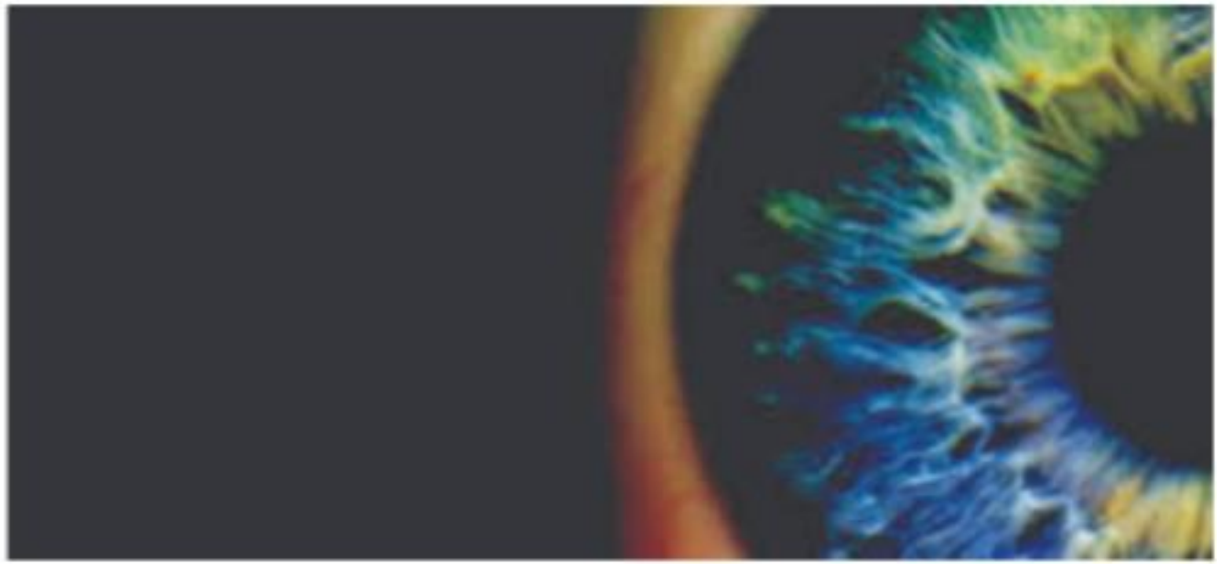
Rawalpindi Medical University
Department of Ophthalmology
Integrated clinical oriented modular curriculum
4th year MBBS- 2025/26



Rawalpindi Medical University
Department of Ophthalmology
Integrated Modular Curriculum
4th year MBBS

	Rawalpindi Medical University			
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Prepared By	Reviewed By	Approved By
Department Of Ophthalmology	Curriculum Committee	Vice Chancellor

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Document Revision History

Author(s)	Date	Version	Description
Dean HOD ophthalmology Prof Fuad Niazi, Prof Naeem, Dr Maria, Dr Omaima	2017-2018	1st	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Ophthalmology, Community Medicine, Pathology & Pharmacology.
Dean HOD ophthalmology Prof Fuad Niazi, Prof Naeem, Dr Maria, Dr Omaima	2019-2020	2nd	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Ophthalmology, Community Medicine, Pathology & Pharmacology.
Dean HOD ophthalmology Prof Fuad Niazi, Prof Naeem, Dr Maria, Dr Omaima	2021-2022	3rd	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Ophthalmology, Community Medicine, Pathology & Pharmacology. Research and bioethics curriculum incorporated
Dean HOD ophthalmology Prof Fuad Niazi, Dr Arshad Sabir, Dr Sidra Jabeen, Dr Imrana, Dr Omaima	2022-2023	4th	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Ophthalmology, Community Medicine, Pathology & Pharmacology. Research and bioethics curriculum incorporated
Dean HOD ophthalmology Prof Fuad Niazi, Dr Arshad Sabir, Dr Sidra Jabeen, Dr Mehwish Riaz, Dr Omaima	2023-2024	5th	Developed for fourth Year MBBS. Composed of Horizontally Integrated subjects of Ophthalmology, Community Medicine, Pathology & Pharmacology. Research, bioethics and family medicine curriculum incorporated

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Contents

1. University Moto, Vision, Values& Goals

RMU Motto

Mission Statement

To impart evidence-based research-oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

Vision and Values

Highly recognized and accredited centre of excellence in Medical Education, using evidence-based training techniques for development of highly competent health professionals, who are lifelong experiential learner and are socially accountable.

Goals of the Undergraduate Integrated Modular Curriculum

The Undergraduate Integrated Learning Program is geared to provide you with quality medical education in an environment designed to:

- Provide thorough grounding in the basic theoretical concepts under pinning the practice of medicine.
- Develop and polish the skills required for providing medical services at all levels of the Healthcare delivery system.
- Help you attain and maintain the highest possible levels of ethical and professional conduct in your future life.
- Kindle a spirit of inquiry and acquisition of knowledge to help you attain personal and professional growth & excellence.

Preamble

This curriculum is according to the standards set by following organizations.

1. Foundation for Advancement of International Medical Education and Research (FAIMER)
2. Accreditation Council for Graduate Medical Education (ACGME)
3. World Federation for Medical Education (WFME)
4. Undergraduate Education Policy 2023 from Higher Education Commission (HEC)
5. Pakistan Medical and Dental Council (PMDC) guidelines for undergraduate Medical Education Curriculum (MBBS) 2022

It is based on **SPICES** model of educational strategies which is student centered, problem based, integrated, community oriented and systematic.*

Teacher centered	→	Student centered	S
Information oriented	→	Problem based	P
Discipline based	→	Integrated	I
Hospital based	→	Community based	C
Standardized curriculum	→	Elective programs	E
Opportunistic	→	Systematic	S

*Harden, R. M., Sowden, S., & Dunn, W. R. (1984). Educational strategies in curriculum development: The SPICES model. Medical Education, 18, 284-297. http://dx.doi.org/10.1111/j.1365-2923.1984.tb01024.x

Reference Documents

FAIMER™
A Division of Intealth

Foundation for Advancement of International Medical Educatio
and Research

https://search.wdoms.org/?_gl=1*b2ddww*_ga*MTQyNTAwNzIxMi4xNzA2ODEwNjcx*_ga_R5BJZG5EYE*MTcwNjgzNjg3Ni4yLjAuMTcwNjgzNjg3Ni4wLjAuMA.

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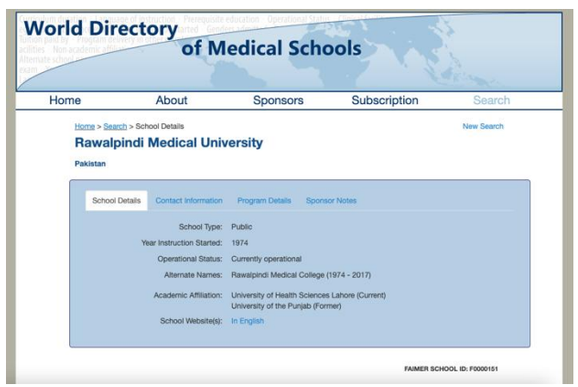
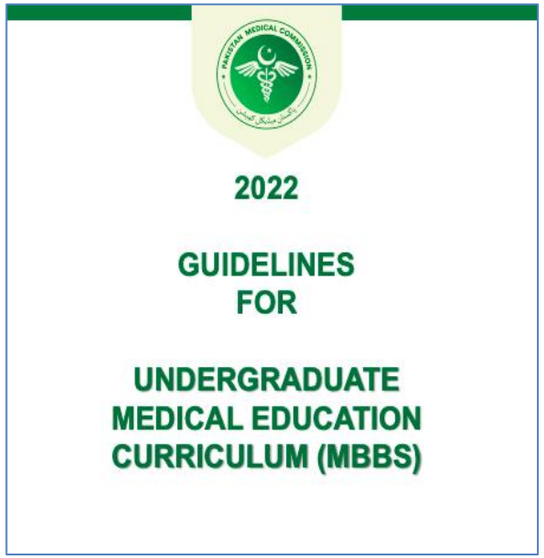
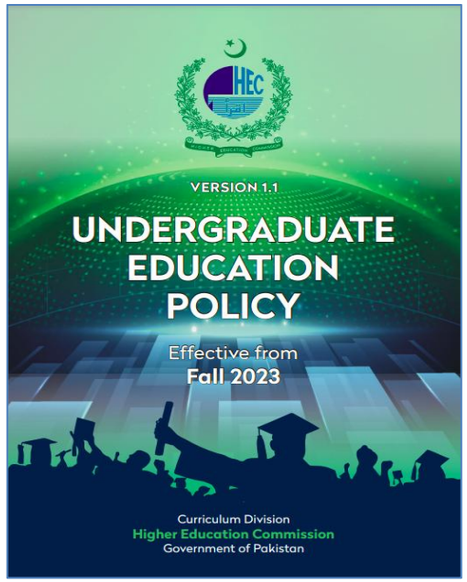
https://wfme.org/wp-content/uploads/2020/12/WFME-BME-Standards-2020.pdf







https://pmc.gov.pk/Documents/Examinations/Guidelines%20for%20Undergraduate%20Medical%20Education%20Curriculum%20(MBBS).pdf

https://www.hec.gov.pk/english/services/students/UEP/Documents/UGE-Policy.pdf

According to Pakistan Medical and Dental Council (PMDC) guidelines for undergraduate Medical Education Curriculum (MBBS) 2022

Seven star doctor

Skillful	Knowledgeable
Community health promoter	Critical thinker

Professional
Leader and role model

Scholar

Skillful (Clinical, Cognitive and Patient Care Skills)

Takes a focused history

Perform physical and psychological examination

Formulates a provisional diagnosis

Orders appropriate investigations

Performs various common procedures

Debates, formulates management plans

Manages time and prioritizes tasks

Ensures patient safety.

Advises and counsels, educates, recognizes and takes in to consideration issues of equality

Describes and debates the reasons for the success or failures of various approaches

Knowledgeable (Scientific Knowledge for Good Medical Practice)

Differentiates, relates, applies and ensures knowledge is gained.

Community Health Promoter (Knowledge of Population Health and Healthcare Systems)

Understands their role and be able to take appropriate action

Determinants of health impact on the community

Takes appropriate action for infectious non-communicable disease and injury prevention

Evaluates national and global trends in morbidity and mortality

Works as an effective member of health care team

Adopts a multidisciplinary approach for health promotion

Applies the basics of health systems

Makes decisions for health care.

Critical thinker (Problem Solving and Reflective Practice)

Use of information Critical data evaluation Dealing effectively with complexity, uncertainty and probability

Regular reflection on their practice Initiating participating in or adopting to change,

flexibility and problem solving approach Commitment to quality assurance,

Raising concerns about public risks and patient safety.

Professional (Behavior and Professionalism)

Life long, self-directed learner Demonstrates continuous learning

Seeks peer feedback Manages information effectively

Provides evidence of continuing career advancement Functions effectively as a mentor and a trainer,

responds positively to appraisals and feedback Altruistic and empathetic

Ethical, Collaborator, Communicator.

Scholar and Researcher

a. Identifies a researchable problem and critically reviews the literature

b. Phrases succinct research questions and formulates hypotheses

c. Identifies the appropriate research design(s) in epidemiology and analytical tests in biostatistics to answer the research question.

d. Collects, analyzes and evaluates data, and presents results.

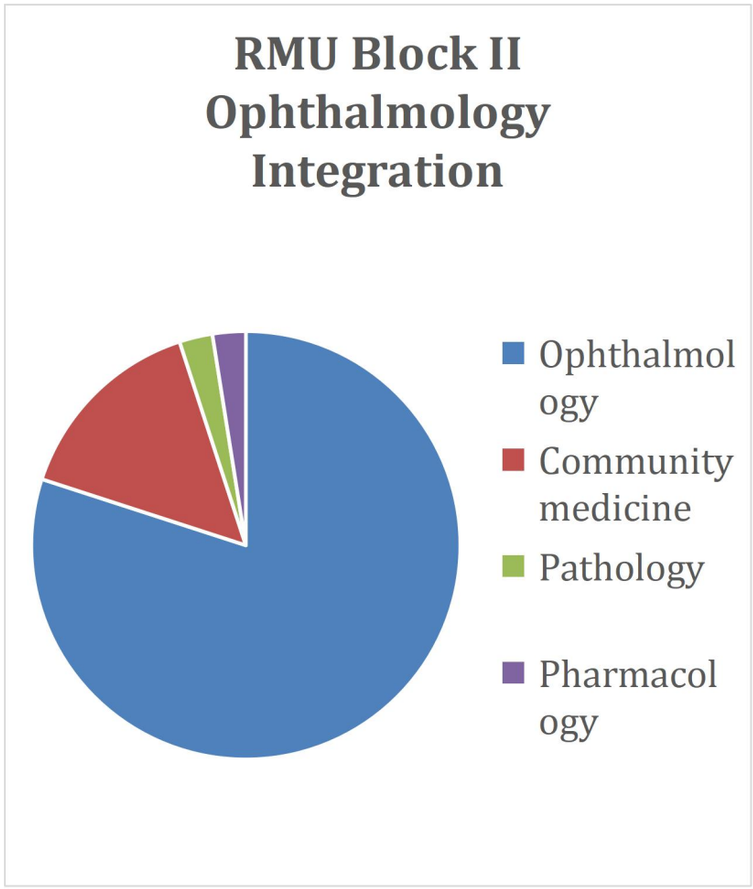
e. Demonstrates ethics in conducting research and in ownership of intellectual property.

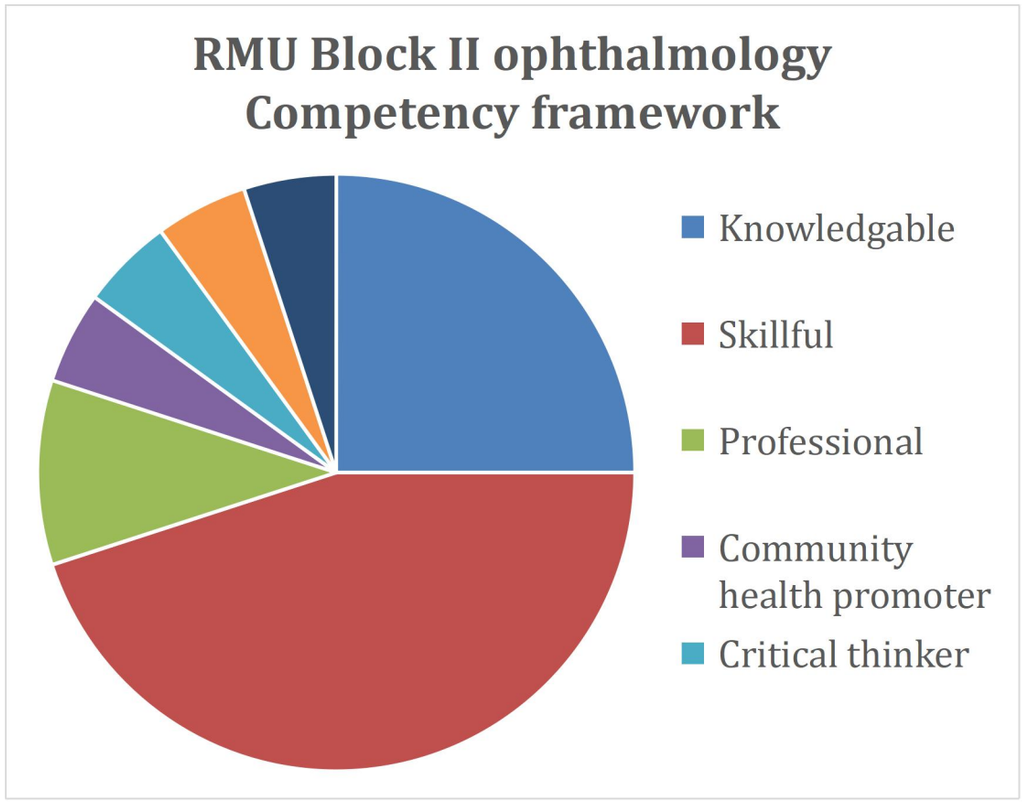
Leader and Role Model

Demonstrates exemplary conduct and leadership potential in a. advancing healthcare b. enhancing medical education c. initiating, participating in and adapting to change, using scientific evidence and approaches d. Enhancing the trust of the public in the medical profession by being exceptional role model at work and also when away e. accepting leadership roles f. Providing leadership in issues concerning society.

- Appreciate concepts & importance of
    - **Research**
    - **Biomedical ethics**
    - **Family medicine**
    - **Artificial Intelligence**

This module will run in 6 weeks duration. The content will be covered through introduction of topics. Instructional strategies are given in the time table and learning objectives aregiven in the study guides. Study guides will be uploaded on the university website.


RMU Block II Ophthalmology Integration
Ophthalmology
Community medicine
Pathology
Pharmacology


RMU Block II ophthalmology Competency framework
Knowledgable
Skillful
Professional
Community health promoter
Critical thinker

Ophthalmology Module (6 WEEKS)

Ophthalmology system- based module, as part of an outcome- based, integrated curriculum keeping in view the approach suggested by Harden.

Curriculum partially represents constructivist perspective and partially behavioral perspective. Behavioral approach begins with educational plans that start with the setting of goals or objectives. These are the important elements in curriculum implementation, as evaluating the learning outcomes will mean the change in behavior. The change of behavior indicates the measure of the achievement.

Constructivist approach leads to learning that proceeds in spiraling fashion including laddering, scaffolding, weaving, and dialogism. The utilization of constructivism in educational settings has been shown to promote higher-order thinking skills such as problem-solving and critical thinking. Students will construct their new knowledge based on what they already know. This knowledge will be used in purposeful activities like making judgments and decisions.

