immunoglobulin's / Antibodies	Define Immunoglobulin's DESCRIBE Types of Immunoglobulin's Describe Structure of Immunoglobulin's Describe the mechanism of action of antibodies Explain biochemical role of each immunoglobulin in immunity	LGIS	1	MCQs/SA Qs Viva
COMMUNITY MEDICINE					
19	Vaccinology	Define vaccine and immunization Explain the expanded program of immunization (EPI) in Pakistan	LGIS	1	MCQs/SA Qs Viva
LAB WORK					
PHYSIOLOGY					
20	TLC & DLC determination	Determine the total leukocyte count (TLC) in the given sample Determine the differential leukocyte count (DLC) in the given sample	Demonstration / Practical	1.5	OSP E
HISTOLOGY					
21	Lymph node	Identify and describe the microscopic anatomy of lymph node under microscope Compare the histological features of lymph node	Demonstration / Practical	1.5	OSP E
22	Thymus gland	Identify and describe the microscopic anatomy of thymus under microscope Compare the histological features of thymus	Demonstration / Practical	1.5	OSP E
BIOCHEMISTRY					
23	Hb estimation	Estimation of hemoglobin concentration in blood using spectrophotometer and interpret the results in relation to normal values and common types of Anemia.	Demonstration / Practical	1.5	OSP E
SMALL GROUP DISCUSSIONS					
ANATOMY					
24	Lymph node	Identify the major lymph node groups in the body and describe their anatomical location. · Describe the microstructure of a lymph node (cortex, paracortex, medulla) and correlate it with its	SGD	1	MCQs/SA Qs

		function as a part of the lymphatic system.			
25	Thymus Gland	Describe the location, relations, and blood supply of the thymus gland in the body. · Identify the histological features of the thymus (cortex, medulla, and Hassall's corpuscles) and correlate its structure with its function in T-lymphocyte maturation.	SGD	1	MCQ s/SA Qs
PHYSIOLOGY					
26	Immunity	Differentiate between the mechanisms of humoral immunity (B-cells) and cell-mediated immunity (T-cells). · List the primary and secondary lymphoid organs and describe their role in the development and maturation of immune cells.	SGD	1	MCQ s/SA Qs
27	Hemostasis	Define hemostasis and list the three main phases involved (vasoconstriction, platelet plug formation, and coagulation). · Differentiate between the intrinsic and extrinsic pathways of coagulation and identify their point of convergence.	SGD	1	MCQ s/SA Qs
28	Blood Coagulation	List the clotting factors and describe their role in the coagulation cascade. · Describe the mechanism of fibrin clot formation and explain the role of calcium and vitamin K in the process.	SGD		MCQ s/SA Qs
BIOCHEMISTRY					
29	Immunoglobulins	Describe the basic structure of an immunoglobulin molecule, including heavy chains, light chains, and variable/constant regions. · List the five classes of immunoglobulins (IgG, IgA, IgM, IgE, IgD) and state their primary functions in the body.	SGD	1	MCQ s/SA Qs
DIRECTED SELF LEARNING					
ANATOMY					

30	Developmental Anatomy of lymphoid tissue	Describe the development of lymphoid organs including lymph nodes, tonsils, thymus and spleen	DSL	1	MCQs/SA Qs
PHYSIOLOGY					
31	Immunity	Define and classify immunity Define antigen Define pathogen Enlist the tissues that contribute to immunity and explain their function Describe the functions of immune system Describe the structure and function of lymphatic system	DSL	1	MCQs/SA Qs
BIOCHEMISTRY					
32	Qualitative Haemoglobinopathies	Describe the Qualitative Haemoglobinopathies Describe the amino acid substitution in sickle cell disease. Hemoglobin C disease & Hemoglobin SC disease.	DSL	1	MCQs/SA Qs

Theme-3 (Excessive Bleeding)

S. No.	Topic	Learning Objectives	MIT	Hours	Assessment
PHYSIOLOGY					
1	Introduction to Hemostasis	Describe the structure, function, life span and normal count of Platelets. Define hemostasis Describe the role of platelets in hemostasis Outline the sequence of processes involved in hemostasis.	LGIS	1	MCQs/SA Qs Viva
2	Blood Coagulation	Enlist the clotting factors Explain the role of calcium in coagulation Explain how clotting is prevented in the normal vascular system Outline the sequence of processes during blood coagulation Describe with the help of a flow diagram (or draw) intrinsic pathway of coagulation cascade Describe with the help of a flow diagram (or draw) extrinsic pathway of coagulation cascade Explain how the mechanism of clot dissolution.	LGIS	1	MCQs/SA Qs Viva

