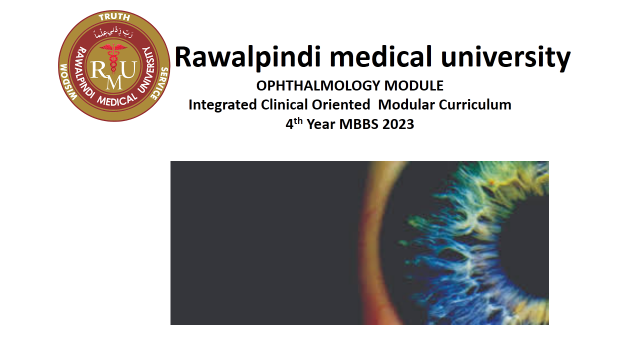


**Rawalpindi Medical University**

**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**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Final RMU logo | **Rawalpindi Medical University** | | | |
| **Doc. Title: Procedure for Control of Documented Information** | | | |
| **Document #:** RMU-MR-SOP-59 | **Rev. #:** 05 | **Issue #:** 01 | **Issue Date: 2**5-03-2024 |

**Procedure for Control of Documented Information**

In-Compliance with

**ISO 9001:2015**

**Clause 7.5**

**Copyright**

The copyright of this procedure, together with all confidential information contained herein is the sole property of Rawalpindi Medical University

It may be copied in full or in parts only by the Management/personnel and only for Company-related activities. Disclosure of any information contained within this procedure to any person (s) outside the employee of the institute without written permission of the Vice Chancellor or Principal or ISO Committee Head is strictly prohibited.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Final RMU logo | **Rawalpindi Medical University** | | | |
| **Doc. Title: Procedure for Control of Documented Information** | | | |
| **Document #:** RMU-MR-SOP-59 | **Rev. #:** 05 | **Issue #:** 01 | **Issue Date: 25**-03-2024 |

**Document Information**

|  |  |
| --- | --- |
| ­**Category** | **Opthalmology Module Study Guide** |
| Document | Procedure for Control of Documented Information |
| Issue | 1 |
| Rev | 05 |
| Identifier | RMU-MR-SOP-59 |
| Status | Final Document |
| Author(s) | Department of Ophthalmology |
| Reviewer(s) | Curriculum Committee. |
| Approver(s) | Vice Chancellor |
| Creation Date | 05-0-2024 |
| Effective Date | -2024 |
| Control Status | **Controlled** |
| Distribution | VC, Principal, ISO Committee |
| Disclaimer | This document contains confidential information. Do not distribute this document without prior approval from higher management of **Rawalpindi Medical University.** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Final RMU logo | **Rawalpindi Medical University** | | | |
| **Doc. Title: Procedure For Control of Documented Information** | | | |
| **Document #:** RMU-MR-SOP-59 | **Rev. #:** 00 | **Issue #:** 01 | **Issue Date:** 25-06-2024 |

**Document Approval**

|  |  |  |
| --- | --- | --- |
| **Prepared By** | **Reviewed By** | **Approved By** |
| Department Of Ophthalmology | Curriculum Committee | Vice Chancellor |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Final RMU logo | **Rawalpindi Medical University** | | | |
| **Doc. Title: Procedure For Control of Documented Information** | | | |
| **Document #:** RMU-MR-SOP-59 | **Rev. #:** 05 | **Issue #:** 01 | **Issue Date:** 25-06-2024 |

**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 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Final RMU logo | **Rawalpindi Medical University** | | | |
| **Doc. Title: Procedure For Control of Documented Information** | | | |
| **Document #:** RMU-MR-SOP-59 | **Rev. #:** 05 | **Issue #:** 01 | **Issue Date: 25-03-2024** |

**List of Copy Holders**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Document Code** | **Issue # /Rev.#** | **Copy #** | **Copy Holders** | **Distribution Mode** | **Signature** |
| **RMU-MR-SOP-59**  **RMU-MR-SOP-59**  **RMU-MR-SOP-59** | **01/00**  **01/00**  **01/00** | **01**  **02**  **03** | **V.C**  **HODs**  **IC** | **Email**  **Email**  **Hard Copy** |  |

Contents

[1. University Moto, Vision, Values& Goals 5](#_gjdgxs)

[2. OPHTHALMOLOGY MODULE 6](#_30j0zll)

[3. Ophthalmology Module Team 7](#_1fob9te)

[4. Ophthalmology Module 8](#_3znysh7)

[Knowledge 8](#_2et92p0)

[Skills 8](#_tyjcwt)

[Attitude 8](#_3dy6vkm)

[5. Section I-Terms &Abbreviations 9](#_1t3h5sf)