1. Ophthalmology Module Team

Module Name: Ophthalmology Module

Module Committee		
1.	Vice Chancellor RMU Prof. Dr. Muhammad Umar	Prof. Dr. Muhammad Umar (SI)
2.	Director DME Prof. Dr. Rai Muhammad	Prof. Dr. Rai Muhammad Asghar
3.	Convener Curriculum	Prof. Dr. Naeem Akhter
4.	Dean Basic Sciences	Prof. Dr. Ayesha Yousaf
5.	Additional Director DME	Prof. Dr. Ifra Saeed
6.	Chairperson Ophthalmology	Prof Fuad Ahmad Khan Niazi
7.	Chairperson Community Medicine	Prof. Dr. Rozina Shahadat Khan
8.	Focal Person Ophthalmology	Dr. Sidra Jabeen
9.	Focal Person Community Medicine	Dr. Mehwish Riaz

Module Task force team		
1.	Coordinator	Dr. Sidra Jabeen (Associate Pprofessor Ophthalmology)
2.	DME focal person	Dr. Maryam Batool
DME implementation Task Force		
1.	Director DME	Prof. Dr. Rai Muhammad Asghar
2.	Add. Director DME	Prof. Dr. Ifra Saeed
3.	Deputy Director	Dr
4.	Module planner & Implementation coordinator	Dr. Omaima Asif
5,	Editor	Dr. Omaima Asif

Prepared by
Dr. Sidra Jabeen
Assistant Professor Ophthalmology department
Rawalpindi Medical University, Rawalpindi

2. Ophthalmology Module

. **Introduction:** Ophthalmology module provides integration of core concepts that underlie the foundation of basic sciences and their use in clinical medicine. This will eventually lead to develop critical thinking for integration and application of basic knowledge for clinical application.

Rationale: The module is designed to impart basic knowledge about ophthalmic pathology, pharmacology, Community Medicine, bioethics, Research, Medicine& Surgery. This knowledge will serve as a base on which the student will construct further knowledge about the etiology, pathogenesis and prevention of diseases; the principles of their therapeutics and management

Module Outcomes
Each student will be able to:

Knowledge

Acquire knowledge about the basic terminologies used in Pharmacology, Pathology & Forensic Medicine as well as the concepts of diseases in the community

- Usetechnologybasedmedicaleducationincluding**ArtificialIntelligence.**
- Appreciate concepts & importance of **Family Medicine, Biomedical Ethics, Artificial intelligence and Research.**

Skills

Interpret and analyze various practicals of Pre-clinical Sciences

Attitude

- Demonstrate a **professional attitude, team building** spirit and **good communication skills**

This module will run in 5weeks duration. The content will be covered through introduction of topics. Instructional strategies are given in the time table and learning bjectives are given in the study guides. Study guides will be uploaded on the university website. Good luck!

3. Section I-Terms &Abbreviations

Contents

Tables & Figures

Table1.Domains of learning according to Blooms Taxonomy

Sr. #	Abbreviation	Domains of learning
1.	C	**Cognitive Domain:** knowledge and mental skills.
	● C1	Remembering
	● C2	Understanding
	● C3	Applying
	● C4	Analyzing
	● C5	Evaluating
	● C6	Creating
2.	P	**Psychomotor Domain:** motors kills.
	● P1	Imitation
	● P2	Manipulation
	● P3	Precision
	● P4	Articulation
	● P5	Naturalization
3.	A	**Affective Domain:** feelings, values, dispositions, attitudes, etc
	● A1	Receive
	● A2	Respond
	● A3	Value
	● A4	Organize
	● A5	Internalize

4. Teaching and Learning Methodologies/Strategies

a. Large Group Interactive Session (LGIS)

The large group interactive session is structured format of Prof Umar Model of Integrated lecture. It will be followed for delivery of all LGIS. Lecturer will introduce a topic or common clinical condition and explains the underlying phenomena through questions, pictures, videos of patients, interviews and exercises, etc. Students are actively involved in the learning process.

Figure1. Prof Umar's Eye of Integrated Lecture

b. **Small Group Discussion:** This format helps students to clarify concepts acquire skills and attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics or power point presentations. Students exchange opinions and apply knowledge gained from lectures, SGDs and self-study. The facilitator role is to ask Probing questions, summarize and helps to clarify the concepts.

Table 2. Standardization of teaching content in Small Group Discussions

S.No	Topics	Approximate%
1	Title Of SGD	
2	Learning Objectives From Study Guides	
3	Horizontal Integration	5%+5%=10%
4	Core Concepts of the Topic	60%
5	Vertical Integration	20%
6	Related Advance Research points	3%
7	Related Ethical points	2%

Table 3. Steps of taking Small Group discussions

Step1	Sharing of Learning objectives by using students Study guides	First 5 minutes
Step2	Asking students pre-planned questions from previous teaching session to develop co-relation (these questions will be standardized)	5minutes
Step3	Students divided into groups of three and allocation of learning Objectives	5minutes
Step4	ACTIVITY: Students will discuss the learning objectives among Themselves	15minutes
Step5	Each group of students will present its learning objectives	20min
Step6	Discussion of learning content in the main group	30min
Step7	Clarification of concept by the facilitator by asking structured questions from learning content	15min
Step8	Questions on core concepts	
Step9	Questions on horizontal integration	
Step10	Questions on vertical integration	
Step11	Questions on related research article	
Step12	Questions on related ethics content	
Step13	Students Assessment on online M. Steams (5MCQs)	5min
Step14	Summarization of main points by the facilitator	5min

c. Self-Directed Learning (SDL)

Self-directed learning is a process where students take primary charge of planning, continuing and evaluating their learning experiences.

Time Home assignment

Learning objectives will be defined

Learning resources will be given to students=Textbook (page no), website

Assessment: Will be online on LMS (Mid module/end of Module)

OSPE station

d. Case Based Learning (CBL)

It's a learner centered model which engages students in discussion of specific scenarios that resemble typically are real world examples.

Case scenario will be given to the students

Will engage students in discussion of specific scenarios that resemble or typically are real-world examples.

Learning objectives will be given to the students and will be based on

i. To provide students with an opportunity to see theory in practice

ii. Require students to analyze data in order to reach a conclusion, develop analytic, communicative and collaborative skills along with content knowledge.

5. Title: Ophthalmology Module

a. AN OVERVIEW OF THE MODULE TEACHING AND LEARNING / ASSESSMENT ACTIVITIES OF DEPARTMENT OF OPHTHALMOLOGY

Teaching and Learning Strategies Teaching Staff / Human Resource

Sr. #	Designation of Teaching Staff/ Human Resources	Total number of teaching staff	Total number of lectures LGIS	Faculty Hours Breakup	Total Faculty Hours
1	Professor of Ophthalmology	Prof. Dr. Fuad Ahmad Khan Niazi	9	9 Hours (LGIS) 1 Hours (CBD) 1 Hours (SDL) 7 Hours (Assessment) 25 Hours (Clinical Teaching)	43 Hours
2	Associate Professor of Ophthalmology	Dr. Sidra Jabeen Dr. Ambreen Gul	10	10 Hours (LGIS) 1 Hours (CBD) 1 Hours (SDL) 7 Hours (Assessment) 25 Hours (Clinical Teaching)	40 Hours
3	Senior Registrars	Dr. Saira Bano Dr. Maria Waqas Dr. Fatima Sidra Dr Wajeeha Rasool Dr Salman Tariq Dr Rafaaq Saleem	13	13 Hours (LGIS) 1 Hours (CBD) 1 Hours (SDL) 7 Hours (Assessment) 18 Hours (Clinical Teaching)	40 Hours
4	Post Graduate Residents	26	0	0	

Hours Calculation of various type of Teaching Strategies

Sr. #	Hours Calculation for Various Type of Teaching Strategies	Total Hours
1	Large Group Interactive Session (LECTURES)	**1-hour x 18 = 18 Hrs** **45 mins x 11 = 8 Hrs 15 mins** **Total = 26 Hrs 15mins**
2	Self-Directed Learning (SDL)	**2-hour x 7= 14Hrs**
3	Case Based Discussion (CBD)	**1-hour x 6 = 6 Hrs** **1 hour 45 mins x 2 = 3 Hrs 30 mins** **45 mins * 1 = 45 mins** **Total = 10 Hrs 15 mins**

6. LEARNING OBJECTIVES (LO) OF SELF-DIRECTED LEARNING (SDL) FOR OPHTHALMOLOGY MODULE:

GENERAL LEARNING OBJECTIVES OF SELF-DIRECTED LEARNING:

1. Encourages students to learn more effectively.
2. Inspires curiosity and motivates further discovery.
3. Boosts self-esteem.
4. Strengthens problem solving skills.
5. Learning at a comfortable pace.
6. Improves time management skills.
7. Encouraging students to learn from textbooks.
8. Learn to take initiative and act upon goals
9. Role in cognitive development (critical thinking, trial and error analysis)

Sr. #	Topic of SDL	Learning objectives At the end of this session, students will be able to	Assessment		References
			LMS	Modular exams	
1	Fungal Keratitis	● Describe the Signs and Symptoms of fungal keratitis ● Describe its Pathophysiology ● Discuss the Investigations required ● Describe its treatment plan	MCQ	MCQ, SEQ OSPE	● Kanski's Clinical Ophthalmology 9th edition Chapter 7, Page # 216 - 218 ● Clinical Ophthalmology by Shafi M. Jatoi 5th edition Chapter 8, Page # 90-92 https://eyewiki.aao.org/Fungal_Keratitis
2	Congenital Glaucoma	● Describe the Signs of symptoms of Congenital Glaucoma ● Enumerate the Differential diagnosis of watering in neonates ● Discuss its Clinical evaluation in pediatric group ● Explain the principles of its Management	MCQ	MCQ, SEQ OSPE	● Kanski's Clinical Ophthalmology 9th edition Chapter 11, Page # 395 - 398 ● Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 11, Page # 156-159 https://www.aao.org/webinar-detail/primary-secondary-surgery-congenital-glaucoma

3	Steroid induced Glaucoma	• Describe the pathophysiology of steroid induced glaucoma • Enlist the types of steroids causing glaucoma and their route of administration • Know about steroid responders • Discuss the different treatment options	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 11, Page # 388 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 11, Page # 155 https://doi.org/10.1016/j.survophthal.2020.01.002
4	Recurrent anterior uveitis	• Enlist its systemic associations • Describe its signs and symptoms • Explain the systemic and ocular investigations to be done • Describe the management of this case.	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 12, Page # 424 - 442 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 12, Page # 165 - 168 https://doi.org/10.1016/j.ajo.2008.11.009
5	Ophthalmic manifestations of DM	• Explain the different presentations of DM in eye • Enlist the risk factors for DR • Enlist the complications of DR • Describe the management of different manifestations	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 13, Page # 496 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 15, Page # 191 - 197 DOI:10.1177/1474651411428950
6	Strabismus and Amblyopia	• Define amblyopia • Relationship between strabismus and amblyopia • Enlist the different types of squint • Describe, how will they assess a patient of squint • Describe its Management.	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 18, Page # 707 - 708 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 22, Page # 282 - 283 https://aapos.org/glossary/amblyopia
7	Complications of Cataract surgery	• Enlist types of cataract surgery • Describe its Pre op and post op complications • Describe the management of	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 10, Page # 325 - 335 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 10, Page # 128 -

		complications			131https://eyewiki.aao.org/Cataract_Surgery_Complications
8	Approach to Leukocoria	• Enlist the differential diagnosis of Leukocoria • Discuss different sight and life threating conditions • Describe its clinical evaluation and investigations • Describe its management plan	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 20, Page # 864 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 10, Page # 117 https://www.aao.org/eyenet/article/stepwise-approach-to-leukocoria
9	Idiopathic intracranial hypertension	• Describe its Signs and symptoms • Enlist its differential diagnosis • Discuss the role of Lumber puncture and MRI • Describe its management plan	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 19, Page # 769 - 770 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition Chapter 16, Page # 223 - 225 https://doi.org/10.1016/S1474-4422(06)70442-2

7. Learning Objectives of Case-Based Discussion (CBD) Ophthalmology Module:

Sr. #	Topic of SDL	Learning objectives. At the end of this session, students will be able to:	Weeks	Assessment		References
				LMS	Modular exams	
1.	A middle-aged farmer with painful red eye after vegetative trauma	• Enlist the causes of keratitis, C2 • Classify keratitis and enlist sign and symptoms of keratitis. C2 • Discuss the clinical examination including the different stains used for staining the corneal ulcers C1 • Describe the treatment of corneal ulcers C2 • Explain the contact lens related keratitis with its management C2	1st weeks	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition, Chapter 7, Page # 216 – 218 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition, Chapter 8, Page # 90-92 • https://eyewiki.aao.org/Fungal_Keratitis

2.	An infant presenting with photophobia, excessive lacrimation and blepharospasm	• Define congenital glaucoma? C1 • Enumerate different types of secondary glaucoma? C3 • Describe clinical features of congenital glaucoma? C2 • Discuss treatment options? C2	2nd weeks	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 11, Page # 395 - 398 • Clinical Ophthalmology by ShafiM.Jatoi 5th edition • Chapter 11, Page # 156-159 https://www.aao.org/webinar-detail/primary-secondary-surgery-congenital-glaucoma
3.	A 50yrs old male patient with gradual painless loss of vision.	• Recall anatomy of Lens C1 • Define cataract C1 • Enlist classification of cataract, C1 • Discuss the clinical examination with investigations to diagnose cataract. C2 • Explain the principles of management of cataract. C2 • Enlist indications, types and complications of cataract surgery C3	2nd Weeks	MCQ	MCQ, SEQ OSPE	MCQ, SEQ OSPE

4.	A teenage male with recurrent painful red eye which gets better after treatment	• Recall anatomy of Conjunctiva C1 • Enlist common causes, sign and symptoms of conjunctivitis C2 • Diagnose infective and allergic conjunctivitis. C3 • Discuss the management of conjunctival eye problems C3	3rd Weeks	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 20, Page # 167 – 200 • https://www.aao.org/eye-health/symptoms/red-eye-3
5.	4yrs old child with intermittent inwards deviation of both eyes for last 6 months	• Define strabismus C2 • Classify strabismus C2 • Outline examination and investigation of strabismus Enlist different surgical procedures of squint C2	3rd Weeks	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 20, Page # 697 - 743 • https://www.aao.org/eye-health/disease/strabismus-in-children

6.	A middle aged obese female with complain of headache and bilateral disc swelling	• Recall anatomy and pathway of Optic nerve C1 • Know the Clinical Features of optic neuritis, papilledema C2 • Demonstrate the Indications of neuroimaging, visual evoked potential and visual fields. C2	4th Weeks	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 20, Page # 745 – 825 • https://eyewiki.aao.org/Demyelinating_Optic_neuritis
7.	6 months old infant with white pupillary reflex since birth.	• Discuss Leukocoria (white pupillary reflex) its differential diagnosis. C2 • Describe Retinoblastoma, its clinical presentation and management. C2 • Explain congenital cataract, presentation and management. C2 • Enumerate retinopathy of prematurity, persistent hypertensive, primary vitreous, coats diseases. C2	5th Weeks	MCQ	MCQ, SEQ OSPE	• Kanski's Clinical Ophthalmology 9th edition Chapter 20, Page # 864 • Clinical Ophthalmology by Shafi M.Jatoi 5th edition, Chapter 10, Page # 117 https://www.aao.org/eyenet/article/stepwise-approach-to-leukocoria

8. Learning Objectives of Ophthalmology Block II/ Module- I

Topic/ theme	Content	Learning outcome By the end of lecture students should be able to	Learning Domain	Teaching Strategies	Assessment Tools
Eyelids/ adnexa	• Blepharitis • Ptosis • Non neoplastic and neoplastic lid mass • Ectropion/ entropion • Ophthalmia neonatorum	• Recall anatomy of Eye lid • Distinguish between inflammatory, benign and malignant neoplastic disorders of eyelid. • Discuss the pathophysiology, microscopic features and diagnostic features of neoplasms of eyelid • Differentiate between malignant and benign neoplasms of eyelid • Describe the pathologies causing eyelid/eyelash malposition like Trichiasis, ectropion, entropion and ptosis • Diagnose and manage ophthalmia neonatorum	C1 C2 C2 C2 C2 C3	LGIS	MCQs SAQs SEQs EMQs VIVA
Conjunctiva	• Infective conjunctivitis • Allergic conjunctivitis • Degenerative conjunctival disorders • Dry eye syndrome	• Recall anatomy of Conjunctiva • Enlist common causes, sign and symptoms of conjunctivitis • Diagnose infective and allergic conjunctivitis. • Discuss the management of common conjunctival pathologies • Diagnose and manage Dry Eye, • Discuss pathology of Conjunctival degenerations (Pterygium, pinguecula, concretions)	C1 C2 C3 C3 C2 C1	LGIS	MCQs SAQs SEQs EMQs VIVA

Cornea	• Corneal ulcers; diagnosis and management • Keratoconus • Corneal dystrophies • Keratoplasty	• Enlist the causes of keratitis, • Classify keratitis and enlist sign and symptoms of keratitis. • Discuss the clinical examination including the different stains used for staining the corneal ulcers • Describe the treatment of corneal ulcers • Discuss the pathology of contact lens related keratitis with its management • Discuss pathophysiology of band keratopathies ,keratoconus , fuchs endothelial and stromal dystrophies • Enlist the surgical steps and complications of keratoplasty	C2 C2 C1 C2 C2 C2 C1	LGIS	MCQs SAQs SEQs EMQs VIVA
Refractive errors/ refractive surgery	• Hypermetropia • Myopia • Astigmatism • Presbyopia • Refractive surgery	• Diagnose and manage various refractive errors • Enlist the surgical options and steps for refractive surgery and discuss its complications	C2 C2	LGIS	MCQs SAQs SEQs EMQs VIVA
Uveal tissue	• Uveitis workup and management • Anterior uveitis- acute and chronic • Complications of uveitis and its treatment	• Classify different types of uveitis • Enlist the causes and systemic associations • Identify Clinical Features • Enumerate the complications of uveitis and its treatments • Describe basic principles of management of Uveitis	C1 C1 C2 C1 C2	LGIS	MCQs SAQs SEQs EMQs VIVA