3	Bleeding disorders	Describe the role of Vit K in clotting Describe the following bleeding disorders: • Vitamin K deficiency • Thrombocytopenia • Hemophilia Define Von Willebrand disease	LGIS	1	MCQs/S AQs Viva
4	Thrombotic disorders	Describe the effects of low platelet count on Hemostasis Define thrombus/thrombi Define emboli/embolus Enlist the causes of thromboembolic conditions Describe Femoral venous thrombosis and pulmonary embolism	LGIS	1	MCQs/S AQs Viva
PHARMACOLOGY					
5	Coagulation modifying drug	Identify the site of action of following drugs in coagulation cascade • Aspirin, • Heparin, • Tranexamic acid • Vit K	LGIS	1	MCQs/S AQs
LAB WORK					
PHYSIOLOGY					
6	Blood Clotting	Assessment of bleeding time (BT) and clotting time (CT), and to explain the process of hematopoiesis and its role in normal hemostasis.	Demonstration / Practical	1	OSPE
DIRECTED SELF LEARNING					
ANATOMY					
7	Histology of lymphoid tissues	Describe the histological features and functions of Lymph node, Thymus, Tonsils and Spleen.	DSL	1	MCQs/S AQs

Theme-4 (Transfusion Reaction)

S. No.	Topic	Learning Objectives	Teaching Strategy	Hours	Assessment Tools
PHYSIOLOGY					
1	Blood Grouping	Describe different types of blood groups Describe the genotype-phenotype relationships in blood groups.	LGIS	1	MCQs/SAQs Viva

		Interpret the plausible blood groups (A-B-O) in children of parents with known blood groups. Describe the role of agglutinogens and agglutinins in blood grouping Describe the antigens and antibodies of the O-A-B blood types/ Interpret the types of agglutinins present in individuals with a specific blood group Describe the process of agglutination			
2	Transfusion reactions	Describe the antigens and antibodies of the Rh system Describe the principles of blood typing Explain universal donor and universal recipient blood groups Enlist the manifestations of transfusion reaction	LGIS	1	MCQs/SAQs Viva
3	Erythroblastosis fetalis	Define Rhesus incompatibility Describe erythroblastosis fetalis Describe the transfusion reactions resulting from mismatched O-A-B and Rh blood types	LGIS	1	MCQs/SAQs Viva
4	Major histocompatibility complex	Define autoimmunity Explain how immune reaction to self-antigens is avoided Define and classify Major Histocompatibility complex (MHC) Characterize the significance and function of major histocompatibility complex molecules	LGIS	1	MCQs/SAQs Viva
FORENSIC MEDICINE					
5	Medico-legal importance of blood groups	Describe the Medico-legal importance of blood groups in forensic work that is: • Personal Identity • Inheritance claims • DNA profiling • Disputed paternity and maternity	LGIS	1	MCQs/SAQs
COMMUNITY MEDICINE					
6	Epidemiology of blood borne diseases	Identify important blood borne pathogens and how they are spread Discuss the epidemiology of blood borne disease transmission and the	LGIS	2	MCQs/SAQs

		potential for HIV, HBV and HCV transmission. Identify routes of transmission of blood borne pathogens Discuss the best practices to perform safe blood transfusion. Identify potential exposure risks List important safeguards against blood borne pathogen disease			
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LAB WORK

PHYSIOLOGY

7	Blood grouping	Determine the O-A-B and Rh blood group in the given sample	Demonstration / Practical	0.5	OSPE
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PATHOLOGY

8	Blood Bank	Observe the process of blood donation, blood product separation, screening and storage and observe the process of blood transfusion	VISIT	1.5	OSPE
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HISTOLOGY

9	Tonsils	Identify the lymphoid tissue and epithelial lining of a tonsil under the microscope and differentiate between the palatine and pharyngeal tonsil based on the type of epithelium present. · Observe and label the histological features of a tonsil, including the crypts, germinal centers, and overlying epithelium (stratified squamous for palatine, pseudostratified columnar for pharyngeal).	Demonstration / Practical	1.5	OSPE
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SMALL GROUP DISCUSSION (SGD)

ANATOMY

10	Tonsils	Describe the location and types of tonsils (palatine, pharyngeal, and lingual) forming Waldeyer's ring. · Identify the histological features of a tonsil, including crypts, germinal centers, and overlying epithelium.	SGD	1.5	OSPE
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PHYSIOLOGY