[Contents 9](#_4d34og8)

[Tables & Figures 9](#_2s8eyo1)

[6. Teaching and Learning Methodologies/Strategies 11](#_17dp8vu)

[a. Large Group Interactive Session (LGIS) 11](#_3rdcrjn)

[b. Small Group Discussion 12](#_26in1rg)

[c. Self-Directed Learning (SDL) 13](#_lnxbz9)

[d. Case Based Learning (CBL) 13](#_35nkun2)

[7. Title: Ophthalmology Module 14](#_1ksv4uv)

[a. AN OVERVIEW OF THE MODULE TEACHING AND LEARNING / ASSESSMENT ACTIVITIES OF DEPARTMENT OF OPHTHALMOLOGY 14](#_44sinio)

[b. Teaching Staff / Human Resource Distribution of Department of community medicine in Block-II 15](#_2jxsxqh)

[8. LEARNING OBJECTIVES OF SELF-DIRECTED LEARNING (SDL) FOR OPHTHALMOLOGY MODULE: 17](#_z337ya)

[9. LEARNING OBJECTIVES OF CASE-BASED LEARNING (CBL) OPHTHALMOLOGY MODULE: 20](#_3j2qqm3)

[10. LEARNING OBJECTIVES OF SMALL GROUP DISCUSSION (SGD) COMMUNITY MEDICINE: 24](#_1y810tw)

[11. WEEKS-WISE LEARNING OBJECTIVES OF OPHTHALMOLGY BLOCK 26](#_4i7ojhp)

[12. TIME TABLE Integrated Clinically Oriented Modular Curriculum for Fourth Year MBBS 56](#_3whwml4)

[13. Clinical clerkship 71](#_qsh70q)

[a. Ophthalmology 71](#_3as4poj)

[Weeks 1 (HFH) 73](#_1pxezwc)

[Weeks 2 (HFH) 75](#_49x2ik5)

[Weeks 3 (BBH) 76](#_2p2csry)

[Weeks 4 (BBH) 79](#_147n2zr)

[Weeks 5 (DHQ) 81](#_3o7alnk)

[Weeks 6 (DHQ) 83](#_23ckvvd)

[14. Assessment policies 92](#_1hmsyys)

15. [ASSESSMENTS 97](#_2grqrue)

[a. TOS Mid Module Assessment 97](#_vx1227)

[b. END BLOCK ASSESSMENT 100](#_3fwokq0)

[c. End Block Assessment Clinical Component 105](#_1v1yuxt)

[d. Ward Test Component Breakup 106](#_4f1mdlm)

[e. Internal Assessment Component Breakup 107](#_2u6wntf)

16. [4th year Professional Examination 108](#_19c6y18)

[17. Research 112](#_nmf14n)

[18. Biomedical ethics 113](#_37m2jsg)

[19. Family medicine 113](#_1mrcu09)

[20. Artificial intelligence 113](#_46r0co2)

[21. Sample paper 115](#_2lwamvv)

22. [FOURTH YEAR BLOCK II (EYE) EXAM 2024 115](#_111kx3o)

[Sample Paper SEQs 116](#_3l18frh)

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

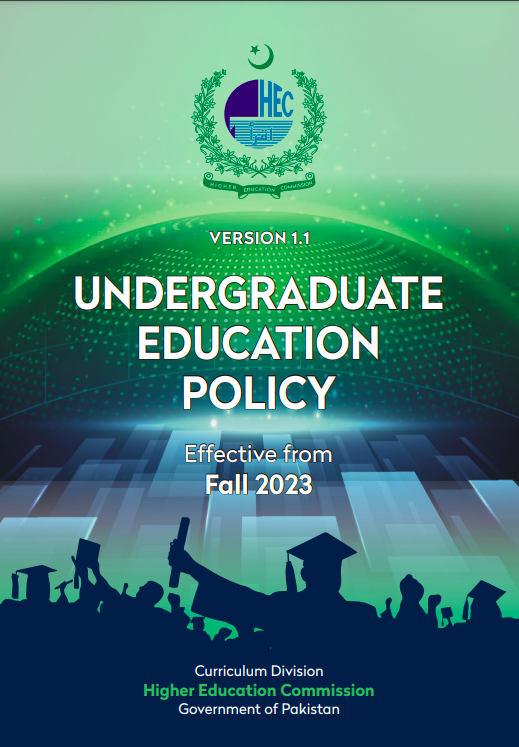
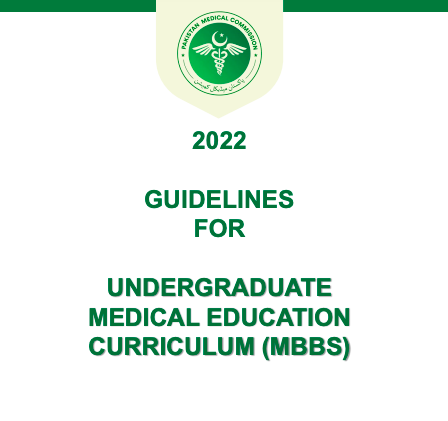