9. Learning Objectives of Ophthalmology Block II/ Module- I

Topic/ theme	Content	Learning outcome By the end of lecture students should be able to	Learning Domain	Teaching Strategies	Assessment Tools
Orbit	• Proptosis • Orbital/ preseptal cellulitis • Thyroid eye disease	• Enlist the causes of Proptosis • Describe clinical features of Thyroid Eye Disease • Discuss management of Thyroid Eye Disease • Describe the pathophysiology of orbital cellulitis. • Describe the etiology of orbital cellulitis • Outline the differences between orbital and preseptal cellulitis • Identify sight threatening complications of orbital cellulitis	C2 C3 C3 C2 C1 C2 C3	LGIS	MCQs SAQs SEQs EMQs VIVA
Lens	• Cataract; clinical features and management • Different types of cataract surgeries and their complications • Ectopia lentis; diagnosis and management	• Define cataract • Classify cataract • Explain the principles of management of cataract. • Summarize possible complications of cataract surgery • Identify ectopia lentis and its causes	C2 C2 C3 C3 C2	LGIS	MCQs SAQs SEQs EMQs VIVA

Lacrimal drainage system	• Congenital NLDO • Acute and Chronic dacryocystitis	• Describe anatomy of lacrimal system • Enlist causes of epiphora • Identify clinical features of congenital and acquired nasolacrimal duct obstruction? • Differentiate between acute and chronic dacryocystitis • Discuss investigations and treatment options of congenital and acquired nasolacrimal duct obstruction	C2 C1 C3 C3 C2	LGIS	MCQs SAQs SEQs EMQs VIVA
Retina	• Retinal vascular disorders; DR, CRAO, CRVO • Retinal dystrophies/ degenerations; RP, AMD, myopic retinal degeneration • Retinal detachment • Ophthalmic lasers • Anti VEGF • Pars plana vitrectomy	• Discuss diagnosis and management of common retinal vascular disorders such as Diabetic retinopathy, CRVO, CRAO, CRVO, AMD • Discuss common retinal dystrophies/ degenerations such as Retinitis pigmentosa, AMD, Myopic retinopathy • Outline diagnosis ad management of different types of retinal detachment • Enlist common treatment options, their indications and complications like anti VEGF, retinal laser and PPV	C2 C2 C2 C3	LGIS	MCQs SAQs SEQs EMQs VIVA
Ocular tumors	• Retinoblastoma • Rhabdomyosarcoma • Haemangiomas • Neurofibroma	• Identify common types of ocular tumors • Discuss clinical presentation and diagnosis of common ocular tumors • Outline their treatment options	C1 C2 C3	LGIS	MCQs SAQs SEQs EMQs VIVA
Glaucoma	• Primary open angle glaucoma • Angle closure glaucoma • Secondary glaucoma • Congenital glaucoma	• Classify glaucoma • Identify clinical features of congenital glaucoma • Describe treatment options of congenital glaucoma • Differentiate between primary open angle and closed angle glaucoma • Describe treatment options for open and closed angle glaucoma • Identify secondary glaucoma • Enumerate different types of secondary glaucoma • Describe clinical features of different types of secondary glaucoma	C1 C2 C2 C2 C2 C1 C1 C2	LGIS	MCQs SAQs SEQs EMQs VIVA

		• Discuss treatment options of different types of secondary glaucoma	C2		
	• Systemic medications: Steroids, amiodarone • Systemic diseases:	• Enlist Ocular effects of systemic diseases • Identify the systemic drugs causing ocular side effects • Identify the signs and symptoms if side effects	C1 C2 C2	LGIS	MCQs SAQs SEQs EMQs VIVA
Trauma	• Chemical injury • Blunt ocular trauma • Penetrating ocular trauma • Blow out fracture • Hyphema	• Describe the findings, Grading and Treatment of Chemical injuries • Classify the different types of trauma • Discuss clinical features of Penetrating ocular trauma • Describe management of Penetrating Ocular trauma • Discuss clinical features of Blunt Orbital trauma and Blow out fracture	C2 C1 C2 C3 C2	LGIS	MCQs SAQs SEQs EMQs VIVA
Neuro ophthalmology	• Ocular motor cranial nerve palsies • Optic neuropathies/ neuritis • Pupillary abnormalities such as RAPD, light near dissociation • Efferent pupillary disorders such as Horner's syndrome, adies pupil • Visual field defects • Papilledema • Neuroimaging	• Describe the neuroanatomy of the visual pathways. • Describe the anatomy and functions of cranial nerves 2-7 • Illustrate the pupillary light and accommodation reflex pathway • Describe ocular motility and related neuronal pathways. • Interpret the typical findings and evaluation of the most common visual field defects (e.g., optic nerve, optic chiasm, optic radiation, occipital cortex). • Describe a systematic, sign-and-symptom-oriented neuro-ophthalmic patient • Recall anatomy and pathway of Optic nerve • Know the Clinical Features of cranial nerve palsies and Facial spasm • Discuss the typical features, evaluation, and management of the most common ocular motor neuropathies (e.g., third, fourth, sixth nerve palsy)	C1 C2 C2 C3 C1 C2 C2 C2 C2	LGIS	MCQs SAQs SEQs EMQs VIVA

		• Describe the typical features, evaluation, and management of the most common efferent Pupillary abnormalities (e.g., Horner syndrome, third nerve palsy, tonic pupil, light-near dissociation). • Recall anatomy and pathway of Optic nerve • Know the Clinical Features of optic neuritis, papilledema • Demonstrate the Indications of neuroimaging, visual evoked potential and visual fields.	C1 C2 C2 C3		
Pediatric ophthalmology	• Congenital cataract • ROP • PHPV • Coats disease	• Discuss Leukocoria (white pupillary reflex) and its differential diagnosis. • Explain Congenital cataract; presentation, diagnosis and management.	C2 C2	LGIS	MCQs SAQs SEQs EMQs VIVA
Strabismus	• Esotropia • Exotropia • Amblyopia; causes and management • Principles of strabismus management; surgical and non surgical	• Define & classify strabismus • Differentiate between pseudo strabismus and strabismus • Enlist causes of strabismus • Outline examination and investigation of strabismus • Diagnose, classify and manage amblyopia • Enlist different surgical procedures for management of squint	C2 C2 C1 C2 C2 C1	LGIS	MCQs SAQs SEQs EMQs VIVA

CONTENT OF COMMUNITY MEDICINE
COMMUNITY MEDICINE LARGE GROUP INTERACTIVE SESSION (LGIS)

Topic	At the end of the lecture student should be able to	Learning domain	Teaching strategies	Assessment tools
Introduction of Biostatistics	• Comprehend the relevance of descriptive biostatistics to epidemiological research • Explain principles of descriptive analysis of data. • Perform simple data analysis including quantitative & qualitative data • Perform cross-tabulation between two categorical binomial variables • Define inferential statistics • Explain the role of inferential statistics in health research decision making • Describe concept of generalization of results to the population • Explain the concept of standard error and confidence interval • Calculate confidence interval and its interpretation.	C2 C2 C3 C3 C1 C2 C2 C2 C3	**LGIS**	MCQs SAQs SEQs EMQs VIVA
Hypothesis testing	• Elaborate the concept of hypothesis testing • Explain role of statistical test of significance in hypothesis testing • Enlist the steps of hypothesis testing • Appreciate the concept of Level of significance • Interpret p-value in published research results • Enable to interpret the Probability distribution chart • Appreciate the Concepts of degree of freedom • Calculate the degree of freedom in different tests of significance.	C2 C2 C1 C2 C3 C3 C2 C3	**LGIS**	MCQs SAQs SEQs EMQs VIVA
Test of significance (t, z & chi-square tests)	• Appreciate the concepts of Parametric and non-parametric tests • Differentiate between One tail and two tail tests • Understand the concept of Z test & T test • Apply student t-test for computing difference between 2 means and interpret the results • Elaborate types of t-tests	C2 C2 C2 C3 C2	**LGIS**	MCQs SAQs SEQs EMQs VIVA

	• Differentiate between one sample, independent and paired t tests • Enlist the steps of hypothesis testing • Elaborate the types of chi square test • Perform hypothesis testing by applying chi-square test • Interpret the results of chi-square test • Elaborate fisher's exact test	C2 C1 C2 C3 C3 C2		
Correlation/ regression & ANOVA	• Explain principles of correlation and regression analysis with examples • Draw & interpret scatter diagrams with respect to the types of correlation • Apply ANOVA for comparison of means in more than 2 groups • Differentiate between one way and two-way ANOVA for a given data • Choose different tests for relevant data (decision tree)	C2 C3 C3 C2 C2	**LGIS**	MCQs SAQs SEQs EMQs VIVA
Concepts of Screening	• Explain Iceberg phenomenon of diseases with examples • Discuss aims and objectives of screening • Enlist Criteria for screening of diseases & screening tests • Comprehend uses & types of screening with examples • State differences between screening test and diagnostic tests. • Describe rationale of screening tests with reference to natural history of disease and critical point. • Construct2x2table from given data. • Explain measures of validity of screening tests.	C2 C1 C1, C2 C1, C2 C1, C2 C1, C2 C2 C3 C2	**LGIS**	MCQs SAQs SEQs EMQs VIVA
Interpretation of Screening test	• Calculate and interpret sensitivity & specificity of screening test from given data • Calculate and interpret Positive predictive value& Negative predictive value of screening test from given data • Explain yield of screening tests. • Discuss measures used to evaluate screening tests & program • Discuss problems of borderline with emphasis on cut-off point decision	C3 C3 C1 C2 C3	**LGIS**	MCQs SAQs SEQs EMQs VIVA
Concept of Health education	• Define health communication and understand its types. • Explain role of sender, receiver, feedback and content of health message • Explains Shannon Weaver communication model • Appreciate communication barriers • Explain various functions of health communication	C1 C2 C2 C3 C2	**LGIS**	MCQs SAQs SEQs EMQs VIVA
Models and approaches of Health education	• Recognize different models of health education • Understand the scope /contents of health education • Explain different approaches of health education	C2 C2 C1	**LGIS**	MCQs SAQs SEQs EMQs VIVA

	• Appraise the concept of propaganda	C2		
Principles and practices of Health education	• Explain principles of health education • Appraise different ways of practice of health education • Understand social marketing • Comprehend CHC message development protocol	C1 C2 C2 C2	**LGIS**	MCQs SAQs SEQs EMQs VIVA
Prevention and control of Blindness, accidents & injuries in population	• Describe epidemiology of blindness • Describe patterns of preventable blindness in the community • Recommend approaches to prevention of blindness in the community • Categorize different types of accidents • Describe risk factors involved in accidents • Recommend different preventive strategies for accident controls	C2 C1 C3 C1 C2 C3	**LGIS**	MCQs SAQs SEQs EMQs VIVA
Primary Health care	• Understand primary healthcare • Conceptualize 'health for all' and Alma Ata declaration • Appraise the elements, principles and strategy of Primary Health Care • Outline the challenges that contributed to evolution of PHC	C2 C2 C2 C1	**LGIS**	MCQs SAQs SEQs EMQs VIVA
MDGs, SDGs	• Explain the millennium development goals (MDGs) • Appraise sustainable development goals (SDGs) and their origins • Difference between MDGs and SDGs • Comprehend how SDGs might affect overall health as a global priority in the future • Understand universal health coverage	C2 C2 C2 C2 C1	**LGIS**	MCQs SAQs SEQs EMQs VIVA
Hospital Waste Management	• Explains Healthcare waste • Categorize risk and non-risk waste • Explain health hazards of health care waste • Describe waste management system, team • Describe the disposal / treatment technologies for health care waste	C2 C3 C2 C1 C2	**LGIS**	MCQs SAQs SEQs EMQs VIVA
Planning & Management	• Define Health Planning • Identify the aim and objectives of planning • Understand rationale of planning • Comprehend different phases of planning • Appreciate the various steps of planning cycle • Appreciate various management techniques	C1 C1 C1 C1 C2 C2	**LGIS**	MCQs SAQs SEQs EMQs VIVA
HMIS-Health Management Information System	• Define HMIS • Difference between data and information • Enlist components & features of HMIS • Discuss essential elements & functions of HMIS	C1 C2 C1 C1	**LGIS**	MCQs SAQs SEQs EMQs VIVA

	• Describe steps in developing HMIS • Discuss various sources of health information	C2 C2		
Hospital Administration	• Define hospital • Explain development of hospital as an institution • Appreciate types & functions of hospitals • Understand hospital statistics • Identify factors influencing hospital utilization • Understand the role of hospital administrator	C1 C2 C2 C2 C2 C1	**LGIS**	MCQs SAQs SEQs EMQs VIVA

SMALL (SGDS) **GROUP DISCUSSION**

Topic	At the end of the lecture student should be able to	C/P/A	Teaching strategy	Assessment tools
Health for all-2000	• Understand primary health care • Conceptualize 'health for all' and Alma Ata declaration • Appraise the elements, principles and strategy of PHC • Appraise Recent proceedings of Alma-Ata as Astana declaration	C2 C2 C2 C2	SGD	MCQs SAQs SEQs EMQs VIVA
Surface infections	• Describe the epidemiology of surface infections • Identify the risk factors of surface infections • Recommend the preventive & control measures for surface infections • Appraise the working of Punjab Aids Control Program	C2 C2 C3 C3	SGD	MCQs SAQs SEQs EMQs VIVA
Disinfection	• Differentiate between disinfection & sterilization • Enlist properties of an ideal disinfectant • Explain different types of disinfection • Describe various important types of agents (natural, physical and chemical) used as disinfectants	C1 C1 C2 C2	SGD	MCQs SAQs SEQs EMQs VIVA

COMMUNITY MEDICINE SELF DIRECTED LEARNING (SDL)

Topic	Learning objectives	References
Health planning& management (Evaluation of health services)	• Explain 7 steps of evaluation. • Comprehend elements of evaluation.	K Park text book of preventive & social Medicine 26th edition (882-3)
Communication for health education	• Apprise among three models of health education. • Explain steps of planning for Health education. • Differentiate six stages of transtheoretical model of change	• K Park text book of preventive & social Medicine 26th Edition (Chapter 19, 859, 867) • Maxcy-Rosenau-Last Public health & preventive medicine (15th Edi Chapter53)
Emporiatrics	• Define Emporiatrics • Enlist health risks related to travel • Define Role of health physician in Emporiatrics • Enlist Recommended vaccines for travellers	K Park textbook of preventive & social Medicine, 26th Edition, Chapter 5
Geriatrics	• Differentiate between geriatrics and gerontology • Explain the public health importance of geriatrics • Enlist common health and other problems related to old age • Recommend preventive, rehabilitative measures for older age health problems required to be adopted in travel • Knowledge of high-risk group of travelers • Appreciate the role of health physicians in giving health advise to travelers	K Park textbook of preventive & social Medicine, 26th Edition Chapter 10
Surface-Infection HIV / AIDS a Global pandemic	• Describe lab findings & their significance with HIV infection. • Classify WHO recommended ARV treatments guidelines / regimens.	K Park textbook of preventive & social Medicine 26th Edition Chapter 5

BASIC AND CLINICAL SCIENCES (SPIRAL INTEGRATION)

Content Organization

- **Spiral Integration**
    - Biomedical Ethics & Professionalism
    - Family Medicine
    - Behavioral Sciences
    - Integrated Undergraduate Research Curriculum (IUGRC)

LARGE GROUP INTERACTIVE SESSIONS (LGIS) BIOETHICS & PROFESSIONALISM

Topic	Learning Objectives	Learning Domain	Teaching Strategy	Assessment Tools
Research and publication ethics	• Demonstrate understanding of different types of "Plagiarism" and "scientific misconduct" as ways of lying, stealing or Cheating related to research and publication • Describe the concept of intellectual property" in reference to research ideas, medical writing, proposals, data, publication Identify issues related to authorship criteria for scientific journals • Describe the Authorship criteria according to ICMJE Guidelines • Identify potential sources of unethical conduct in dissemination of research such as plagiarism, fabrication of data, duplicate publication and gift authorships.	C3	LGIS	MCQs SEQs SAQs Standard matching

Topic	Learning Objectives	Teaching Strategy	Assessment Tools
Data collection	• Compile & interpret study data • Make observable improvements or changes in data collection skills & behaviors if required • Record take measures to address logistic issues reported like lack of equipment ,facilities ,need assessment for prior data collection training , poor quality assurance, language barriers , systematic errors • Address ethical concerns of study if any	PAL	Manuscript submission at SJRMC
Descriptive analysis of collected data	• Make variables on computer • Feed data under variables on computers • Summarize data on computer including text, tabulations & graphics • Perform Descriptive analysis of data on computer • Run SPSS	PAL	Manuscript submission at SJRMC

Human Resource of Department of Community Medicine

Sr.no.	Designation	Total number of teaching staff
1	Professor	01
2	Associate professor	02
3	Assistant professor	04
4	Demonstrators	05
5	PGTs	07

DETAIL OF CONTACT HOURS COMMUNITY MEDICINE (FACULTY &STUDENTS)
RANKING OF THE CONTENT OF COMMUNITY MEDICINE

CATEGORY A**	**CATEGORY B****	**CATEGORY C****		
LGIS	**LGIS**	**SGD**	**SDL**	**PAL**
Health education(3 lectures)	Development of questionnaire (1 lecture)	Hfa 2000	Health planning and management	Data collection
Screening (2 lectures)	Epidemiology of blindness, accidents and injuries (1 lecture)	Control of surface infections	Communication for health education	Descriptive analysis
Biostatistics (4 lectures)	Hospital waste management (1 lecture)	Disinfection	Emporiatrics	
HMIS (1 lecture)			Geriatrics	
Primary health care (1 lecture)			Surface-infection Hiv / aids a global pandemic	

** category A: fundamental & complex concepts taken by Professors, Associate professors and Assistant professors
**category B: intermediate concepts. Exercises. By professorial faculty and senior demonstrators/ subject specialists.
**category C: relatively lower complex concepts, exercises/ applications. By assistant professors, demonstrators & senior PGTs)