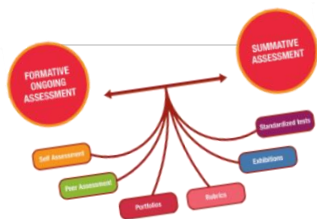
11	Erythroblastosis Fetalis	Define erythroblastosis fetalis and explain the role of Rh incompatibility between mother and fetus in its pathogenesis. · Describe the pathophysiology of hemolytic disease of the newborn and	SGD	1.5	OSPE
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		explain how it leads to jaundice and anemia in the infant.			
BIOCHEMISTRY					
12	Hematinics	Describe the role of hematinics in hemoglobin synthesis and red blood cell production, and to relate their deficiency to different types of anemia and their management	SGD	1.5	OSPE

PRIME MODULE					
S. No.	Topic	Learning Objectives	MIT	Hours	Assessment
BEHAVIORAL SCIENCES					
1	Attention and concentration	Define attention and concentration. What factor affect them?	Lecture/ Discussion Group	1	MCQ and Formative
2	Emotional intelligence	Emotional and social intelligence in given contexts Describe & Display appropriate emotional and social intelligence	Lecture/ Group discussion/Role Play	1	MCQ and Formative

Blood & Immunology-I Module

Subject	LGIS	Practical/ Demo	SGD	DSL	Total Hours
ANATOMY (Histology, Embryology)	8	4.5	4.5	3.5	20.5
PHYSIOLOGY	24	7.5	4.5	2	38
BIOCHEMISTRY	7	3	3.5	2.5	16
PATHOLOGY	2	1.5			3.5
PHARMACOLOGY	2				2
COMMUNITY MEDICINE	4.5				4.5
FORENSIC MEDICINE	1				1
PRIME (Research/JC)	2				2
PRIME (IT Skills)		1.5			1.5
PRIME (Leadership)					0
PRIME (Professionalism)	2				2
PRIME (Communication Skills)					0
PRIME (Ethics/Islamiat)					0
PAKISTAN STUDIES/IDEOLOGY & CONSTITUTION					0
					0
TOTAL (Teaching Hours)	52.5	18	12.5	8	91



9. Examination and Methods of Assessment:

Assessments within the MBBS program at the MIMC consist of both formative and summative evaluations. These assessments are crucial for monitoring student progress and academic performance.

9.1. Formative Assessment:

Formative assessments, accounting for 20% of the total marks assigned to each block, serve as ongoing evaluations designed to provide feedback and promote learning. Formative assessments are conducted after the completion of each module, ensuring students receive timely feedback to enhance their understanding and performance.

9.2. Summative Assessment:

Summative assessments, comprising 80% of the total assessment weighting, are conducted and overseen by constitute university as part of the annual examination process. This summative assessment evaluates students' comprehensive understanding of the curriculum and constitutes a significant portion of their final scores.

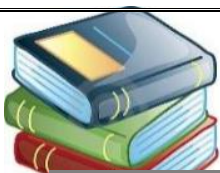
9.3. Assessment Tools:

Various assessment tools are employed to measure students' knowledge and competencies. These tools include:

1. **Written Examinations:** These include Multiple Choice Questions (MCQs) and Short Answer Questions (SAQs) that assess students' theoretical knowledge.
2. **Performance Assessments:** Objective Structured Practical Examinations (OSPE) and Objective Structured Clinical Examinations (OSCE) are used to evaluate practical skills and clinical competence.
3. **Assignments:** Presentations, projects, and self-reflection assignments are included in the assessment process to enhance students' critical thinking and research skills.

9.4. Feedback Mechanism:

At the end of each block, a "Block Evaluation Form" will be provided to students, either in hard copy or online. Students will give their feedback on the "Course Content," "Learning Resources," "Teaching Methods," "Engagement & Motivation," and "Assessment Methods."



10. Learning Opportunities and Resources

1. Anatomy

Books:

- *Clinical Anatomy by Regions* by Richard S. Snell (Latest Edition)
- *Gray's Anatomy for Students* (Latest Edition)
- *Clinically Oriented Anatomy* by K.L. Moore (Latest Edition)
- *Netter's Atlas of Human Anatomy* (Latest Edition)
- *Last's Anatomy* (Latest Edition)

Online Resources:

- [TeachMeAnatomy](#) – Comprehensive anatomy resource with diagrams and explanations.
- [AnatomyZone YouTube Channel](#) – 3D anatomy tutorials.

2. Histology

Books:

- *Textbook of Histology* by Junqueira (Latest Edition)
- *DiFiore's Atlas of Histology with Functional Correlations* (Latest Edition)
- *Atlas of Human Histology* by Wheater's (Latest Edition)
- *Textbook of Histology* by Laiq Hussain (Latest Edition)

Online Resources:

- [Histology Guide](#) – A virtual histology lab with slides and explanations.
- [Armando Hasudungan YouTube Channel](#) – Educational videos on histology and related topics.