Foundation for Advancement of International Medical Education and Research

[https://search.wdoms.org/?\_gl=1\*b2ddww\*\_ga\*MTQyNTAwNzIxMi4xNzA2ODEwNjcx\*\_ga\_R5BJZG5EYE\*MTcwNjgzNjg3Ni4yLjAuMTcwNjgzNjg3Ni4wLjAuMA](https://search.wdoms.org/?_gl=1*b2ddww*_ga*MTQyNTAwNzIxMi4xNzA2ODEwNjcx*_ga_R5BJZG5EYE*MTcwNjgzNjg3Ni4yLjAuMTcwNjgzNjg3Ni4wLjAuMA)..

<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 Scholar

Leader and role model

**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 are given in the study guides. Study guides will be uploaded on the university website.

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

1. **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!

1. **Section I-Terms &Abbreviations**

## Contents

* + Domains of Learning
  + Teaching and Learning Methodologies/ Strategies
    - Large Group Interactive Session (LGIS)
    - Self-Directed Learning (SDL)
    - Case Based Discussion (CBD)

## Tables & Figures

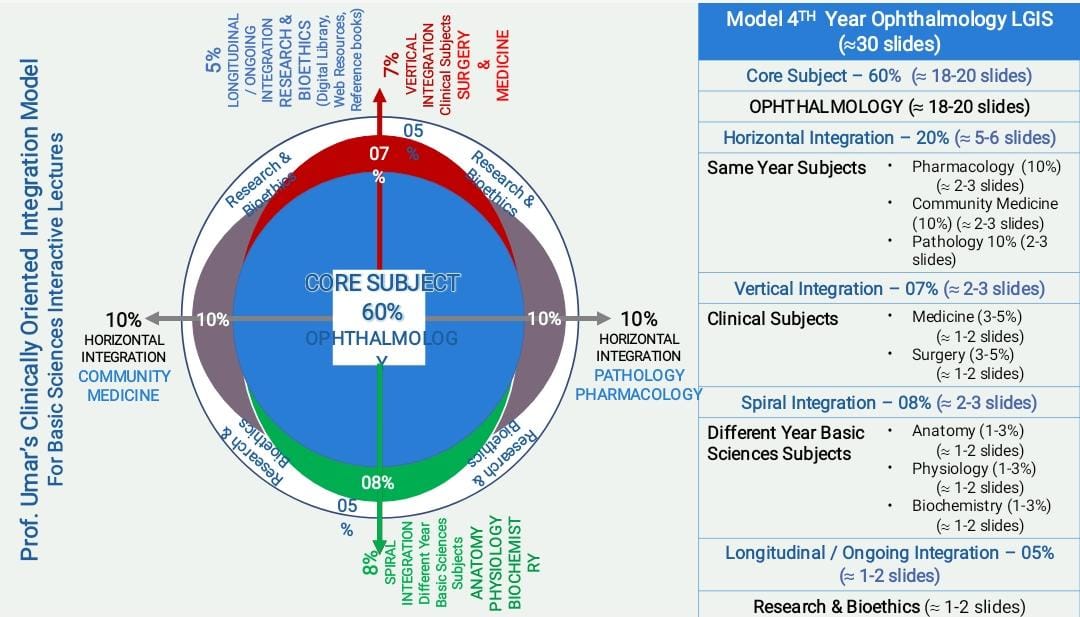
* + Table1. Domains of learning according to Blooms Taxonomy
  + Figure1.Prof Umar’s Model of Integrated Lecture

**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 |

1. **Teaching and Learning Methodologies/Strategies**
   1. **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**

* 1. **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.

|  |  |  |
| --- | --- | --- |
| **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 |
| **Step15** | Students feedback on the SGD and entry into logbook | 5min |
| **Step16** | Ending remarks |  |

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**

* 1. **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

* 1. **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
  1. To provide students with an opportunity to see theory in practice
  2. Require students to analyze data in order to reach a conclusion, develop analytic, communicative and collaborative skills along with content knowledge.