DETAILS OF CONTACT HOURS STUDENTS & FACULTY

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty) Hrs. x class x session	Total Hours (Students)	Faculty level
1	LGIS (17). 1hrs each session (half class sessions)	1x2 x 17= 28 hrs.	17	Professor, associate, and assistant professors
2	SGD (3) approx. 2hrs each session. 1/4class	3x4 x 2= 24 hrs.	6	Demos (subject specialists), Senior PGTs
3	PAL (IUGRC) (2) approx. 2hrs per session. (16 small group sessions).	2x 16x2 =64hrs.	4	Demos (subject specialists) supervised by senior faculties
4	SDL (5)	5 x 1 =5 hrs.	5	Demos (subject specialists)
		Total: 83hrs	24 hrs	

Community Medicine Faculty Wise Lectures Allocation

Sr no	Faculty nominated	No of lectures
1.	Prof Rozina Shahadat Khan	03
2	(Assc Prof) Dr. Khola Noreen	04
3	(Assc Prof) Dr. Sana Bilal	03
4	(Asst Prof) Dr. Afifa Kalsoom	03
5	Asst Prof) Dr Farah Parvaiz	04
6	(Asst Prof) Dr Mehwish Riaz	04
7	(APMO) Dr. Imrana Saeed	04
8	(Sr Demo) Dr. Asif Maqsood Butt (SGD &LGIS)	06
9	(APMO)Dr Narjis Zaidi	05
10	(Sr demo) Dr Abdul Qudoos (SGD &LGIS)	05
11	(Sr demo) Dr Mehjabeen	04

TIME TABLE

Integrated Clinically Oriented Modular Curriculum for Fourth Year MBBS

Faculty	Prof. Dr Fuad Ahmad Khan Niazi Dr. Ambreen Gul (Associate Professor) Dr. Sidra Jabeen (Associate Professor) Dr.Saira Bano (Senior Registrar) Dr. Maria Zubair (Senior Registrar) Dr. Wajeeha Rasool (Senior Registrar) Dr. Fatima Sidra Tanveer (Senior Registrar) Dr. Salman Tariq (Senior Registrar) Dr Rafaaq Saleem (Senior Registrar)
Teaching Strategy	LGIS SDL CBD
Lecture Sites	All Lectures in Lecture hall 1 / 2 From Monday till Thursday All Lectures in Lecture hall 4 / 5 Friday and Saturday EVEN BATCH IN LECTURE HALL 2 AND 4 ODD BATCH IN LECTURE HALL 1 AND 5
List of Recommended books	Kanski's Clinical Ophthalmology 9th edition Parsons' Diseases of the Eye 23rd edition Basic Ophthalmology by Renu Jogi 4th ed. Clinical Ophthalmology by Shafi M. Jatoi 5th edition Comprehensive Ophthalmology by Dr. Nasir Chaudhary
Assessment Strategies	MCQs EMQ SEQs SAQ OSPE OSCE OSVE

Categorization of Modular Content of Ophthalmology

Category A **Professor Fuad Ahmad khan**	Category B Associate Professors	Category C Senior Registrar
Lens; 1. Cataract- diagnosis and management 2. cataract Surgery and its complications, 3. Ectopia Lentis	Dr Sidra Jabeen Strabismus; 1. Squint diagnosis and assessment 2. Squint Management Eyelids; 3. eyelid tumors and infections 4. anomalies of eyelid position Pediatric Ophthalmology 5. ROP, RB and congenital cataract	1. Conjunctival Disorders – 1 2. Conjunctival Disorders – 2 3. Dry eye Syndrome 4. Lacrimal Drainage system
trauma 4. blunt ocular trauma 5. penetrating ocular trauma	**Dr Ambreen Gul** Cornea; 1. corneal Ulcer 2. Corneal Dystrophies. Uvea 3. Uveitis- diagnosis and management 4. complications of Uveitis Glaucoma; 5. Approach to Glaucoma, 6. Open and Closed Angle Glaucoma, 7. Secondary Glaucoma	5.visual pathway 6.3rd, 4th, 6th cranial nerve palsies 7. optic neuropathies 8. Lacrimal System
Retina; 6. Retinal Vascular Disorders, 7. Retinal Detachment. 8. acquired macular disorders		1. Refractive errors 2. Scleritis/ episcleritis

Block II(Ophthalmology)
- Module I
3 Weeks

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK

TENTATIVE TIME TABLE 4th YEAR MBBS – (EYE) Module I 2025 (1st WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am		10:30am – 12:00pm 12:00pm - 01:00pm		
Monday 14-4-2025	Pathology (LGIS)	EYE (LGIS)	BREAK 10:00AM – 10:30AM	Clinical Clerkship Annexure -1 (Complete 6 weeks rotation plan attached at the end of the curriculum)		
	Neoplasms of Eyelid (Squamous Cell CA, Basal Cell CA) Prof. Dr. Mobina Ahsan Dhody/ Dr. Mudassara Zahid Lect hall 1/ 2	Eyelid and Eyelash Disorder -1 Dr. Wajeeha Rasool/ Dr Fatima Sidra Lect hall 1/ 2				
Tuesday 15-4-2025	COMMUNITY MEDICINE (LGIS)	Eye (LGIS)				
	Concepts of screening Prof Rozina Shahadat Khan/ Dr. Sana Bilal Lect hall 1/ 2	Eyelid and Eyelash Disorder -2 Dr. Wajeeha Rasool/ Dr Fatima Sidra Lect hall 1/ 2				
Wednesday 16-4-2025	COMMUNITY MEDICINE (LGIS)	Eye (LGIS)				
	Interpretation of screening test Prof Rozina Shahadat Khan/ Dr. Sana Bilal Lect hall 1/ 2	Refractive Errors Dr. Humera Fawad/ dr Maria Lect hall 1/2				
Thursday 17-4-2025	Community Medicine (LGIS)	EYE (LGIS)				
	Concepts of health education Dr Khola Noreen/ Dr Afifa Kulsoom Lect hall ½	Lens-1 Prof. Dr. Fuad/ Dr Sidra Jabeen Lect hall 1/ 2				
Friday 18-4-2025	8:00AM- 9:45AM	09:45AM – 10:30	10:30AM – 11:15AM	11:15AM – 12:00PM		
	Community Medicine/ pathology (SGD)	Ophthalmology LGIS	Community Medicine (LGIS)	Pharma (LGIS)		
	Data Collection, Skills Behavior, Logistics and Field Issues (All Senior Faculty and Demonstrators) Non neoplastic lesions of eyelids Dr Fatima/ dr mahjabeen/ dr mehreen/ dr Iqbal	Lens-2 Prof. Dr. Fuad/ Dr Sidra Jabeen Lect hall 4/ 5	Development of questionnaire (LGIS) Dr. Afifa Kulsoom/Dr Mehwish Riaz Lect hall 4/5	Ophthalmic Dosage Forms of Drugs Dr. Zunaira/ Dr zufishan Lect hall 4/5		
Saturday 19-4-2025	08:00AM – 09:45AM	09:45AM – 10:40AM	10:40AM – 11:30AM	1130- 1200	12:00 PM- 1:00PM	01:00PM – 02:00PM
	Community Medicine/ pathology (SGD)	Community Medicine (LGIS)	Ophthalmology (LGIS)		Community medicine (LGIS)	Ophthalmology (LGIS)
	Data Collection, Skills Behavior, Logistics and Field Issues (All Senior Faculty and Demonstrators)	Models and approaches of Health Education Dr. Khola Noreen /Dr. Mehwish Riaz Lect hall 4/ 5	Lens-3 Prof. Dr. Fuad/ Dr Sidra Jabeen Lect hall 4/ 5	Break	Epidemiology of Blindness, Accidents, and injuries (LGIS) Dr. Farah/Dr. Narjis Lect hall 4/5	Conjunctival Disorders – 1 Dr. Sulman/ dr Wajeeha Lect hall 4/5

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK

TENTATIVE TIME TABLE 4th YEAR MBBS – (EYE) Module I 2025

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am		10:30am – 12:00pm	12:00pm - 02:00pm
Monday 21-04-2025	**ENT End module-II exam (written+ AV OSPE)**		**BREAK 10:00AM – 10:30AM**	**Clinical Clerkship Annexure -1 (Complete 6 weeks rotation plan attached at the end of the curriculum)**	
Tuesday 22-4-2025	**ENT End Block Exam (OSCE-OSVE)**				
Wednesday 23-04-2025	**ENT End Block Exam (OSCE-OSVE)**				
Thursday 24-04-2025	**ENT End Block Exam (OSCE-OSVE)**				
Friday 25-4-2025	**08:00AM – 09:45AM**	**09:45AM – 10:30AM**	**10:30AM – 11:15AM**	**11:15AM – 12:00PM**	
	ENT End Block Exam (OSCE-OSVE)				
Saturday 26-4-2025	**8:00- 10:00**	**10:00-11:00 am**	**11:00-11:30 am**	**1130-12:300**	**12:30- 2:00 pm**
	EYE (CBD)	**EYE (LGIS)**		**Pharmacology (LGIS)**	**EYE (SDL)**
	Common ophthalmic surgeries **CPC Hall** **Dr Rafaaq**	**Conjunctival Disorders – 2** **Dr. Wajeeha/ dr Sulman** **Lect hall 4/5**	**break**	**Drugs used in Ocular Infections** **Dr. Zunaira/ Dr. Uzma** **Lect hall 4/ 5**	A 50yrs old male patient with gradual painless loss of vision. **Dr sidra jabeen**

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK

TENTATIVE TIME TABLE 4th YEAR MBBS – EYE Module I 2025 **2nd week**

DATE / DAY	8:00 AM – 9:00AM	09:00am – 10:00am	BREAK 9:30AM – 10:30AM	10:30am – 12:00pm	12:00pm - 02:00pm
Monday 28-4-2025	Community Medicine (LGIS) Introduction to Biostatistics Dr. Imrana/Dr. Mehjabeen Lect hall 1/ 2	EYE (LGIS) The Lacrimal System Dr. Fatima Sidra/ dr Wajeeha Lect hall 1/ 2		Clinical Clerkship Annexure -1 (Complete 6 weeks rotation plan attached at the end of the curriculum)	
Tuesday 29-4-2025	Dermatology LGIS Approach to a patient with Urticaria CPC hall	Eye (LGIS) Uvea – 1 Dr. Ambreen/ dr Maria Lect hall 1/ 2			
Wednesday 30-4-2025	PATHOLOGY (LGIS) Corneal and Conjunctival degenerative and neoplastic disorders Dr. Kiran/ Dr. Fatima Lect hall 1/ 2	Eye (LGIS) Uvea – 2 Dr. Ambreen/ Dr Maria Lect hall ½			
Thursday 1-5-2024	LABOR DAY HOLIDAY				

Friday 2-5-2025	08:00AM – 09:45AM		09:45AM – 10:30AM	10:30AM – 11:15AM	11:15AM – 12:00PM	
	Community Medicine (PAL) Descriptive analysis (All Senior Faculty and Demonstrators)	Pharma (SGD) ocular side effects of systemic medications	Eye (LGIS) Corneal ulcers Dr. Ambreen/ Dr wajeeha Lect hall 4/5	Eye (LGIS) Dry eyes Dr. Fatima Sidra/ dr Wajeeha Lect hall 4/5	Community Medicine (LGIS) Hospital Administration Dr. Narjis/ Dr Abdul Quddus Lect hall 4/ 5	

Saturday 3-5-2025	08:00AM – 09:45AM		9:45am-10:40am	10:40am-11:30am	11:30 – 12:00 Break	12:00 PM – 1:00PM	1:00PM – 02:00PM
	Pharma (SGD) ocular side effects of systemic medications	Community Medicine (SGD) Descriptive analysis (All Senior Faculty and Demonstrators)	Eye (LGIS) Cornea – 2 Dr. Ambreen/ Dr wajeeha Lect hall 4/5	Eye (LGIS) Refractive Surgery Prof Fuad/ Dr Ambreen Lect hal 4/ 5		Community Medicine (LGIS) Hypothesis testing Dr. Imrana/Dr. Mehjabeen Lect hall 5/4	EYE (SDL) A middle-aged farmer with painful red eye after vegetative trauma Dr Rafaaq

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK
TENTATIVE TIME TABLE 4th YEAR MBBS – (EYE) Module 1 2025 (3rd WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am		10:30am – 12:00pm	12:00pm - 02:00pm	
Monday 5-5-2025	Community Medicine (LGIS)	Eye (LGIS)	BREAK 10:00AM – 10:30AM	Clinical Clerkship Annexure -1 (Complete 6 weeks rotation plan attached at the end of the curriculum)		
	Principles and practices of Health Education Dr Khola Noreen/Dr Mehwish Riaz Lect hall 1/ 2	Cornea – 3 Dr. Ambreen/ Dr wajeeha Lect hall 1/ 2				
Tuesday 6-5-2025	Pathology (LGIS)	COMMUNITY MEDICINE (LGIS)				
	Pathology of cataract, glaucoma, intraocular infections and tumor Dr. Mobina/ Dr. Mudassara Lect hall 1/ 2	HMIS Dr Farah/ Dr. Abdul Quddus Lect hall 1/ 2				
Wednesday 7-5-2025						
	Prep. Leave for End Module 1 Examination					
Thursday 8-5-2025	8:00 AM – 10:00AM					
	End Module 1 Examination (written + AV OSPE)					

	08:00AM – 09:45AM		09:45AM – 10:30AM	10:30AM – 11:15AM	11:15AM – 12:00PM	
Friday 9-5-2025	Community medicine (SGD)	PATHOLOGY (skill lab)	EYE (LGIS)	Quran class	COMMUNITY MEDICINE (LGIS)	
	Health for All Dr Asif, Dr Mehreen,Dr Mehrish	Neoplastic lesions optic nerve Dr Nida Fatima	Strabismus 1 Dr Sidra/ Dr saira Lect hall 4/ 5	CPC hall	Hospital waste management practices Dr. Narjis/ DrAsif Lect hall 5/4	

	08:00AM – 09:45AM		09:45AM – 10:40	10:40AM – 11:30AM		12:00-1:00Pm	1:00PM – 02:00PM
Saturday 10-5-2025	PATHOLOGY (Skill lab)	Community medicine (SGD)	EYE (LGIS)	Bioethics	BREAK 11:30AM – 12:00PM	Dermatology (LGIS)	EYE(SDL)
	Neoplastic lesions optic nerve Dr Nida Fatima	Health for All Dr Asif, Dr Mehreen,Dr Mehrish	Strabismus 2 Dr Sidra/ Dr saira Lect hall 4/5	Research and publication ethics Prof Rozina Shahadat Khan / Dr Sana bilal Lect hall 5/ 4		An approach to a pt. with Cutaneous Leishamniasis or Leprosy Dr. Shahwana CPC hall	6 months old infant with white pupillary reflex since birth. Dr saira

Ophthalmology Module II/ Block – II

3 Weeks

TENTATIVE TIME TABLE 4th YEAR MBBS – (EYE) Module II 2025 (4th WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am	10:30am – 12:00pm	12:00pm - 02:00pm		
Monday 12-5-2025	EYE (LGIS) Orbit – 1 Dr. Maria/ dr Sulman Lect hall 1/ 2	EYE (LGIS) Ocular Tumors Dr sulman/ Dr Fatima Even/Lect hall 1/ 2	BREAK 10:00 – 10:30	Clinical Clerkship Annexure -1 (Complete 6 weeks rotation plan attached at the end of the curriculum)		
Tuesday 13-5-2025	COMMUNITY MEDICINE (LGIS) Primary Health Care Dr. Mehwish/ Dr. Afifa Lect hall 1/ 2	EYE (LGIS) Orbit – 2 Dr. Maria/ dr Sulman Lect hall 1/ 2				
Wednesday 14-05-2025	COMMUNITY MEDICINE (LGIS) Test of significance (t, z & chi-square tests) Dr Imrana / Dr Mehjabeen Lect Hall 1/2	Eye (LGIS) Pupillary disorder Dr Fatima/ Dr sulman Lect hall 1/ 2				
Thursday 15-5-2025	Quran Class	Eye (LGIS) Diabetic Retinopathy Prof. Dr. Fuad/ dr Saira Bano Lect hall 1/ 2				
Friday 16-05-2025	08:00AM – 09:45AM Community medicine/ Pathology (SGD) Disinfection Dr Abdul Quddus/Dr Aisha / Dr Maria Pathophysiology and manifestation of systemic diseases in eye Dr mudassira/ dr unaiza/ dr Ayesha/ dr faiza	09:45AM – 10:30 Eye (LGIS) Retinal vascular disorders Prof. Dr. Fuad/ dr Saira Bano Lect hall 4/ 5	10:30AM – 11:15AM Eye (LGIS) Visual pathway disorders Dr. Fatima/ Dr Sulman Lect hall 4/ 5	11:15AM – 12:00PM Eye (LGIS) Open angle Glaucoma Dr. Ambreen/ dr Saira Lect hall 4/ 5		
Saturday 17-05-2025	08:00AM – 09:45am Community Medicine/ PATHOLOGY (SGD) Disinfection Dr Abdul Quddus/Dr Aisha / Dr Maria Pathophysiology and manifestation of systemic diseases in eye Dr mudassira/ dr unaiza/ dr Ayesha/ dr faiza	09:45AM – 10:40 Eye (LGIS) Retinal detachment Prof. Dr. Fuad/ dr Saira Bano Lect hall 4/ 5	10:400AM – 11:30AM Pharma (LGIS) Drugs used in glaucoma Dr attiya/ dr hasiba Lect hall 4/ 5	BREAK 11:30AM – 12:00PM	12:00PM- 1:00PM Community medicine (LGIS) Health Planning and Management Dr. Narjis/ Dr. Asif Lect hall 4/5	12:30PM – 01:00PM- 02:00PM Dermatology (LGIS) An approach to a pt. with Nail Disorders. Dr. Shahwana CPC hall