3. Embryology

Books:

- *Langman's Medical Embryology* (Latest Edition)
- *The Developing Human* by Keith L. Moore (Latest Edition)

Online Resources:

- Embryology at UNSW – Detailed embryology resource from the University of New South Wales.
- [Dr. Najeeb Lectures YouTube Channel](#) – In-depth video lectures on embryology and other basic medical sciences.

4. Physiology

Books:

- *Textbook of Medical Physiology* by Guyton and Hall (Latest Edition)
- *Ganong's Review of Medical Physiology* (Latest Edition)

Online Resources:

- Vivo Interactive Physiology – Interactive tutorials on physiology topics.
- [PhysioPathoPharmaco YouTube Channel](#) – Physiology explanations and tutorials.

5. Biochemistry

Books:

- *Harper's Illustrated Biochemistry* (Latest Edition)
- *Lippincott's Illustrated Review: Biochemistry* (Latest Edition)

Online Resources:

- MedlinePlus Biochemistry – Basic biochemistry concepts with clinical correlations.
- [Osmosis YouTube Channel](#) – Visual and concise videos on biochemistry and other medical topics.

6. Pharmacology

Books:

- *Katzung's Basic and Clinical Pharmacology* (Latest Edition)

Online Resources:

- [Pharmacology YouTube Channel by Ninja Nerd](#) – Detailed pharmacology lectures and notes.
- [GoodRx Pharmacology Resources](#) – Practical applications of pharmacology in medicine.

7. Pathology**Books:**

- *Robbins Basic Pathology* (Latest Edition)

Online Resources:

- [PathologyOutlines.com](#) – An online pathology resource with a focus on differential diagnosis.
- [Dr. John Minarcik YouTube Channel](#) – Free pathology lectures and tutorials.

8. Community Medicine**Books:**

- *Essential Community Medicine* (Latest Edition)
- *K. Park's Textbook of Preventive and Social Medicine* (Latest Edition)

Online Resources:

- [CDC Public Health](#) – Extensive resources on public health and community medicine.
- [Public Health England YouTube Channel](#) – Videos on various community health topics.

9. Forensic Medicine**Books:**

- *Parikh's Textbook of Medical Jurisprudence, Forensic Medicine, and Toxicology* (Latest Edition)

Online Resources:

- [Forensic Medicine Online](#) – Detailed forensic medicine resources for students.
- [Forensic Pathology Lectures YouTube Channel](#) – Educational videos on forensic pathology.

10. General Medicine**Books:**

- *Davidson's Principles and Practice of Medicine* (Latest Edition)

Online Resources:

- [Medscape](#) – Comprehensive resource for clinical medicine and continuing medical education.
- [Geeky Medics YouTube Channel](#) – Clinical skills and general medicine tutorials.

11. Timetables

		MOHI-UD-DIN ISLAMIC MEDICAL COLLEGE , MIRPUR, (AJ&K)			
DEPARTMENT OF MEDICAL EDUCATION					
Blood & Immunology- 1 Module (Theme-1)					
Time Table 1st Year MBBS, 2026					
Week-1				Venue for LGIS : 1st Year Lecture Hall	
Day / Date	Time				
	08:00AM - 09:00AM	09:00AM -10:00AM		10:30 AM - 12:00 PM	12:00 PM - 01:00PM
MONDAY 23-02-2026					
TUESDAY 24-02-2026					
Wednesday 25-02-2026					
THURSDAY 26-02-2026	F. MED. 2 LGIS Topic: Death Fac: Prof. Dr. Aftab Alam	BIO-7 LGIS Topic: Carbohydrates -II Fac: Dr. Wajahat Ullah Khan	Break 10:00 - 10:30 AM	PHY-7,8 LGIS Topic: Non-Vascular Transport/ Cell Organelles & Movements of cell Fac: Prof. Dr. Ayyaz Ahmed	ANT-12 LGIS Topic: Introduction to Joints Fac: Dr. Maham Amin
FRIDAY 27-02-2026	Medical Education LGIS Topic: Introduction to Blood & Immunology- 1 Module Fac: Dr. M Junaid Khan	PHY-1 LGIS Topic: Introduction to blood Fac: Dr. Barkat Ullah Khan Awan		10:30 AM - 11:30 AM PHY-2 LGIS Topic: Red Blood Cells Fac: Dr. Barkat Ullah Khan Awan	11:30 AM - 12:00 PM SDL
Dr. M Junaid Khan Department of Medical Education Principal Brig(R) Prof. Dr. Abdul Halim					
Note: The teaching session of thursday, 26th Feb. 2026 are those missed on 5th Feb. and 13th Feb. Holiday					