1. **Title: Ophthalmology Module**
   1. **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** | Assistant 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 | 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** |

1. **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](http://dx.doi.org/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 complications | 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 - 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> |

1. **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> |

1. **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 |

1. **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 * Discuss treatment options of different types of secondary glaucoma | C1  C2  C2  C2  C2  C1  C1  C2  C2 | LGIS | MCQs SAQs SEQs EMQs VIVA |
|  | * 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) * 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  C1  C2  C2  C2  C2  C1  C2  C2  C3 | LGIS | MCQs SAQs SEQs EMQs VIVA |
| 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 * 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  C2  C2  C3  C2  C2  C1  C2  C3  C3  C2 | **LGIS** | MCQs SAQs SEQs EMQs VIVA |
| 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 * Appraise the concept of propaganda | C2  C2  C1  C2 | **LGIS** | MCQs SAQs SEQs EMQs VIVA |
| 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 * Describe steps in developing HMIS * Discuss various sources of health information | C1  C2  C1  C1  C2  C2 | **LGIS** | MCQs SAQs SEQs EMQs VIVA |
| 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 Group Discussion (SGDs)

| **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 |

**Integrated UNDergraduate Research Curriculum (IUGRC)**

|  |  |  |  |
| --- | --- | --- | --- |
| **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**

Ophthalmology Module Time Table

| 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 |
| 9. Refractive surgery |  | 1. Ocular manifestations of systemic diseases |

**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** | **BREAK 10:00AM – 10:30AM** | | **10:30am – 12:00pm** | | **12:00pm - 01:00pm** | |  | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Monday**  **14-4-2025** | **Pathology (LGIS)** | | **EYE (LGIS)** | | **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 ½** | | **Eyelid and Eyelash Disorder -1**  **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** | **Lens-1**  **Prof. Dr. Fuad/ dr Sidra Jabeen**  **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 1/2** | **Lens-2**  **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-3**  **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** | |  | **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** | | | **Ophthalmic emergencies**  **Dr sidra/ dr saira**  **Lect hall 4/ 5** | |  | **Epidemiology of Blindness, Accidents, and injuries (LGIS)**  **Dr. Farah/Dr. Narjis**  **Lect hall 4/5** | | **Conjunctival Disorders – 1**  **Dr. Wajeeha/ dr Fatima sidra**  **Lect hall 1/ 2** | | | |

**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 - 01:00pm** | |  | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Monday**  **28-4-2025** |  | | |  | | | | | |
| **SPORTS WEEK** | | |
| **Tuesday**  **29-4-2025** |  | | |
| **SPORTS WEEK** | | |
| **Wednesday**  **30-4-2025** |  | | |
| **SPORTS WEEK** | | |
| **Thursday**  **1-5-2025** |  | | |
| **SPORTS WEEK** | | |
| **Friday**  **2-5-2025** |  |  | |  | |  | | |
|  |  | | |  |  | | |
| **SPORTS WEEK** | | | | | | | |
| **Saturday**  **3-5-2025** |  |  | |  | |  |  | |  | |  | |
|  |  | |  | |  | |  | | | |
| **SPORTS WEEK** | | | | | | | |  | | | |