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am	10:30am – 11:00pm	11:00pm - 02:00pm
Monday 19-05-2025	EYE (LGIS) Secondary Glaucoma Dr. Ambreen/ dr Saira Lect hall 1/ 2	Eye (LGIS) Optic neuritis Dr. Fatima/ Dr Sulman Lect hall 1/ 2		**Clinical Clerkship** **Annexure -1** **(Complete 6 weeks rotation plan attached at the end of the curriculum)**
Tuesday 20-05-2025	Dermatology (LGIS) An approach to a pt. with bullous disorders Dr Shawana CPC hall	EYE (LGIS) Angle closure Glaucoma Dr. Ambreen/ dr Saira Lect hall 1/ 2		
Wednesday 21-05-2025	Community medicine (LGIS) Correlation , regression and ANOVA Dr Imrana / Dr Mehjabeen Lect Hall 1/ 2	Eye (LGIS) 3rd, 4th, 6th and 7th Cranial nerve palsies Dr. Fatima/ Dr Sulman Lect hall 1/ 2		
Thursday 22-05-2025	Eye (LGIS) Pediatric Ophthalmology Dr. Sidra Jabeen/ Dr Saira Bano Lect hall 1/ 2	Eye (LGIS) Penetrating Ocular Trauma Prof. Dr. Fuad/ Dr Ambreen Lect hall 1/ 2		

Friday 23-05-2025	08:00AM – 09:45AM		09:45AM – 10:30AM	10:30AM – 11:15AM	11:15AM – 12:00PM
	Community Medicine (SGD) Control of surface infections Dr Asif/Dr Bushra / dr saba	Pathology (SGD) Pathophysiology and manifestation of systemic diseases in eye Dr mudassara/ dr faiza/ dr Ayesha/ dr unaiza	EYE (LGIS) Systemic Diseases affecting Eye Dr. Wajeeha/ Dr Sulman Lect hall 4/ 5	Eye (LGIS) Blunt Ocular Trauma Prof. Dr. Fuad/ Dr Ambreen Lect hall 4/ 5	Eye (LGIS) Ophthalmic lasers Dr maria/ dr sulman Lect hall 4/ 5

Saturday 24-05-2025	08:00AM – 09:45AM		09:45AM – 10:40AM	10:40AM – 11:40AM	BREAK 11:40AM – 12:00pM	12:00AM – 1:00PM	1:00PM-2:00PM
	Pathology (SGD) Pathophysiology and manifestation of systemic diseases in eye Dr mudassara/ dr faiza/ dr Ayesha/ dr unaiza	Community Medicine (SGD) Control of surface infections Dr Asif/Dr Bushra / dr saba	EYE (LGIS) Ocular complications of systemic medications Dr Wajeeha/ Dr Sulman Lect Hall 4/5	Dermatology (LGIS) An approach to a pt. with Lichen Planus Dr Shawana CPC hall		Pathology LGIS Optic neuropathies, retinal detachment, retinal vascular disease Dr.Fatima/ Dr. Kiran Fatima Lect hall 4/5	Community medicine (LGIS) Millennium Development Goals & Sustainable Development Goals Dr. Asif / Dr. Narjis Lect hall 4/ 5

RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK

TENTATIVE TIME TABLE 4th YEAR MBBS – (EYE) 2025 - (6th WEEK)

DATE / DAY	8:00 AM – 9:00 AM	09:00am – 10:00am		10:30am – 12:00pm	12:00pm - 02:00pm
Monday 26-05-2025	**End module-II exam (written+ AV OSPE)**		**BREAK 10:00AM – 10:30AM**	**Clinical Clerkship Annexure -1 (Complete 6 weeks rotation plan attached at the end of the curriculum)**	
Tuesday 27-5-2025	**End Block Exam (OSCE-OSVE)**				
Wednesday 28-05-2025	**End Block Exam (OSCE-OSVE)**				
Thursday 29-05-2025	**End Block Exam (OSCE-OSVE)**				
	08:00AM – 09:45AM	**09:45AM – 10:30AM**	**10:30AM – 11:15AM**	**11:15AM – 12:00PM**	
Friday 30-5-2025	**End Block Exam (OSCE-OSVE)**				
Saturday 31-5-2025	**End block examination (LMS)**				

10. Clinical curriculum

DURATION: 06 weeks

RATIONALE:

Eyes are one of the highly developed sensory organs of human body. Although disorders of eye are commonly encountered in medical practice woefully it is neglected very badly in our undergraduate teaching system. Millions of people are permanently losing their eyesight due to poor diagnosis and inappropriate treatment. Integrated modular system will help to produce a 7 star PM&DC doctor.
Our aim of teaching this module is to have a medical graduate who is aware of the community eye health problems, has a sound knowledge and is able to understand and solve the common problems of eye such as conjunctivitis, cataract, glaucoma, retinal diseases, and errors of refraction and involvement of eyes in systemic disorders. These are some conditions that can be reduce morbidity if properly diagnosed and timely managed.

EDUCATIONAL ENVIRONMENT:

Medical school is a habitat with many components, complex dynamics and interactions, inevitable conflicts and is constantly evolving. To facilitate healthy educational environment for 4th year medical students peer to peer interaction of students and with the faculty will be encouraged. Transfer of knowledge, skills and attitude will be in Wards, operation theatres and clinics. All these measures will enhance the learning capacity of students.

Learning Outcomes:

To **Learning Objectives**

By the end of the 6-week ophthalmology clerkship, you should be able to:

1. Conduct a focused history and ophthalmic examination.
2. Identify common ophthalmic conditions.
3. Perform and interpret essential ophthalmic examinations under supervision.
4. Identify Ophthalmologic Emergencies and Indications for Referral
5. Apply ethical principles and effective communication in patient care.
6. Participate in team-based management and patient education.
7. Gain Exposure to Ophthalmic Surgical Techniques
8. Administer informed consent to patients undergoing surgical procedures

Clinical Skills/ competencies Required

Keyword/Topic	Competency Description
Common Ocular Conditions	Identify and describe common ocular conditions, along with their treatment and management strategies.

History Taking and Case Presentation	Take a detailed and comprehensive ophthalmic history. Present patient cases in a structured and professional format.
Vision Assessment	Demonstrate the steps for assessing visual acuity, including distance, near vision, colour vision, and pinhole testing.
Pupil Examination	Perform a thorough examination of pupils, including anisocoria, hetrochromia, light and near reflex
Slit Lamp Examination	Demonstrate the correct use of the slit lamp for evaluating the anterior segment of the eye, including lids, cornea, and iris.
Direct Ophthalmoscopy	Perform direct ophthalmoscopy to examine the optic disc, macula, and retinal vessels.
Extraocular Movements	Examine uniocular and binocular extraocular movements and interpret findings related to ocular alignment and motility.
Ophthalmologic Emergencies	Recognize common ophthalmic emergencies, describe their clinical features, and determine the need for urgent referral.
Patient Counselling and Education	Counsel patients effectively regarding common conditions such as cataracts, including obtaining informed consent in a simulated environment.
Surgical Exposure	Observe ophthalmic surgical procedures to gain an understanding of surgical techniques, patient preparation, and teamwork.
Preoperative Patient Preparation	Demonstrate the steps of preoperative preparation, including patient education, hygiene, and administration of pre-surgical medications.
Practical Skills in a Simulated Environment	Eyedrop instillation, lacrimal regurgitation techniques and biometry in a simulated setting.

Entrustable Professional Activities (EPA) Framework for Undergraduate Ophthalmology Clinical Clerkship

EPA	Description	Key Competencies	Assessment Methods	Expected Level of Entrustment
1. Perform a Basic Ophthalmic Assessment	Obtain a focused history and perform essential eye examinations, including visual acuity, pupil reflexes, and anterior segment examination.	- Communication skills for history taking - Psychomotor skills for examinations - Basic knowledge of normal/abnormal findings	- OSCE (history taking, torchlight exam) - Faculty feedback - Logbook review	Supervised with direct guidance for performing a complete ophthalmic evaluation
2. Perform Direct Ophthalmoscopy	Conduct direct ophthalmoscopy to examine the fundus, identify abnormalities (e.g., optic disc changes, diabetic retinopathy), and correlate findings with patient symptoms.	- Psychomotor skills for handling the ophthalmoscope - Knowledge of normal and pathological fundus features	- OSCE (direct ophthalmoscopy station) - Faculty feedback - Logbook entries	Supervised with minimal guidance for identifying basic fundus abnormalities
3. Recognize and Manage Red Eye Conditions	Identify common causes of red eye, such as conjunctivitis, keratitis, and uveitis, and propose initial management strategies, including patient education.	- Critical thinking for differential diagnosis - Clinical reasoning for management - Patient communication skills	- OSCE (red eye management station) - Case-based discussions - Ward tests	Indirect supervision; can manage common red eye conditions independently but consult for complex cases
4. Counsel Patients About Cataracts	Educate patients about cataracts, including disease progression, treatment options, and postoperative	- Communication skills for patient-centered counseling - Professionalism	- OSCE (counseling station) - Faculty feedback - Reflective	Supervised with minimal guidance for structured counseling sessions

	care, addressing patient concerns empathetically.	and empathy	portfolios	
5. Identify and initiate management of Ophthalmic emergencies	Recognize critical conditions such as chemical burn, trauma, retinal detachment or central retinal artery occlusion and escalate appropriately for urgent management.	- Clinical acumen in identifying emergencies - Effective communication with the healthcare team	- OSCE - Logbook review - Case-based discussions	Supervised with direct guidance in identifying emergencies and initiating appropriate management
6. Assist in Common Ophthalmic Procedures	Observe or assist in procedures like cataract surgery or laser therapies, understanding procedural steps and ensuring aseptic techniques.	- Familiarity with instruments - Teamwork in the surgical setting - Adherence to aseptic protocols	- Logbook of observed/assisted procedures - Video interpretation of surgical steps - Supervisor feedback	Supervised with direct guidance for assisting in procedures; independently perform pre- and post-procedure patient preparation tasks

DURATION: 06 Weeks
Modules: 03(2 weeks each)

MODULE I

- **WEEK 1:**

GRADUAL PAINLESS LOSS OF VISION

WEEK 2:

OCULAR MISALLIGNMENT

MODULE II

- **WEEK 3 AND 4:**
- RED EYE

MODULE III

- **WEEK 5:**

SUDDEN PAINLESS LOSS OF VISION

WEEK 6:

ORBIT ADNEXA TRAUMA

Ophthalmology Clerkship Framework

Module I: Gradual Painless Loss of Vision & Ocular Misalignment

Week	Theme	Learning Outcomes	Competencies	Teaching Strategies	Learning Resources	Assessment Methods
1	Gradual Loss of Vision	- Establish rapport with patients while taking history and explaining disease progression. - Assess vision and examine the anterior segment. - Perform pupillary reflex examination. - Conduct basic fundus examination using a direct ophthalmoscope. - Enlist common ophthalmic instruments like those used in cataract and glaucoma surgeries. - Participate in formulating management plans for cataracts, glaucoma, and diabetic retinopathy under supervision.	- Communication Skill: Establish rapport with patients. - Clinical Examination Skill: Assess vision, anterior segment, pupils, and fundus. - Clinical Reasoning/Problem Solving: Identify common ophthalmic instruments and their applications. - Decision Making: Formulate management plans.	- Bedside teaching - Clinical exposure in OPD - Pre-reading - Recorded videos - Small group discussions (SGD)	- Textbooks: *Clinical Ophthalmology: A Systematic Approach* by Jack J. Kanski. - Videos: Recorded surgical procedures. - Clinical tools: Direct ophthalmoscope, visual acuity charts.	- MCQs and SAQs - OSCE station on direct ophthalmoscopy and counseling - Faculty feedback - Logbook review
2	Ocular Misalignment	- Establish rapport with patients while explaining alignment disorders. - Conduct basic assessment of ocular alignment. - Differentiate types of strabismus (e.g., esotropia, exotropia). - Participate in discussing treatment options for ocular misalignment.	- Communication Skill: Patient interaction and education. - Clinical Examination Skill: Assessment of ocular alignment. - Clinical Reasoning/Problem Solving: Differentiate and manage alignment disorders.	- Bedside teaching - Clinical exposure - Recorded videos - Scenarios	- Textbooks: *Strabismus and Ocular Motility* by Gunter K. von Noorden. - Clinical tools: Prism bars, synoptophore.	- Case presentations - OSCE station for alignment assessment - Logbook review

Module II: Red Eye

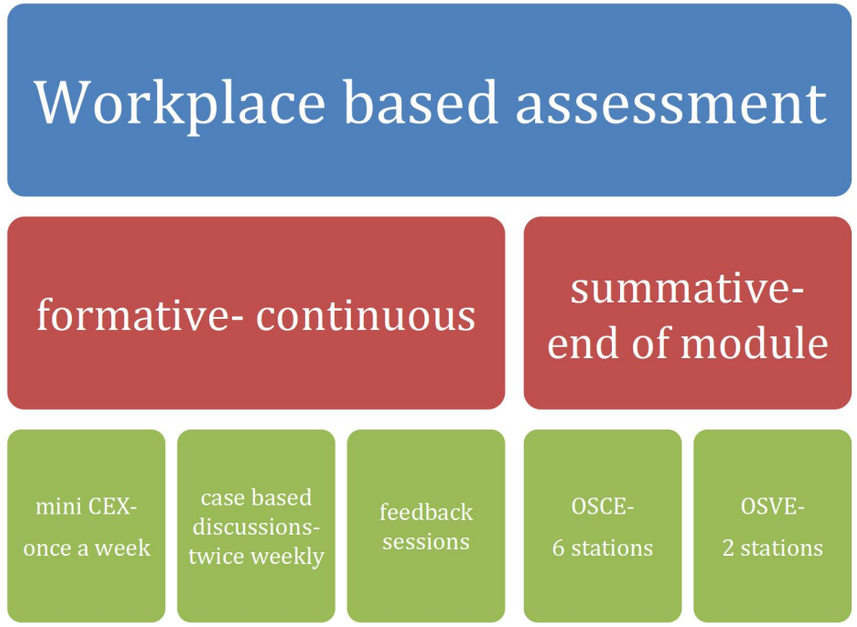
Week	Theme	Learning Outcomes	Competencies	Teaching Strategies	Learning Resources	Assessment Methods
1	Red Eye	- Differentiate between types of red eye (e.g., conjunctivitis, keratitis, uveitis). - Examine the anterior segment and assess ocular damage. - Understand management principles for red eye conditions.	- Clinical Examination Skill: Examine anterior segment and assess red eye. - Clinical Reasoning: Differentiate and manage red eye conditions.	- Clinical exposure in OPD and ward settings - Pre-reading - Small group discussions	- Textbooks: *Basic Ophthalmology for Medical Students and Primary Care Residents* by American Academy of Ophthalmology. - Videos: Red eye clinical cases. - Clinical tools: Slit-lamp, fluorescein strips.	- MCQs and SAQs on red eye - OSCE station for slit-lamp examination - Logbook review
2	Red Eye	- Establish rapport with patients and educate them about red eye prevention. - Examine the anterior segment for signs of trauma-related damage. - Understand the role of medical ethics in managing red eye conditions.	- Communication Skill: Patient education and ethical practice. - Clinical Examination Skill: Assess trauma-related damage.	- Bedside teaching - Recorded videos - Clinical exposure	- Articles: Case studies on red eye management. - Clinical tools: Slit-lamp, tonometer.	- Ward test - Case presentations - Faculty feedback

Module III: Sudden Painless Loss of Vision & Ocular Adnexa/Trauma

Week	Theme	Learning Outcomes	Competencies	Teaching Strategies	Learning Resources	Assessment Methods
1	Sudden Loss of Vision	- Rapidly assess visual acuity and visual fields by confrontation. - Differentiate between conditions like retinal detachment and optic neuritis. - Participate in emergency management under supervision.	- Clinical Examination Skill: Perform rapid visual assessments. - Clinical Reasoning/Problem Solving: Differentiate and manage acute vision loss.	- Bedside teaching - Emergency clinical exposure - Small group discussions	- Textbooks: *Ophthalmology Secrets in Color* by James Vander. - Videos: Emergency case simulations.	- OSCE station for emergency triage and management - Portfolio assessment
2	Trauma	- Examine ocular trauma and assess associated damage. - Observe common surgical procedures for ocular trauma. - Understand ethical considerations in trauma management.	- Clinical Examination Skill: Assess ocular trauma. - Professionalism: Ethical practice in trauma care.	- Clinical exposure in trauma settings - Recorded surgical videos - Pre-reading	- Textbooks: Trauma-focused clinical guides. - Videos: Trauma surgery cases.	- Case presentations - Logbook review - Faculty feedback

Workplace Based Assessment:

Framework



1. **Continuous Formative Assessment**

Assessment Method	Description	Timing
Case-Based discussions	Discussions involving clinical scenarios to assess clinical reasoning and decision making.	Twice a week

Mini CEX	Focused observation of clinical encounters with immediate feedback	Once a week
Feedback sessions	Dedicated time for discussing performance and identifying learning gaps.	Once a week

2. **Log book and Reflective Learning**

Logbook entries	Mandatory recording of key procedures (e.g., tonometry, visual acuity testing, slit lamp exam) with supervisor sign-off.
Record of patient interaction	Details of patient encounters, including history, examination, and learning outcomes.

3. **End of Module Assessment**

4th year MBBS students have to complete 6 weeks clinical curriculum in Ophthalmology which includes 2 weeks rotation individually in HFH, BBH and DHQ. Assessment of Psychomotor and Affective skill will be taken at the end of each fortnightly rotation in respective hospital.