MOHI-UD-DIN ISLAMIC MEDICAL COLLEGE , MIRPUR, (AJ&K)
DEPARTMENT OF MEDICAL EDUCATION
Blood and Immunology - 1 Module (Theme 1)
Time Table 1st Year MBBS, 2026


Week-2	Venue for LGIS : 1st Year Lecture Hall			
Day / Date	Time			
	08:00AM - 09:00AM	09:00AM -10:00AM	10:30 AM - 12:00 PM	12:00 PM - 01:00PM
MONDAY 02-03-2026	BIO-1 LGIS Topic: Introduction of Porphyrins Fac: Prof. Dr. M. Naqib	ANT-1 LGIS Topic: Introduction to Hematopoietic/ Immune system Fac: Prof.Dr.Col Shafqat Ali	Group-A: SDL Group-B: PYH-Practical-1 Group-C: IT Lab-(LMS)	Group-A: ANT DSL-1 Group-B: BIO-DSL-2 Group C: PHY SGD-1
TUESDAY 03-03-2026	BIO-2 LGIS Topic: Iron Metabolism Fac: Dr. Zahira Bashir	DSL-3 (PHY) Topic: Red blood Cells Genesis Fac: Dr. Amna Khalid Venue: Library	Group-B: SDL Group-C: PYH-Practical-1 Group-A: IT Lab-(LMS)	Group-B: ANT DSL-1 Group-C: BIO-DSL-2 Group A:PHY SGD-1
WEDNESDAY 04-03-2026	PHY-3 LGIS Topic: Red Blood Cells Genesis Erythropoiesis Fac: Dr. Barkat Ullah Khan Awan	BIO-3 LGIS Topic: Introduction to heme synthesis Fac: Prof. Dr. M. Naqib	Group-C: SDL Group-A: PYH-Practical-1 Group-B: IT Lab-(LMS)	Group-C: ANT DSL-1 Group-A: BIO-DSL-2 Group B: PHY SGD-1
THURSDAY 05-03-2026	BIO-4 LGIS Topic: Introduction to heme degradation Fac: Prof. Dr. M. Naqib	ANT-2 LGIS Topic: Hematopoiesis Fac: Prof.Dr.Col Shafqat Ali	C. MED. 1 LGIS Topic: Epidemiology of blood borne disease Fac: Prof. Dr. Ejaz Ali	PHY-4 LGIS Topic: Erythropoietin Fac: Dr. Barkat Ullah Khan Awan
FRIDAY 06-03-2026	BIO-5 LGIS Topic: Haemoglobinopathies Fac: Prof. Dr. M. Naqib	PHY-5 LGIS Topic: Anemia & Polycythemia Fac: Dr. Barkat Ullah Khan Awan	10:30 AM - 11:30 AM PATHO-1 LGIS Topic: Anemias of diminished erythropoiesis Fac: Dr. Sara Najeeb	11:30 AM - 12:00 PM SDL
SGDs/DSLs			Practical	
DSL-1 (ANT) Topic: Surface & Applied Anatomy of the main organs of hematopoietic system DSL-2 (BIO) Topic: Chemistry of Haemoglobin PHY SGD-1 Topic: Types of anemia's & interpretation of CBC/Hb			IT Lab - Topic: LMS PYH-Practical-1 Topic: GPE (Regarding Haematological Disorders) + ESR + HCT	
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MOHI-UD-DIN ISLAMIC MEDICAL COLLEGE , MIRPUR, (AJ&K)
DEPARTMENT OF MEDICAL EDUCATION
Blood and Immunology - 1 Module (Theme 1/2)
Time Table 1st Year MBBS, 2026