Total Marks: 50

i. Ci-OSCE: 30 Marks
ii. OSVE:20 Marks

Ci-OSCE Station: 06 (5 Marks each)

OSVE Station: 02 (10 Marks each)

A. OSCE

Station No.	Content	Task Description	No. of Stations	Cognitive Level (KSA)	Skills to be Assessed	Assessment Focus
1	History Taking • Red Eye • Loss of vision(sudden/ gradual) • Abnormal appearance of eye	Take a focused history from a patient.	1	Knowledge, Skills, Attitude (KSA)	History-taking, logical reasoning	Identification of cause and associated risk factors.
2	Direct Ophthalmoscopy	Perform direct ophthalmoscopy on a dummy or model to identify fundus features.	1	Knowledge, Skills	Examination technique, interpretation	Accuracy in identifying fundus abnormalities (e.g., optic disc changes).
3	Counseling • Cataract Surgery • Ocular tumors	Counsel a patient about the risks, benefits, and postoperative care for cataract surgery.	1	Knowledge, Attitude	Communication, patient education	Empathy, clarity, and structured counseling.
4	Examination skills: • Visual Fields by Confrontation • Pupil Examination • Extraocular movements	Perform **assigned skill** based on the examiner's instruction	1	Knowledge, Skills	Examination technique, perform and interpretation	Accuracy in performing the assigned technique and identifying any abnormalities.

	• Cover/ uncover test • Torchlight Examination					
5	Ophthalmic Instruments	Identify and explain the use of common ophthalmic instruments (e.g., slit lamp, tonometer).	1	Knowledge	Instrument identification, application	Accuracy in naming instruments and explaining their clinical use.
6	Surgical Video Interpretation	Watch a short surgical video (e.g., phacoemulsification) and describe the steps involved.	1	Knowledge, Skills	Identification, procedural knowledge	Recognition of surgical steps and their relevance.

B. OSVE

Station No.	Skill Assessed	Station Type	Marks Distribution **(10 marks each)**	Time (Minutes)	Key Competencies/Skills	Domain
1	Diagnosis and Management of anterior segment disorders	Case-Based Viva (Anterior Segment)	Diagnosis (3), Investigation (3), Management (4)	10	Discuss the diagnosis, appropriate investigations, and management plan.	C3

2	Interpretation of Fundus images/ videos	Image/ video Based Viva (Posterior Segment)	Identification (3), Interpretation (4), Management approach (3)	10	Identify key findings from a given fundus photograph (e.g., diabetic retinopathy) and suggest management options.	C3

4TH Year Ophthalmology Clinical curriculum

Holy Family Hospital

Duration two weeks

Morning: 10.30 am to 02.00 pm

WEEK 1 Gradual painless loss of vision

Day	Topic	Specific Learning Objectives	Station	MOT/MIT	Level of Cognition			Psychomotor	Affective	MOA
					C1	C2	C3			

Monday	• Cataract • Glaucoma • Refractive errors • Diabetic retinopathy • Age related macular degeneration	• Take history of a patient with gradual painless loss of vision • Perform visual acuity, torch examination and fundoscopy, visual field plotting and identify clinical signs of a patient with gradual painless loss of vision • List a differential diagnosis on the basis of history and examination • Propose a mechanism responsible for cataract, open angle glaucoma, refractive errors, diabetic retinopathy and age related macular degeneration • Suggest appropriate	Out patient Dept	Clinical exposure SGD Role modeling Recorded videos Pre-reading OMP			**C3**	P2	A3	OSVE CI-OSCE Mini CEX , Faculty feedback Evidence from logbook

		treatment for a patient with gradual painless loss of vision								
Tuesday	• Extracapsular cataract extraction • Phacoemulsification	• Identify the surgical procedures and instruments used during surgery with their uses • Identify the drugs and propose their mechanism of action • Identify potential complications of disease and its management	Eye OT	• Live surgeries • Recorded videos • Pre-reading • SGD				P2	A2	Ci OSCE OSVE Quiz Discussion form

Wednesday	• Torch examination • Slit lamp examination • Biometry	• Record visual acuity • Perform torch examination, pupillary light reflexes and fundoscopy • Identify clinical signs of a patient • Perform fundoscopy via fundal camera • Observe laser treatment • Suggest different treatment options for a patient with diabetic retinopathy	Diabetic clinic/ eye OPD	• Bedside teaching • Clinical exposure						Ci OSCE,OSVE Mini CEX Self and peer assessment of the skill Evidence from logbook
Thursday	• Myopia • Hyperopia • astigmatism	• Snellen's chart, Autorefraction, Retinoscopy • Goldmann applanation tonometry	Refraction room	• Bedside teaching • Clinical exposure			C3		A3	OSCE Quiz Discussion form

4TH Year Ophthalmology Clinical curriculum

Holy Family Hospital Rawalpindi

Duration two weeks

Morning: 10.30 am to 02.00 pm

WEEK 2 Ocular misalignment and neuro ophthalmology

Days	Topics	Specific Learning Objectives	Station	MOT/MIT	Level of Cognition			Psychomotor	Affective	MOA
					C1	C2	C3			

Monday	• Optic nerve disorders • Pupil reflex abnormalities • Cranial nerve palsies • Esotropia • Exotropia Amblyopia	• Take a detailed history for optic nerve disorders, cranial nerve palsies, and strabismus cases (esotropia/exotropia) • Recognize abnormal pupil reflexes and clinical features of amblyopia. • Conduct visual acuity testing, funduscopy for optic nerve disorders, and pupil reflex testing (direct and consensual).	OPD	• Bedside teaching • Clinical exposure • Role playing • Patient simulation • Videos • Discussion group • PBL, CBD		**C2**		P2	A	MCQS SAQ OSCE, MiniCEX Faculty feedback Evidence from logbook
Tuesday		Understand surgical procedures for correcting esotropia/exotropia and their indications. Learn diagnostic tools (e.g., Maddox rod, prism bars) for strabismus evaluation. Perform basic skills like cover-uncover tests and light reflex testing for strabismus.	OT	• Bedside teaching • Clinical exposure • Discussion		**C2**		P2	A	MCQS SAQ OSCE Quiz Discussion form

Wednesday		Discuss inpatient cases of cranial nerve palsies, optic neuropathies, and severe amblyopia Understand systemic causes (e.g., stroke, multiple sclerosis) associated with cranial nerve palsies. Perform bedside assessments for hospitalized patients with cranial nerve palsies and monitor treatment responses.	Eye ward	● Ambulatory teaching		**C2**				OSCE, CI OSCE Mini CEX Self and peer assessment of the skill Evidence from logbook
Thursday	End of Module Assessment									

Thursday (12-2pm)	Ward test (OSCE 6 stations = 6X5 = 30 marks) (OSVE 2 station= 10x 2=20)
	Module I

Topic	**I X F**	**Weightage (%)**	**Marks (Out Of 30)**	**No. Of Stations**
Cataract	3 x 3	23	7	2
Glaucoma	3 x 3	23	7	1
Diabetic Retinopathy	3 x 3	23	7	1
Optic Nerve Disorders	2 x 2	10	3	1
Cranial Nerve Palsies	2 x 1	05	2	
Squint	2 x 3	15	5	1
Total	**39**	**100**	**30**	**6**

4TH Year Ophthalmology Clinical curriculum
Benazir Bhutto Hospital
Duration two weeks
Morning: 10.30 am to 02.00 pm

WEEK 3 RED EYE

Days	Topics	Specific Learning Objectives	Station	MOT/MIT	Level of cognition			Psychomotor	Affective	MOA
					C1	C2	C3			
Monday	• Anterior Uveitis • Episcleritis • Scleritis • Foreign Body • Acute Angle-Closure Glaucoma	• Take focused history for group diseases. Identify signs of conjunctivitis, keratitis, uveitis, and episcleritis. • Perform torch examination examination and observe fluorescein dye staining.	OPD	Bedside teaching Clinical exposure Patient simulation Videos	**C2**			P	A	OSVE, Ci-OSCE, Faculty feedback Logbook review Case presentations Formative Quiz

Tuesday	●Minor procedure instruments	● Identify the surgical procedures and instruments used during surgery with their uses Identify potential complications of disease and its complications	Eye OT	ambulatory teaching		**C2**		P2	A	Ci OSCE OSVE, MiniCEX Faculty feedback Evidence from logbook
Wednesday		●Perform Visual acuity, Pin hole, BCVA	Eye OPD	ambulatory teaching		**C2**		P	A	Ci OSCE, OSVE MiniCEX Self and peer assessment of the skill Evidence from logbook
Thursday	●Antibiotic, Steroids ●Miotics, ●Mydraiactics, ●Cycloplegics, ●Anesthetics	Identify indications, MOA, systemic/local side effects)	Eye OPD	ambulatory teaching		**C2**				

Benazir Bhutto Hospital
Duration two weeks
Morning: 10.30 am to 02.00 pm

WEEK 4 Red Eye									
Days	**Topic**	**Specific Learning Objectives**	**Station**	**MOT/MIT**	**Level of cognition**			**Psychomotor**	**Affective**	**MOA**
					C1	C2	C3			
Monday	• Conjunctivitis • Keratitis • Contact lens over wear • Endophthalmitis	• Able to Identify surgical procedures • Able to Identify instruments and their uses • Able to take History of patient of cataract • Able to Identify Chalazion and give treatment options	Eye Ward / Eye OT	Ambulatory teaching		**C2**		P	A	OSCE, MiniCEX Self and peer assessment of the skill Evidence from logbook

Tuesday		• Identify the red eye conditions • Management of Bacterial and viral conjunctivitis	Eye OPD	Bedside teaching Clinical exposure Role playing Patient		**C2**		P2	A	MCQS OSCE, MiniCEX Faculty feedback Evidence from logbook
Wednesday	• Sterilization techniques • Phacoemulsification Machine	• Identify phacoemulsification machine • Sterilization of OT and Instruments	Eye Ward / Eye OT	ambulatory teaching		**C2**		P2	A	OSCE, MiniCEX Self and peer assessment of the skill Evidence from logbook
Thursday	End of Module Assessment									

Thursday (12-2pm)	Ward test (OSCE 6 stations = 6X5 = 30 marks) (OSVE 2 station= 10x 2=20)

Topic	**I × F**	**Weightage (%)**	**Marks (Out of 30)**	**No. of Stations**
Conjunctivitis	9	22	7	1
Keratitis	9	22	7	1
Endophthalmitis	3	7.5	2	1
Episcleritis / Scleritis	4	10	3	

	Acute Anterior Uveitis	6	15	4.5	1	
	Foreign Body	6	15	4.5	1	
	Acute Angle-Closure Glaucoma	6	15	4.5	1	
	Total	**43**	**100**	**30**	**6**	

4TH Year Ophthalmology Clinical curriculum

Rawalpindi Teaching Hospital Rawalpindi

Duration two weeks

Morning: 10.30 am to 02.00 pm

WEEK 5 SUDDEN PAINLESS LOSS OF VISION

Days	Topics	Specific Learning Objectives	Station	MOT/MIT	Level of cognition			Psychomotor	Affective	MOA
					C1	C2	C3			

Monday	• Retinal detachment • Retinal artery occlusion • Retinal vein occlusion • Vitreous hemorrhage	• Take history of a patient with sudden painless loss of vision • Record visual acuity • Perform torch examination, pupillary light reflexes and fundoscopy • Identify clinical signs of a patient with sudden painless loss of vision • List a differential diagnosis on the basis of history and examination •	Eye ward	• Bedside teaching • Clinical exposure • Discussion group ,CBD			**C3**		A2	Ci OSCE OSVE, MiniCEX Faculty feedback Evidence from logbook
Tuesday	• Minor procedure instruments • Cataract Surgery instruments	● Identify the surgical procedures and instruments used during surgery with their uses Describes the impact of disease on individual, family and society and demonstrate	Eye OT	● Ambulatory teaching		**C2**			A2	OSVE Ci OSCE, MiniCEX Faculty feedback Evidence from logbook

		empathic attitude towards patient								
Wednesday	• PRP • Macular laser	• Identify the role of ophthalmic lasers • Cite their uses • Observe laser treatment • Suggest different treatment options for a patient with diabetic retinopathy • Describe principles of ophthalmic lasers	Diabetic clinic/ eye OPD	• Clinical exposure • Live lasers Discussion group CBD		**C2**			A2	OSVE Ci OSCE, Mini CEX Faculty feedback Evidence from logbook

Thursday		Perform Fundoscopy of the patient independently	Eye OT				P3		A2	OSVE Ci OSCE, MiniCEX

4TH Year Ophthalmology Clinical curriculum

Rawalpindi Teaching Hospital Rawalpindi

Duration two weeks

Morning: 10.30 am to 02.00 pm

WEEK 6 Orbit Adnexa/ Trauma									
Days	**Topics**	**Specific Learning Objectives**	**Station**	**MOT/MIT**	**Level of Cognition**			**Psychomotor**	**Affective**	**MOA**
					C1	C2	C3			

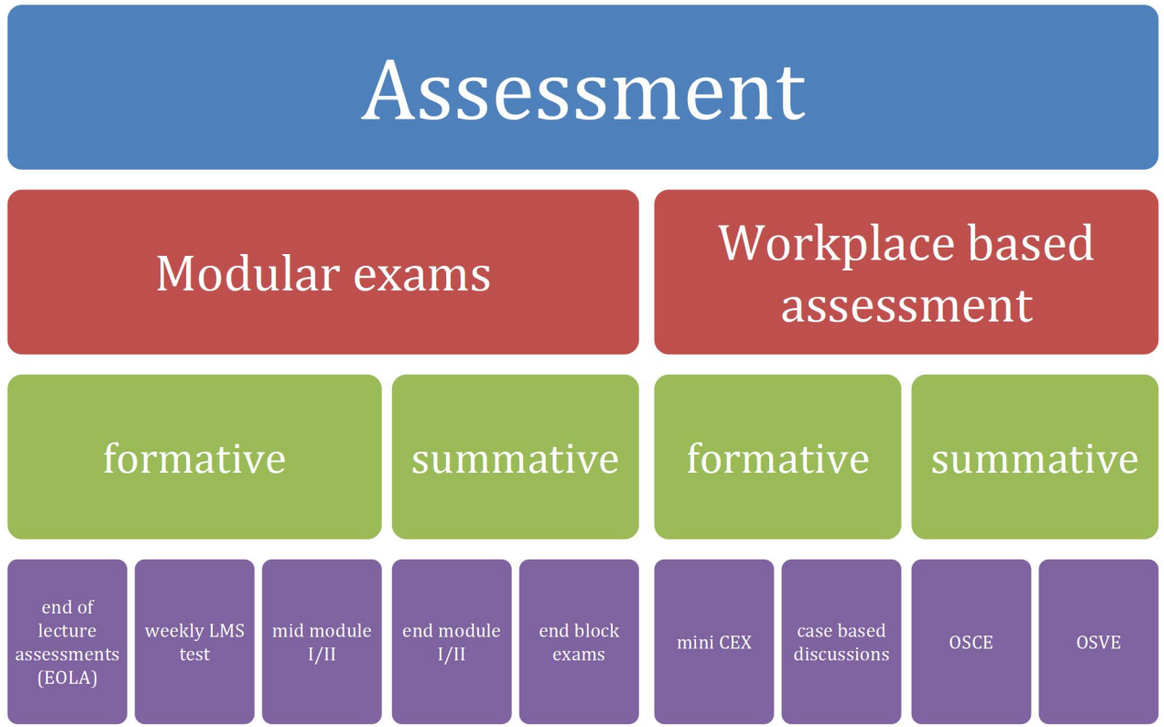
Monday	• Orbital Cellulitis • Thyroid Eye Disease • Dacryocystitis • Dry eyes • Chemical injuries to the eye • Lid lacerations and repair • Orbital fracture • Ptosis Lid Mass	Take detailed history for problems related to orbit and adnexal abnormalities Recognize clinical signs of each disease through history and examination. **Psychomotor:** Perform visual acuity tests, inspect eyelid abnormalities, and evaluate ocular motility. **Affective:** Show empathy during consultations and maintain patient comfort during examinations.	OPD	Ambulatory teaching		**C2**		P2	A	OSCE, Mini CEX Self and peer assessment of the skill Evidence from logbook
Tuesday		• Understand surgical procedures (e.g., dacryocystorhinostomy, eyelid mass biopsy) and their indications • dentify diagnostic instruments like slit-lamp, Schirmer test strips, and lacrimal probes. • Observe lacrimal probing, Schirmer test, and evaluation of lid masses.	OT	Bedside teaching Clinical exposure Role playing • Patient		**C2**		P2	A	OSCE, MiniCEX Faculty feedback Evidence from logbook

Wednesday		Discuss inpatient management of orbital cellulitis, severe trauma cases, and thyroid eye disease. Correlate systemic conditions (e.g., thyroid dysfunction, autoimmune disease) with ocular findings valuate follow-up cases, interpret diagnostic findings, and modify treatment plans for the group diseases.	Eye Ward			**C2**		P2	A	Ci OSCE, OSVE MiniCEX Self and peer assessment of the skill Evidence from logbook
Thursday	End of Module Assessment									

Thursday (12-2pm)	Ward test (OSCE 6 stations = 6X5 = 30 marks) (OSVE 2 station= 10x 2=20)					
	Topic	**I × F**	**Weightage (%)**	**Marks (Out of 30)**	**No. of Stations**	
	Retinal artery/vein occlusion	6	16	5	1	
	Retinal detachment/Vitreous hemorrhage	6	16	5	1	

	Orbital Cellulitis/Dacryocystitis/Proptosis	6	16	5	1	
	Trauma	9	24	7.5	1	
	Eye lid Abnormalities	9	24	7.5	2	

11. Assessment policies



This plan of assessment intricately details the structure and evaluation criteria for the undergraduate ophthalmology block exam, designed to align closely with the Accreditation Council for Graduate Medical Education (ACGME) competencies. The block unfolds across two distinct three-weeks modules, with weekly formative assessments strategically integrated to assess and reinforce students' proficiency in the ACGME-defined domains along with special emphasis on research as per university policy.

ACGME competencies	Assessment tool
Medical Knowledge	MCQ, SAQ, OSCE, ward test
Patient care	OSCE, Ward test
Practice- based learning	OSCE, ward test
System based practice	OSCE, ward test
Professionalism	OSCE, ward test
Communication skills	OSCE, ward test
Research	Spirally integrated across all 5 years Research projects

Each formative assessment serves as a targeted gauge for students to showcase their evolving competencies, embracing the ACGME's focus on patient care, medical knowledge, practice-based learning, interpersonal and communication skills, professionalism, and systems-based practice. As the modules progress, these assessments provide iterative insights into learners' development across these crucial competencies.