Week-3		Venue for LGIS : 1st Year Lecture Hall		
Day / Date	Time			
	08:00AM - 09:00AM	09:00AM -10:00AM	10:30 AM - 12:00 PM	12:00 PM - 01:00PM
MONDAY 09-03-2026	DSL-4 (BIO) Topic: Qualitative Haemoglobinopathies Fac: Dr. Amna Khurshid Venue: Library	ANT-3 LGIS Topic: Central and Peripheral Lymphoid organ Fac: Prof.Dr.Col Shafqat Ali	Group-A: BIO Practical-1 Group-B: PYH-Practical-2 Group-C: Histo Practical-1	Group-A: ANT SGD-1 Group-B: BIO-SGD-1 Group C: PHY SGD-2
TUESDAY 10-03-2026	BIO-6 LGIS Topic: Water soluble vitamins Fac: Dr. Zahira Bashir	ANT-4 LGIS Topic: Lymph Node Fac: Prof.Dr.Col Shafqat Ali	Group-B: BIO Practical-1 Group-C: PYH-Practical-2 Group-A: Histo Practical-1	Group-B: ANT SGD-1 Group-C: BIO-SGD-1 Group A:PHY SGD-2
WEDNESDAY 11-03-2026	PHARMA-1 LGIS Topic: Drugs used in treatment of anemia's Fac: Dr. Salma Salim	PATHO-2 LGIS Topic: Hemolytic anemia's Fac: Dr. Sara Najeeb	Group-C: BIO Practical-1 Group-A: PYH-Practical-2 Group-B: Histo Practical-1	Group-C: ANT SGD-1 Group-A: BIO-SGD-1 Group B: PHY SGD-2
THURSDAY 12-03-2026	PHY-6 LGIS Topic: White blood cells Fac: Prof. Dr. Ayyaz Ahmed	BIO-7 LGIS Topic: Immunoglobulin's & Antibodies Fac: Dr. Wajahat Ullah Khan	10:30 AM - 11:30 AM ANT-5 LGIS Topic: Spleen Fac: Prof.Dr.Col Shafqat Ali	11:30 AM - 1:00 PM Journal Club
FRIDAY 13-03-2026	DSL-6 (ANT) Topic: Developmental Anatomy of Lymphoid tissue Fac: Dr. Anam Zafar Venue: Library	PHY-7 LGIS Topic: Reticulo-endothelial (Monocyte-Macrophage) system Fac: Prof. Dr. Ayyaz Ahmed	10:30 AM - 11:30 AM PHY-8 LGIS Topic: Inflammation Fac: Prof. Dr. Ayyaz Ahmed	11:30 AM - 12:00 PM SDL
SGDs/DSLs			Practical	
ANT SGD-1 Topic: Spleen BIO-SGD-1 Topic: Jaundice PHY SGD-2 Topic: Factors regulating Erythropoiesis + Anemia's			BIO Practical-1 Topic: Spectrophotometer PYH-Practical-2 Topic: Haemocytometer + Red cell indices/RBC count ANT (Histo) Practical-1 Topic: Spleen	
Dr. M Junaid Khan Department of Medical Education			Principal Brig(R) Prof. Dr. Abdul Halim	


MOHI-UD-DIN ISLAMIC MEDICAL COLLEGE , MIRPUR, (AJ&K)
DEPARTMENT OF MEDICAL EDUCATION
Blood and Immunology - 1 Module (Theme 2)
Time Table 1st Year MBBS, 2026


Week-4		Venue for LGIS : 1st Year Lecture Hall			
Day / Date	Time				
	08:00AM - 09:00AM	09:00AM -10:00AM	10:30 AM - 12:00 PM	12:00 PM - 01:00PM	
MONDAY 16-03-2026	PHY-9 LGIS Topic: Abnormal leukocyte counts/ Leukemia Fac: Prof. Dr. Ayyaz Ahmed	ANT-6 LGIS Topic: Thymus Gland & Tonsils Fac: Prof.Dr.Col Shafqat Ali	Break 10:00- 10:30 AM	Group-A: BIO Practical-2 Group-B: PYH-Practical-3 Group-C: Histo Practical-2	Group-A: ANT SGD-2 Group-B: SDL Group C: PHY SGD-3
TUESDAY 17-03-2026	PHY-10 LGIS Topic: Introduction to Immunity Fac: Prof. Dr. Ayyaz Ahmed	ANT-7 LGIS Topic: Mucosa Associated Lymphoid tissue Fac: Prof.Dr.Col Shafqat Ali		Group-B: BIO Practical-2 Group-C: PYH-Practical-3 Group-A: Histo Practical-2	Group-B: ANT SGD-2 Group-C: SDL Group A:PHY SGD-3
WEDNESDAY 18-03-2026	DSL/Revision (PHY) Fac: Dr. Amna Khalid Venue: Library	DSL/Revision (ANT) Fac: Dr. Maham Amin Venue: Library		SDL	DSL/Revision (BIO) Fac: Dr. Amna Khurshid Venue: Library
THURSDAY 19-03-2026	Eid-ul-Fitr				
FRIDAY 20-03-2026					
SGDs/DSLs			Practical		
ANT SGD-2 Topic: Lymph node PHY SGD-3 Topic: Immunity			BIO Practical-2 Topic: Haemoglobin Estimation PYH-Practical-3 Topic: TLC & DLC determination and Haemoglobin concentration ANT (Histo) Practical-2 Topic: Lymph node		
Dr. M Junaid Khan Department of Medical Education			Principal Brig(R) Prof. Dr. Abdul Halim		


MOHI-UD-DIN ISLAMIC MEDICAL COLLEGE , MIRPUR, (AJ&K)
DEPARTMENT OF MEDICAL EDUCATION
Blood and Immunology - 1 Module (Theme 2)
Time Table 1st Year MBBS, 2026


Week-05	Venue for LGIS : 1st Year Lecture Hall				
Day / Date	Time				
	08:00AM - 09:00AM	09:00AM - 10:00AM	10:30 AM - 11:30 AM	11:30 AM - 01:00 PM	01:30 PM - 03:00 PM
MONDAY 23-03-2026	23rd March 2026				
TUESDAY 24-03-2026	DSL-7 (ANT) Topic: Surface & Applied Anatomy of the main organs of hematopoietic system Fac: Dr. Maham Amin Venue: Library	PHY-11 LGIS Topic: Immune System Fac: Prof. Dr. Ayyaz Ahmed	PHY-12 LGIS Topic: Immune response Fac: Prof. Dr. Ayyaz Ahmed	Group-A: BIO SDL Group-B: PYH-Practical-4 Group-C: Histo Practical-3	Group-A: ANT SGD-3 Group-B: BIO-SGD-3 Group C: PHY-SGD-4
WEDNESDAY 25-03-2026	PHY-13 LGIS Topic: Humoral and cell mediated immunity Fac: Prof. Dr. Ayyaz Ahmed	F. MED. 1 LGIS Topic: Medico-legal importance of blood groups Fac: Prof. Dr. Aftab Alam	SDL	Group-B: BIO SDL Group-C: PYH-Practical-4 Group-A: Histo Practical-3	Group-B: ANT SGD-3 Group-C: BIO-SGD-3 Group A:PHY SGD-4
THURSDAY 26-03-2026	PHY-14 LGIS Topic: Complement system Fac: Prof. Dr. Ayyaz Ahmed	C. MED. 2 LGIS Topic: Vaccinology Fac: Prof. Dr. Ejaz Ali		Group-C: BIO SDL Group-A: PYH-Practical-4 Group-B: Histo Practical-3	Group-C: ANT SGD-3 Group-A: BIO-SGD-3 Group B: PHY-SGD-4
FRIDAY 27-03-2026	PHY-15 LGIS Topic: Immunity: extremes of ages Fac: Prof. Dr. Ayyaz Ahmed	DSL-9 (PHY) Topic: Immunity Fac: Dr. Amna Khalid Venue: Library	PHY-16 LGIS Topic: Allergy & Hypersensitivity Fac: Prof. Dr. Ayyaz Ahmed	11:30 AM - 12:00 PM SDL	
SGDs			Practical		
ANT SGD-3 Topic: Thymus gland BIO-SGD-3 Topic: Immunoglobulins PHY SGD-4 Topic: Hemostasis + Blood Coagulation			ANT (Histo) Practical-3 Topic: Thymus gland PYH-Practical-4 Topic: GPE (Re-visit)		
Dr. M Junaid Khan Department of Medical Education			Principal Brig(R) Prof. Dr. Abdul Halim		


MOHI-UD-DIN ISLAMIC MEDICAL COLLEGE , MIRPUR, (AJ&K)
DEPARTMENT OF MEDICAL EDUCATION
Blood and Immunology - 1 Module (Theme 3/4)
Time Table 1st Year MBBS, 2026