The culmination of each module manifests in a summative assessment, meticulously crafted to evaluate the synthesis and application of knowledge within the context of the ACGME competencies. This comprehensive approach ensures that the evaluation process not only measures academic understanding but also holistically assesses the skills and attributes essential for effective and compassionate medical practice.

In essence, this table of specifications serves as a dynamic framework for instructors, weaving ACGME competencies into the fabric of assessments to cultivate well-rounded, future-ready healthcare professionals. It underscores the commitment to nurturing individuals who excel not only in the theoretical aspects of ophthalmology but also in the broader spectrum of competencies vital for patient-centered care.

Block Assessment Plan

University has followed the guidelines of Pakistan Medical and Dental Council for assessment. Assessment is conducted at the mid modular, modular and block levels.

1. Formative Assessment

Assessment Method	Description	Timing
End of Lecture Assessment	Brief quizzes or concept checks to assess understanding after each lecture	End of each lecture
Weekly Quizzes	LMS based Short quizzes covering weekly topics	Every Tuesday
Case-Based discussions	Discussions involving clinical scenarios to assess clinical reasoning and decision making.	Twice a week
Mid module I	LMS based test	at end of 3 weeks module I/ block II
Mid module II	LMS based test	at the end of 3 weeks module II/ Block II

2. Summative Assessment:

Summative assessment is taken at the

- End module-I and
- End block levels.

Assessment framework is specifically designed with careful consideration of subject importance and integration aspects. The distribution of marks is as follows

1	**Core concepts**	**70%**
2	Horizontal/ Vertical integration • Pathology • Community medicine/ public health • Pharmacology Vertical integration • Family medicine • General surgery • Basic sciences	15%
3	Spiral integration • Research • Artificial intelligence • bioethics	15%

This structure emphasizes a significant focus on core subjects, ensuring a substantial grasp of fundamental concepts. Simultaneously, horizontal, vertical, and spirally integrated subjects each contribute to 10% of the assessment, promoting a balanced understanding and application of knowledge across interconnected domains. The tabulated form provides a clear delineation of weightage assigned to each component, reflecting the comprehensive nature of the assessment strategy.

1. **LMS based weekly assessment of SDL and lectures**

Sr. #	Discipline	No. of MCQs	No. of MCQs according to cognitive domain		
			C1	C2	C3
1.	Ophthalmology	35	10	15	10
2.	Community Medicine	10	04	05	01
3	Other subjects: Pharmacology Pathology dermatology	05	02	03	00
		50	16	11	03

1. **Topic distribution 1st weekly LMS test**

Sr. #	Discipline	No. of MCQs	No. of MCQs according to cognitive domain		
			C1	C2	C3
1.	**Ophthalmology** • Infectious eyelid disorder • Eye lid tumors • Anomalies of eyelid position • Cataract- diagnosis, management, complications • Ectopia lentis	35	10	15	10
2.	**Community Medicine**	10	04	05	01

	• Concepts of screening • Iceberg phenomenon of screening				
3	**Pharmacology** • Ophthalmic dosage form of drugs **Pathology** • Neoplasms of eyelids	05	02	03	00
		50	16	11	03

1. **Topic distribution 2nd weekly LMS test Block- II(ophthalmology) / module-II**

Sr. #	Discipline	No. of MCQs	No. of MCQs according to cognitive domain		
			C1	C2	C3
1.	Ophthalmology • Retinal detachment • Retina vascular disorders • Scleritis/ episcleritis • Ocular tumors • Ocular side effects of systemic diseases and medications • Glaucoma: diagnosis and treatment • Primary glaucomas • Neuroopthalmology 1	30	10	15	10

2.	Community Medicine • Millennium Development Goals & Sustainable Development Goals • HMIS •	15	04	05	01
3	Pharmacology • Drugs used in glaucoma	05	02	03	00
		50	**16**	**11**	**03**

2. **Mid module I & II examinations**

Sr. #	Discipline	No. of MCQs	No. of MCQs according to cognitive domain			Total marks
			C1	C2	C3	
1.	Ophthalmology	60	10	30	10	60

3. End Module-I &II Examination

A comprehensive exam covering topics taught during the first weeks, assessing theoretical knowledge and understanding.

Criteria for appearing in the End-module Exam: Completion of 80% of formative assessments.

Passing criteria: 80% marks.

Sr. #	Discipline	No. of MCQs (1 mark each)	Cognitive domain			No of EMQs (5 marks each)	No. of SEQs (9 marks each)	Cognitive domain			No of SAQs (5 marks each)	Cognitive domain			Total	AV OSCE 5 marks each
			C1	C2	C3			C1	C2	C3		C1	C2	C3		
1.	Ophthalmology	35 MCQ	25	05	05	1	5	03	01	01	3	---	01	01		10 stations
		35 marks				5 MARKS	45 MARKS				15 Marks				100 marks	50 marks

i) End module- I assessment topic distribution:

Sr.No.	Topic	Weightage %	SAQ 3	SEQ 5	MCQ 35	EMQ 1	OSCE 10
1	Lids & Adnexa	10	1	1	4	1	1
2	Lacrimal System	10		1	2		1
3	Conjunctiva	10		1	4		2
4	Lens	15	1	1	7		2
5.	uvea	10		1	4		1
6.	Refractive errors	5			2		1
7.	Refractive surgery	5			2		1
8.	Dry eye syndrome	5			2		
9	Family medicine, General surgery, basic sciences	10	1		4		
10	Bio ethics, Research, Artificial intelligence	10			4		
		Marks:	15	45	35		50

End module- II assessment topic distribution:

Sr.No.	Topic	Weightage %	SAQ 3	SEQ 5	MCQ 35	Level of cognition (MCQs)			EMQ 1	AV OSCE
						C1	C2	C3		
1	Orbit	7		1	2		1	1		1
2	Strabismus	7	1	1	2		1	1		1
3	Ocular tumors	3			2		1	1		
4	Trauma	7		1	2		1	1		1
5	cornea	10			4		2	2		1
6	Retina	10	1		4		2	2	1	2
7	Neuro opthalmology	10		1	3		2	1		1
8	Sclera	3			2		1	1		
9	Glaucoma	10		1	3		2	1		2
10.	Pediatric ophthalmology	3			2		1	1		1
9	Community medicine/ public health Pathology Pharmacology	10	1		3		2	1		
10	Family medicine, General surgery, basic sciences	10			3		2	1		

11	Bio ethics, Research, Artificial intelligence	10	1		3	2	2	1		
			3	5	35	2	18	15		

ii) End Block Examination

On completion of the block which consists of two modules, there will be a block examination which consists of one theory paper, AV OSCE and OSVE.

i) Theory Paper

The paper consists of 100 MCQ. The distribution of the questions is based on the Table of Specifications of the module.

ii) Block OSCE

Students will be rotated through 14 set of stations to demonstrate clinical and communication skills to ensure holistic approach to patient care.

Topics	Weightage%	MCQ (100)	Level of cognition		
			C1	C2	C3
Lids & Adnexa	**4**	**2**		**1**	**1**
Lacrimal System	**2**	**2**		**1**	**1**
Conjunctiva	**2**	**2**		**1**	**1**
Lens	**8**	**8**	**2**	**4**	**2**
Uvea	**2**	**2**		**1**	**1**
Refractive errors	**2**	**2**		**1**	**1**
Refractive surgery	**2**	**2**		**1**	**1**
Dry eye syndrome	**2**	**2**		**1**	**1**
Orbit	**4**	**3**		**2**	**1**
Strabismus	**4**	**3**		**2**	**1**
Ocular tumors	**2**	**2**		**1**	**1**
Trauma	**4**	**4**		**2**	**2**
Cornea	**8**	**8**	**2**	**4**	**2**
Retina	**8**	**8**	**2**	**4**	**2**
Neuro ophthalmology	**8**	**8**	**2**	**4**	**8**
Sclera	**2**	**2**		**1**	**1**
Glaucoma	**8**	**8**	**2**	**4**	**8**
Pediatric ophthalmology	**2**	**2**		**1**	**1**
Community medicine/ public health **Pathology** **Pharmacology**	**10**	**10**	**4**	**6**	
Family medicine, **General surgery,** **basic sciences**	**10**	**10**	**4**	**6**	
Bio ethics, Research, Artificial intelligence	**10**	**10**	**4**	**6**	

Content	No. of Stations	Station description	KSA	Skills to be Assessed
Refractive Errors **Optics of eye**	1	Clinical Problem Solutions	C3	Images, reports/videos will be shown to the candidate with relevant clinical scenario to assess the ability to interpret findings.
Ophthalmic Emergencies • **Acute Congestive Glaucoma** • **Central Retinal artery Occlusion** • **Chemical burns** • **Trauma,**	2	Clinical Problem Solutions	C3	Images, reports/videos will be shown to the candidate with relevant clinical scenario to assess the ability to interpret findings.
Optic neuropathies **3rd, 4th, 6th cranial nerve palsies**	1	Clinical Problem Solutions	C3	Images, reports/videos will be shown to the candidate with relevant clinical scenario to assess the ability to interpret findings, make a diagnosis and discuss management with complication.
Glaucoma	1	Clinical Problem Solutions	C3	Images, reports/videos will be shown to the candidate with relevant clinical scenario to assess the ability to interpret findings, make a diagnosis and discuss management with complication.
Retina • **Diabetic retinopathy** • **Hypertensive retinopathy** • **Retinal detachment** • **CRVO, CRAO** • **BRVO, BRAO**	2	Clinical Problem Solutions	C2	Images, reports/videos will be shown to the candidate with relevant clinical scenario to assess the ability to interpret findings, make a diagnosis and discuss management with complication.

• **Cherry red spot** • **ROP** • **Retinoblastoma** • **RP**				
Lens	1	Clinical Problem Solutions	C3	Images, reports/videos will be shown to the candidate with relevant clinical scenario to assess the ability to interpret findings, make a diagnosis and discuss management with complication.
Eyelid and adnexa • **Ptosis,** • **Entropion/ ectropion** • **Lid mass** • **dacryocystitis**	2	Clinical Problem Solutions	C3	Images, reports/videos will be shown to the candidate with relevant clinical scenario to assess the ability to interpret findings, make a diagnosis and discuss management with complication.
Anterior segment pathologies • **Conjunctiva** • **Cornea** • **Uvea**	2	Clinical Problem Solutions	C3	Images, reports/videos will be shown to the candidate with relevant clinical scenario to assess the ability to interpret findings, make a diagnosis and discuss management with complication.
Orbit	1	Clinical Problem Solutions	C3	Images, reports/videos will be shown to the candidate with relevant clinical scenario to assess the ability to interpret findings, make a diagnosis and discuss management with complication.
Total	14			

Workplace Based Assessment:

4. **Continuous Formative Assessment**

Assessment Method	Description	Timing
Case-Based discussions	Discussions involving clinical scenarios to assess clinical reasoning and decision making.	Twice a week
Mini CEX	Focused observation of clinical encounters with immediate feedback	Once a week
Feedback sessions	Dedicated time for discussing performance and identifying learning gaps.	Once a week

5. **Log book and Reflective Learning**

Logbook entries	Mandatory recording of key procedures (e.g., tonometry, visual acuity testing, slit lamp exam) with supervisor sign-off.
Record of patient interaction	Details of patient encounters, including history, examination, and learning outcomes.

6. **End of Module Assessment**

4th year MBBS students have to complete 6 weeks clinical clerkship in Ophthalmology which includes 2 weeks rotation individually in HFH, BBH and DHQ. Assessment of Psychomotor and Affect skill will be taken at the end of each fortnightly rotation in respective hospital.

Total Marks: 50

iii. Ci-OSCE: 30 Marks
iv. OSVE:20 Marks

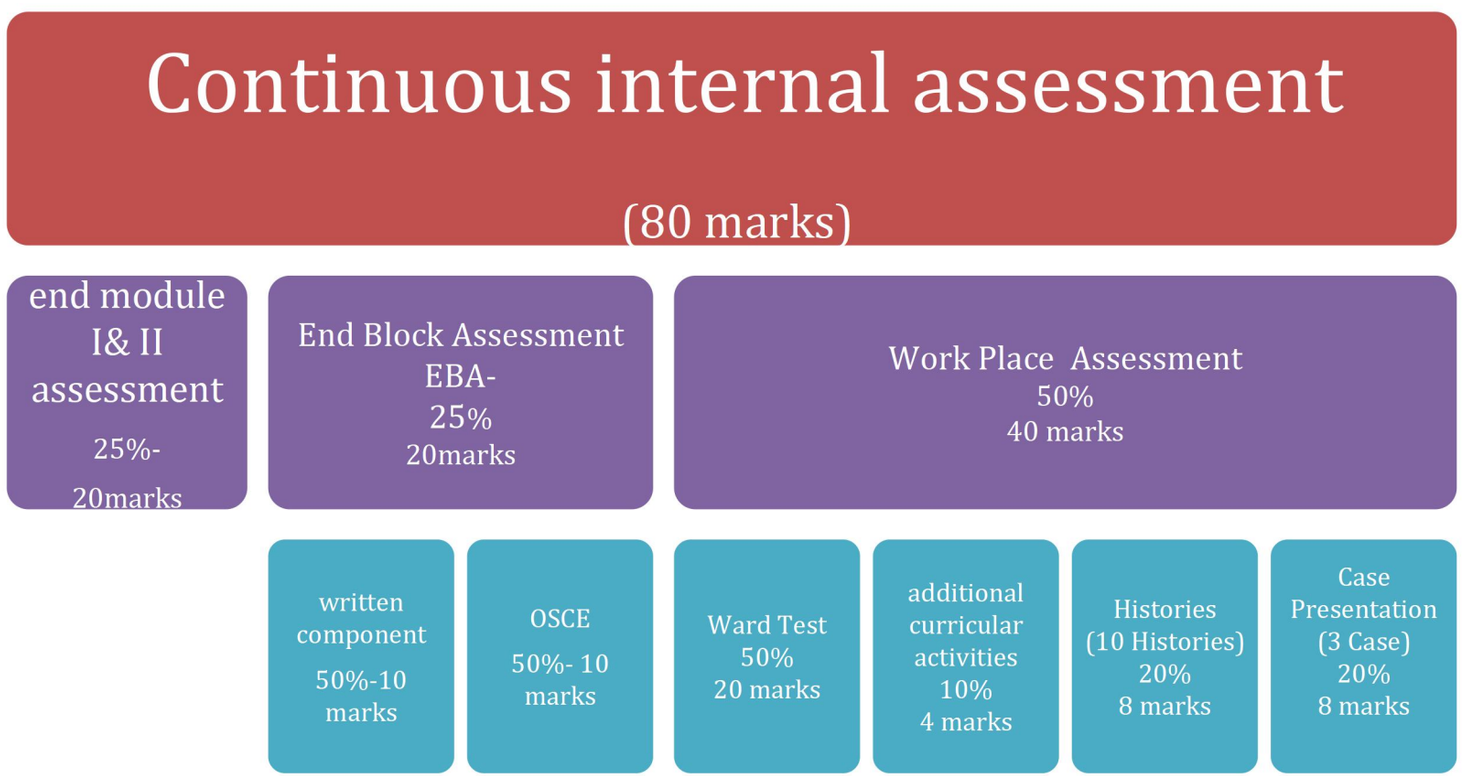
B. OSCE

Station No.	Content	Task Description	No. of Stations	Cognitive Level (KSA)	Skills to be Assessed	Assessment Focus
1	History Taking • Red Eye • Loss of vision(sudden/ gradual) • Abnormal appearance of eye	Take a focused history from a patient.	1	Knowledge, Skills, Attitude (KSA)	History-taking, logical reasoning	Identification of cause and associated risk factors.
2	Direct Ophthalmoscopy	Perform direct ophthalmoscopy on a dummy or model to identify fundus features.	1	Knowledge, Skills	Examination technique, interpretation	Accuracy in identifying fundus abnormalities (e.g., optic disc changes).
3	Counseling • Cataract Surgery • Ocular tumors	Counsel a patient about the risks, benefits, and postoperative care for cataract surgery.	1	Knowledge, Attitude	Communication, patient education	Empathy, clarity, and structured counseling.

4	Examination skills: • Visual Fields by Confrontation • Pupil Examination • Extraocular movements • Cover/ uncover test • Torchlight Examination	Perform **one assigned skill** based on the examiner's instruction	1	Knowledge, Skills	Examination technique, perform and interpretation	Accuracy in performing the assigned technique and identifying any abnormalities.
5	Ophthalmic Instruments	Identify and explain the use of common ophthalmic instruments (e.g., slit lamp, tonometer).	1	Knowledge	Instrument identification, application	Accuracy in naming instruments and explaining their clinical use.
6	Surgical Video Interpretation	Watch a short surgical video (e.g., phacoemulsification) and describe the steps involved.	1	Knowledge, Skills	Identification, procedural knowledge	Recognition of surgical steps and their relevance.

B. OSVE

Station No.	Skill Assessed	Station Type	Marks Distribution **(10 marks each)**	Time (Minutes)	Key Competencies/Skills	Domain
1	Diagnosis and Management of anterior segment disorders	Case-Based Viva (Anterior Segment)	Diagnosis (3), Investigation (3), Management (4)	10	Discuss the diagnosis, appropriate investigations, and management plan.	C3
2	Interpretation of Fundus images/ videos	Image/ video Based Viva (Posterior Segment)	Identification (3), Interpretation (4), Management approach (3)	10	Identify key findings from a given fundus photograph (e.g., diabetic retinopathy) and suggest management options.	C3



The Table of Specifications (TOS) is a detailed framework that describes how assessment items are distributed in terms of content among modules in our prestigious medical university's curriculum. The TOS was created with great care to ensure that educational objectives, instructional content, and evaluation criteria are all in line with one other. This allows us to guarantee the validity, integrity, and reliability of assessments while supporting our students' overall growth. This paper offers clarity and transparency by outlining the cognitive levels, domains, and weightings of assessment items. This helps faculty members create tests that appropriately measure students' understanding of critical competencies and knowledge areas. The TOS, which is based on pedagogical ideas and evidence-based practices, symbolizes our dedication to provide our graduates with the necessary skills, knowledge, and professionalism in medical education to achieve success in their chosen industries and contribute significantly to the medical community and society at large.