Week-06	Venue for LGIS : 1st Year Lecture Hall				
Day / Date	Time				
	08:00AM - 09:00AM	09:00AM - 10:00AM	10:30 AM - 11:30 AM	11:30 AM - 01:00 PM	01:30 PM- 03:00 PM
MONDAY 30-03-2026	PHY-17 LGIS Topic: Introduction to Hemostasis Fac: Prof. Dr. Saadia Zainab	DSL-10 (ANT) Topic: Histology of lymphoid tissue Fac: Dr. Anam Zafar Venue: Library	PHY-18 LGIS Topic: Blood Coagulation Fac: Prof. Dr. Saadia Zainab	Group-A: PHY Practical-5 Group-B: PATHO: Blood bank Visit Group-C: Histo Practical-4	Group-A: ANT SGD-4 Group-B: BIO-SGD-4 Group C: PHY-SGD-5
TUESDAY 31-03-2026	PHY-19 LGIS Topic: Bleeding Disorders Fac: Prof. Dr. Saadia Zainab	PHARMA-2 LGIS Topic: Coagulation modifying drug Fac: Dr. Salma Salim	PHY-20 LGIS Topic: Thrombotic Disorders Fac: Prof. Dr. Saadia Zainab	Group-B: PHY Practical-5 Group-C: PATHO: Blood bank Visit Group-A: Histo Practical-4	Group-B: ANT SGD-4 Group-C: BIO-SGD-4 Group A: PHY-SGD-5
WEDNESDAY 01-04-2026	PHY-21 LGIS Topic: Blood Grouping Fac: Prof. Dr. Saadia Zainab	PRIME-1 LGIS Topic: Attention and Concentration Fac: Prof. Dr. Fazaila Sabih	C. MED. 3 LGIS Topic: Epidemiology of blood borne disease-I Fac: Prof. Dr. Abrar Hussain	Group-C: PHY Practical-5 Group-A: PATHO: Blood bank Visit Group-B: Histo Practical-4	Group-C: ANT SGD-4 Group-A: BIO-SGD-4 Group B: PHY-SGD-5
THURSDAY 02-04-2026	PRIME-2 LGIS Topic: Emotional Intelligence Fac: Dr. Sabeen Islam	C. MED. 4 LGIS Topic: Epidemiology of blood borne disease-II Fac: Prof. Dr. Abrar Hussain	PHY-22 LGIS Topic: Transfusion reactions Fac: Prof. Dr. Saadia Zainab	*Group-C: BIO Practical-2 *Group-A: PYH-Practical-3 *Group-B: Histo Practical-2	*Group-C: ANT SGD-2 *Group-A: SDL *Group B: PHY SGD-3
FRIDAY 3-04-2026	PHY-23 LGIS Topic: Erythroblastosis fetalis Fac: Prof. Dr. Saadia Zainab	PHY-24 Revision LGIS Fac: Dr. Barkat Ullah Khan Awan	PHY-25 LGIS Topic: Major histocompatibility complex Fac: Prof. Dr. Saadia Zainab	11:30 AM - 12:00 PM SDL	
SGDs/DSLs			Practical		
*ANT SGD-2 Topic: Spleen *PHY SGD-3 Topic: Immunity ANT SGD-4 Topic: Tonsils BIO-SGD-4 Topic: Haematimetrics PHY SGD-5 Topic: Erythroblastosis Fetalis			PATHO: Field visit (Blood bank) ANT (Histo) Practical-4 Topic: Tonsils PYH-Practical-5 Topic: ABO blood grouping + BT/ CT + Coagulation profile *BIO Practical-2 Topic: Haemoglobin Estimation *ANT (Histo) Practical-2 Topic: Spleen *PYH Practical-3 Topic: Haemoglobin concentration + DLC		
Dr. M Junaid Khan Department of Medical Education			Principal Brig(R) Prof. Dr. Abdul Halim		

12. For inquiry and troubleshooting



Please contact
DME

13. Course Feedback Form

Course Title: _____

Semester/Module _____

Dates: _____

Please fill the short questionnaire to make the course better.

Please respond below with 1, 2, 3, 4 or 5, where 1 and 5 are explained.

THE DESIGN OF THE MODLUE

- | | | | |
|--|----------------------------|----------------------------|--------------------------|
| A. Were objectives of the course clear to you? | Y ☐ | N ☐ | |
| B. The course contents met with your expectations | | | ☐ |
| 1. Strongly disagree | | 5. Strongly agree | |
| C. The lecture sequence was well-planned | | | ☐ |
| 1. Strongly disagree | | 5. Strongly agree | |
| D. The contents were illustrated with | | | ☐ |
| 1. Too few examples | | 5. Adequate examples | |
| E. The level of the course was | | | ☐ |
| 1. Too low | | 5. Too high | |
| F. The course contents compared with your expectations | | | ☐ |
| 1. Too theoretical | | 5. Too empirical | |
| G. The course exposed you to new knowledge and practices | | | ☐ |
| 1. Strongly disagree | | 5. Strongly agree | |
| H. Will you recommend this course to your colleagues? | | | ☐ |
| 1. Not at all | | 5. Very strongly | |

THE CONDUCT OF THE MODLUE

- | | | | |
|--|----------------------------|----------------------------|--------------------------|
| A. The lectures were clear and easy to understand | | | ☐ |
| 1. Strongly disagree | | 5. Strongly agree | |
| B. The teaching aids were effectively used | | | ☐ |
| 1. Strongly disagree | | 5. Strongly agree | |
| C. The course material handed out was adequate | | | ☐ |
| 1. Strongly disagree | | 5. Strongly agree | |
| D. The instructors encouraged interaction and were helpful | | | ☐ |
| 1. Strongly disagree | | 5. Strongly agree | |
| E. Were objectives of the course realized? | Y ☐ | N ☐ | |

F. 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!!

14. SCAN TO SUBMIT END OF MODULE FEEDBACK

Will be shared separately

15. Students Diary/Notes

[illegible]

PROGRESS: _____

ACHIEVEMENT: _____