Components of TOS:

The following elements are usually included in a Table of Specifications (TOS):

Content Domains or Areas: The assessment's broad categories or content domains are described in this section. These domains have to match the course or module's curriculum and learning objectives.

Weightings or Percentages: Gives each topic area or cognitive level a certain amount of weight or proportional value. This makes it easier to guarantee that the evaluation accurately captures the importance that the curriculum places on certain subjects or abilities.

Assessment Items: Describes the many kinds of assessment items that will be used in the assessment, such as essays, multiple choice questions, short answer questions, and practical tests. The number of items assigned to each content area and cognitive level may also be stated in this section.

Blueprint: A graphic depiction of the TOS that outlines how assessment items are distributed throughout curriculum categories. It frequently takes the shape of a table or matrix.

Modules in 4th Year MBBS

Block	Module Name	Duration
(Block I)	otorhinolaryngology I	3 weeks
	otorhinolaryngology II	3 weeks
(Block II)	Ophthalmology I	3 weeks

	Ophthalmology II	3 weeks
(Block III)	Endocrinology I	3 weeks
	Population medicine& reproduction II	6 weeks
(Block IV)	Renal I	3 weeks
	CNS & Psychiatry II	6 weeks

Assessment strategies to assess module:

Formative: Formative assessment is a process used by teachers during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes.

LMS (Learning Management System): Weeksly LMS based assessment will be carried out in all the modules from the topics already provided in the study guide.(TOS sample annexure 1)

Mid Modular: Mid Modular Assessment will be carried out in the mid of the module from the course taught till that day. (TOS Sample Annexure 2) **Summative**: summative assessment evaluates student learning at the end of a block/ professional year.

MCQs: Multiple-choice questions (MCQs) are a type of assessment item commonly used in educational settings to evaluate a person's knowledge or understanding of a topic. In a multiple-choice question, the respondent is presented with a question or statement, known as the stem, along with several options, one of which is the correct answer (the key), while the others are incorrect (distractors). The respondent selects the option they believe to be the correct answer.

SAQs: Short answer questions are a type of assessment item used to evaluate a person's understanding of a topic or concept. Unlike multiple-choice questions, which provide a list of options for respondents to choose from, short answer questions require respondents to generate their own answers without the aid of options provided by the question.

Assessment tools & strategies

Tools of assessments:

Theory assessment

a. MCQs
b. SAQs & SEQs

Practical Assessment

a. Objectively Structured Viva Examination (OSVE).
b. Objectively Structured Practical Examination (OSPE)
c. Video assisted OSPE.

Strategies of Assessments

1. On campus assessment
2. Assessment on LMS (Learning management system)

Proposed TOS of on campus Assessments during whole Academic Year 2024 (Community Medicine) RMU

Block Name& Order	Modules Names & Numbers	Theory			Scheme of Integration				Practical Assessment				
		25 MCQs (1	5+1 SAQ +EMQ (5	5 SEQs (9marks each)	Core Subject. 70%	Hori- & Verti- Integ. 20%	*Spiral Integ. 10%	Total marks Theory	OSVE	OSPE (05 marks each)	Total marks Practical	End Block LMS (MCQs	Total Block marks

		mark each)	marks each)									Module I		Module 2		Observed	Unobserved	Video assisted		Based)	
I Otorhinolaryngology	**ENT I & II**	Total marks	Total marks	Total marks	MCQs (19)	SAQ/ SEQ +EMQ (7+1)	MCQs (4)	SAQ /SEQs (2)	MCQs (2)	SAQ (1)	100	Viva marks	**Book marks	Viva marks	Book marks	5 stations	5 stations	10 stations	150	30	270
		25	25+5	45	19	46	4	12	2	7		45	5	45	5	25 marks	25 marks	50 marks			
II Ophthalmology	**EYE I & II**	25	25 +5	45	19	46	4	12	2	7	100	45	5	45	5	5 stations	5 stations	10 stations	150	30	270
																25 marks	25 marks	50 marks			
III Population medicine & Reproduction	**Endocrino-logy**	25	25 +5	45	19	46	4	12	2	7	100	-								30	460
	Pop Med & Reproduction	25	25+5	45	19	46	4	12	2	7	100	Viva marks	Book marks	Viva marks	Book marks	10 stations	10 stations	20 stations	250		
												45	5	45	5	50 marks	50 marks	100 marks			
IV CNS & Psychiatry	**Renal**	25	25+5	45	19	46	4	12	2	7	100									30	460
	CNS & Psychiatry		25+5	45	19	46	4	12	2	7	100	Viva marks	Book marks	Viva marks	Book marks	10 OPSEs	10 OPSEs	20 OSPEs	250		
												45	5	45	5	50 marks	50 marks	100 marks			

***Spiral Integration**

1. Biomedical Ethics & Professionalism
2. Family Medicine
3. Integrated Undergraduate Research Curriculum (IUGRC)
4. Artificial Intelligence

** **"Books marks"** will be credited according to evidence of reading relevant subjects from the recommended books presented at the time of viva examination.

- In theory assessment SEQs and SAQs both tools may be used according to need and scope of assessment in the subject.
- **Time** allocated to 1 MCQ: 1min and 1SEQ/SAQ: 10min.

Proposed Pre-Annual Assessment TOS 4th Year MBBS (batch 48)

Blocks	Subjects	MCQs 1mark each	SAQs 5 marks each	Core Subject	Horizontal & Vertical Integration	Spiral Integration	OSPE 5 marks each	VIVA 75 marks	
								Attendance	Core subject
Block 1 * **	ENT	45	10	70%	20%	10%	10	5	40
	Community Medicine	30	5	70%	20%	10%	05	5	25
Total Marks		**75**	**75**	**100%**			**75**	**75**	
Block II* **	Eye	45	10	70%	20%	10%	10	5	40
	Community Medicine	30	5	70%	20%	10%	05	5	25
Total Marks		**75**	**75**	**100%**			**75**	**75**	
Block III * **	Pharmacology	25	4	70%	20%	10%	5	5	20
	Pathology	25	5	70%	20%	10%	5	5	20
	Community Medicine	15	4	70%	20%	10%	5	5	20
Total Marks		**75**	75	**100%**				75	
Block IV* **	Pharmacology	25	4	70%	20%	10%	5	5	20
	Pathology	25	5	70%	20%	10%	5	5	20
	Community Medicine	15	4	70%	20%	10%	5	5	20
Total Marks		**75**	**75**	**100%**			**75**	**75**	

***Total marks of each Block = 300 marks, Grand Total = 1200 marks**

2. Research

Cultivating the culture of Research has always been envisioned as one of the main pillars of Rawalpindi Medical University, as a means to develop healthcare professionals capable of contributing to the development of their country and the world. For the purpose thereof, right from the inception of Rawalpindi Medical University, efforts were concentrated to establish a comprehensive framework for research in Rawalpindi Medical University, as a matter of prime importance. With team efforts of specialists in the field of research, framework was made during the first year of the RMU, for the development and promotion of Research activities in RMU, called the Research Model of RMU, giving clear scheme and plan for establishment of required components for not only promoting, facilitating and monitoring the research activities but also to promote entrepreneurship through research for future development of RMU itself.

3. Biomedical ethics

Ethical choices, both minor and major, confront us every day in the provision of health care for persons with diverse values living in a pluralistic and multicultural society.
Four commonly accepted principles of health care ethics, excerpted from Beauchamp and Childress (2008), include the:
1. Principle of respect for autonomy,
2. Principle of nonmaleficence,
3. Principle of beneficence, and
4. Principle of justice.

4. Family medicine

Family Medicine is the primary care medical specialty concerned with provision of comprehensive health care to the individual and the family regardless of sex, age or type of problem. It
is the specialty of breadth that integrates the biological, clinical and behavioral sciences. Family physicians can themselves provide care for the majority of conditions encountered in
the ambulatory setting and integrate all necessary health care services.

5. Artificial intelligence

Artificial intelligence in medicine is the use of machine learning models to search medical data and uncover insights to help improve health outcomes and patient experiences. Artificial intelligence (AI) is quickly becoming an integral part of modern healthcare. AI algorithms and other applications powered by AI are being used to support medical professionals in clinical settings and in ongoing research. Currently, the most common roles for AI in medical settings are clinical decision support and imaging analysis.

6. Sample paper

FOURTH YEAR BLOCK II (EYE) EXAM 2023

Sample Paper MCQs

MCQs
Time allowed: 60 mins
Total Marks: 35 (eye) + 20 (C.Med) = 55

1. A one-year-old baby is brought to eye opd by her parents with complain of watering, photophobia and enalarged eye ball. On examination there is hazy cornea with inadequate view of the angle and increased intraocular pressure on digital tonometry. Topical and systemic iop lowering drugs were given and a surgical intervention was decided to be performed. The most appropriate surgical procedure for this patient is
   a. Lens extraction
   b. Goniotomy
   c. Trabeculotomy
   d. Cyclolaser ablation
   e. Anterior chamber paracentesis

2. An 18 months old baby was brought to eye opd by her parents with complain of whitish pupillary reflex. She was diagnosed with retinoblastoma which was limited to eye ball occupying more than half of the vitreous volume and not invading the optic nerve. The most appropriate treatment option is
   a. Evisceration
   b. Exenteration
   c. Chemotherapy
   d. Radiotherapy
   e. Enucleation

3. The most common primary orbital malignancy in childhood is
   a. Rhabdomyosarcoma
   b. Optic nerve sheath meningioma
   c. Capillary hemangioma
   d. Neuroblastoma
   e. Lacrimal gland carcinoma

Sample Paper SEQs

1. **A 25 year's old, male presented in the emergency department with the complaint of spillage of acid in his right eye. On examination of the right eye, his corneal epithelium was swollen and opaque. You are suspecting an ocular chemical injury.**

   a. What will be your immediate management of this case? (02)

   b. Write Roper-Hall grading of the chemical injury? (02)

   c. Write two long term complication of the chemical injury? (01)

2. **A 45 years old man presents to the OPD with complains of right sided ocular discomfort and painful rash involving the right peri-orbital region for the past 4 days. Examination reveals tender, vesicular rash involving the right sided forehead and upper lid which respects the midline. Slit lamp examination reveals dendritic ulcers on the cornea. Rest of the ocular examination is unremarkable.**

   a. Based on the history and examination, the most probable diagnosis in this patient would be? (1)

   b. What would be a suitable management plan for this patient? (3)

   c. State two neurological complications that can be associated with this condition? (1)

3. **A 52 years old female presents to the ER with excruciating pain in the right eye and decreased vision in the right eye for the past 1 hour. She states that she is seeing "halos" around light and is also feeling extremely nauseous. Examination reveals severe circumciliary congestion with vertically oval, mid-dilated pupil that is poorly reactive to light. Applanation tonometry reveals IOP of 50mmHg**

   a. Based on these findings, the most probable diagnosis in this case would be? (1)
   b. What would the treatment plan for this patient? (2)
   c. What are the options to prevent such attacks in future in this patient? (2)

4. **A diabetic patient presents to eye OPD with complaint of gradual decrease in vision of his both eyes particularly effecting His central vision. His best corrected visual acuity is 6/36 and 6/18 respectively in both eyes. On detailed fundus examination of both eyes there are multiple dot blot and flame shaped hemorrhage in all quadrant along with clinically significant macular edema.**

   a. What investigations you would like to do that in patient? (1)
   b. What treatment modalities are available currently for this disease? (2)
   c. What other complications can develop in this patient? (2)

AV Sample OSPE:

A 60-year-old female presents to the emergency department with sudden onset severe pain in her right eye, blurred vision, and headache. her anterior segment photograph is shown

a) **What is the most likely diagnosis?**
b) **What are the clinical signs shown?**
c) **How will you manage the patient?**
d) **What is the definitive treatment?**

Annexure 1

Community Oriented Clerkship Module (annex I)

Theme

(Aim):

The primary purpose of this module is to educate students in those areas of the subject of CM&PH which are learnt better by onsite presence of the students at certain sites, processes, agencies which have public health relevance and in general community setting. Moreover some, areas of the subject which demands close interactive teachings in small group like HHS data analysis & report writing skills, contraceptive use skills, vaccination skills, etc are also covered during this rotation. All opportunities available within and outside the institution within affordable logistics, time, are focused for this purpose. A short time of this batch rotation is dedicated for health education communication practices as Health awareness work and other social work.

Learning Outcomes (LOs):

At the end of this learning module students are expected to achieve following Public health Competencies as will be able to:

1. Undertake a population-based health survey (HHS)
2. Appreciate working of First level Care Facility (Public Sector)
3. Perform Community Immunization / EPI vaccinations.
4. Develop Hospital waste management plans.
5. Develop Community based health awareness message.
6. Communicate for Health awareness in community settings.
7. Commemorate International public health days.
8. Develop Hospital administration Plans.
9. Undertake Preventive healthcare inquiries and NCDs Risk Factors Surveillance
10. Counsel for the contraceptive devices to the community

Module Outline:

- A batch comprising 20-22 students is posted in the department of CM & PH for a period of 2weeks **(Monday to Thursday-04 hrs. /day & for 32hrs in total)**. This schedule is run over the whole academic year, till all students of 4th year MBBS class passes through this rotation.
- Batch formation and schedules of rotation for whole class as notified by the DME / Student's section will be followed accordingly.
- At commencement of the academic year overall batch learning module coordinator, nomination of batch in-charges, senior faculty in charges and calendar schedule of batch rotation for all batches over the whole academic year will be notified by the Department of CM & PH.

Domains of learning: learning will occur in all the three domains C, A & P

Day	Activity -I 10.30 – 11.00	Activity – II 11.00-11.30am	Activity III 11.30-01.00pm	Act-V 01.00 – 2.00pm	Sites of teaching-learning	Assessment	Session outcome (level of learning)
	Session topic	Session topic	Session topic	Session topic			
1st day	instructing / demonstration on Practical Manual based Assignments	• Visit to CHC • SGIS on Health days commemoration work, Display material, PPT.	• SGIS on HMDTD practicum. Topic finalization, CHC-Message draft outlines finalization.	• PPT based Demo on How to conduct & report HHS. • Guidelines on PHI work to be done during clinical rotations / ward duties	• Demonstration on n / lec Hall 3 • CHC - Dept. CM NTB RMU.	• 1-2 OSPE in end of clerkship exam (credit will part of IA) • Assessment of HHS - Report (Max marks:5 part practical /viva exam 4th Prof MBBS)	• Construct a health message. (C6) • Prepare Health days commemoration stuff, Display material, PPT, (P) • Undertake a health survey. (HHS) (C3)

SOPs Of Learning & Assessments:

- Active participation will be graded by the batch in charge **(under a check list)** during the activity / session and grades/marks will be entered in the practical manual as out of 05 (Max marks 05) by the batch in charge. O5 Max Marks are reserved for CHC (HMDTD and Health awareness work.
- Assessment will be done by **OSPE / MCQs Exam** / **Viva voce** at the end of each module and credit will be objectively recorded for the purpose of internal assessment. (Max mark 10)
- General assessment of the subject learning will be through MCQs, SEQs & OSPE on the relevant subjects in the relevant end of modules, block exams and Send up Exams.
- **Students are required to report / write the relevant work in Practical Journal, House Hold Survey Report Book and log all the clerkship activities in the Logbook on daily basis.**

2nd day	Follow up session on. - HM-DTD work - HHS work - health days commemoration work	SGIS/ Briefing / PPT based guidelines on field visit of the day (EPI services center HFH)	FV to the EPI center HFH	Health awareness work (HAW)	• Demo Room, • EPI Center HFH • OPD, hospital shelters sites for health awareness work (HAW)	• 1-2 OSPE in end of clerkship exam (credit will part of IA) • Grade of performance in EPI visit reporting. • Credit of HAW	• Explain cold chain component at EPI center • Vaccinate (EPI) vaccines to the clients. • Comprehend EPI system
3rd day	Follow up session on HM- DTD work & HHS	SGIS / Briefing / PPT based guidelines on FV to MCH & FP Services Center HFH	FV to the MCH services & FP center HFH	Health awareness work (HAW)	• FP Center HFH • OPD, hospital shelters sites for HAW	• 1-2 OSPE in end of clerkship exam (credit will part of IA) • Grade of performance in EPI visit reporting. • Credit of HAW	• Identify CP devices available at MHC FP center • Counsel clients for use of a contraception method • Place CP devices to client (P)
4th day	Follow up session on HM- DTD work & HHS	Briefing / guidelines on FV Hospital waste disposal system in hospitals	• FV to the hospital waste disposal system & relevant sites / Incinerator	Health awareness work (HAW)	• FP Center HFH OPD, hospital shelters sites for HAW	• End of module OSPE • Grade of performance in visits to sites	• Explain hospital waste disposal system • Develop a hospital waste management plan • Explains various domains of hospital management (C2)
5th day week 2)	SGIS / PPT based briefing on Hospital management & administration on	Visit to Hospital management & administration (HFH) office		Health awareness work (HAW	HHF	• End of module OSPE • Grade of performance in visits to sites	

6th day	SGIS / PPT based briefing on visit to First level of health care facility (FLCF) BHU/RHC	Field visit to RHC Khayaban Sir-Syed (RHC) or BHU	• Demo room / lec Hall 3 NTB / CPC-Hall. • RHC / BHU	Health awareness work (HAW at site visited	• End of module OSPE • Report credit in PJ	• Explain working of FLCF • Appreciate PHC elements at FLCF. (C2)
7th day	Health days commemoration (walk/ seminar/ presentation/ CHC-message dissemination work (10.30 – 12.00pm)		12.00 – 2.00pm • Completion & assessment of relevant Practical Journal work, • HHS-report book, • Logbook etc. • Feedback discussion on PHI		• Communication skills • Comprehend frequency Preventable RFs of NCDs in the real population (RF surveillance) • Undertake a preventive Healthcare inquiry	