**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**  **5-5-2025** | **Community Medicine**  **(LGIS)** | | **EYE (LGIS)** | | **Clinical Clerkship**  **Annexure -1**  **(Complete 6 weeks rotation plan attached at the end of the curriculum)** | | | | | |
| **Introduction to Biostatistics**  **Dr. Imrana/Dr. Mehjabeen**  **Lect hall 1/ 2** | | **Conjunctival Disorders – 2**  **Dr. Wajeeha/ dr Fatima sidra**  **Lect hall 1/ 2** | |
| **Tuesday**  **6-5-2025** | **Dermatology**  **LGIS** | | **Eye (LGIS)** | |
| **Approach to a patient with Urticaria**  **CPC hall** | | **The Lacrimal System**  **Dr. Fatima Sidra/ dr Wajeeha**  **Lect hall 1/ 2** | |
| **Wednesday**  **7-5-2025** | **PATHOLOGY**  **(LGIS)** | | **Eye**  **(LGIS)** | |
| **Corneal and Conjunctival degenerative and neoplastic disorders**  **Dr. Kiran/ Dr. Fatima**  **Lect hall 1/ 2** | | **Uvea – 1**  **Dr. Ambreen/ dr Maria**  **Lect hall 4/ 5** | |
| **Thursday**  **8-5-2025** | **EYE**  **(LGIS)** | | **EYE**  **(LGIS)** | |
| **Dry eyes**  **Dr. Fatima Sidra/ dr Wajeeha**  **Lect hall 1/ 2** | | **Uvea – 2**  **Dr. Ambreen/ Dr Maria**  **Lect hall 1/ 2** | |
| **Friday**  **9-5-2025** | **08:00AM – 09:45AM** | | **09:45AM – 10:30AM** | | **10:30AM – 11:15AM** | | **11:15AM – 12:00PM** | | |  | |
| **Community Medicine (PAL)** | **Pharma**  **(SGD)** | **Eye**  **(LGIS)** | **Eye**  **(LGIS)** | | | **Community Medicine**  **(LGIS)** | | |  | |
| **Descriptive analysis (All Senior Faculty and Demonstrators)** | **ocular side effects of systemic medications** | **Squint diagnosis and assessment**  **Dr Sidra Jabeen/ Dr Saira**  **Lect hall 4/ 5** | **Refractive Errors**  **Dr. Fatima/ dr sulman**  **Lect hall 4** | | | **Hospital Administration**  **Dr. Narjis/ Dr Abdul Quddus**  **Lect hall 4/ 5** | | |
| **Saturday**  **10-5-2025** | **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)** | **Community Medicine (SGD)** | **Eye**  **(LGIS)** | **Eye**  **(LGIS)** | | | **Community Medicine (LGIS)** | **Pharmacology (LGIS)** | |
| **ocular side effects of systemic medications** | **Descriptive analysis (All Senior Faculty and Demonstrators)** | **Strabismus management/ amblyopia**  **Dr Sidra Jabeen/ dr saira Bano**  **Lect hall 1/ 2** | **Refractive Surgery**  **Prof Fuad/ Dr Ambreen**  **Lect hal 4/l 5** | | | **Hypothesis testing**  **Dr. Imrana/Dr. Mehjabeen**  **Lect hall 5/4** | **Drugs used in Ocular Infections**  **Dr. Zunaira/ Dr. Uzma**  **Lect hall 5/4** | |

**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** | | **BREAK 10:00AM – 10:30AM** | **10:30am – 12:00pm** | | | **12:00pm - 02:00pm** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Monday**  **12-5-2025** | **Community Medicine (LGIS)** | | | **Eye (LGIS)** | | | **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** | | | **Corneal ulcers**  **Dr. Ambreen/ Dr wajeeha**  **Lect hall 1/ 2** | | |
| **Tuesday**  **13-5-2025** | **Pathology**  **(LGIS)** | | | **EYE**  **(LGIS)** | | |
| **Pathology of cataract, glaucoma, intraocular infections and tumor**  **Dr. Mobina/ Dr. Mudassara**  **Lect hall 1/ 2** | | | **Cornea – 2**  **Dr. Ambreen/ Dr wajeeha**  **Lect hall 4/ 5** | | |
| **Wednesday**  **14-5-2025** |  | | |  | | |
| **Prep. Leave for End Module 1 Examination** | | | | | |
| **Thursday**  **15-5-2025** | **8:00 AM – 10:00AM** | | | | | |
| **End Module 1 Examination (written + AV OSPE)** | | | | | |
| **Friday**  **16-5-2025** | **08:00AM – 09:45AM** | | | **09:45AM – 10:30AM** | | | **10:30AM – 11:15AM** | | **11:15AM – 12:00PM** | |  |
| **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** | **Cornea – 3**  **Dr. Ambreen/ Dr wajeeha**  **Lect hall 4/ 5** | | | **CPC hall** | | **Hospital waste management practices**  **Dr. Narjis/ DrAsif**  **Lect hall 5/4** | |  |
| **Saturday**  **17-5-2025** | **08:00AM – 09:45AM** | | | | | **09:45AM – 10:40** | **10:40AM – 11:30AM** | | **BREAK**  **11:30AM – 12:00PM** | **12:00-1:00Pm** | **1:00PM – 02:00PM** |  |
| **PATHOLOGY**  **(Skill lab)** | **Community medicine**  **(SGD)** | | | | **EYE**  **(LGIS)** | **Bioethics** | | **Dermatology**  **(LGIS)** | **COMMUNITY MEDICINE**  **(LGIS)** |
| **Neoplastic lesions optic nerve**  **Dr Nida Fatima** | **Health for All**  **Dr Asif, Dr Mehreen,Dr Mehrish** | | | | **Scleritis/ episcleritis**  **Dr. Maria/ Dr Sulman**  **Odd/Lect hall 1/ 2** | **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** | **HMIS**  **Dr Farah/ Dr. Abdul Quddus**  **Lect hall 5/4** |

**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**  **19-5-2025** | **EYE**  **(LGIS)** | **EYE**  **(LGIS)** | **BREAK**  **10:00 – 10:30** | | **Clinical Clerkship**  **Annexure -1**  **(Complete 6 weeks rotation plan attached at the end of the curriculum)** | | | |
| **Orbit – 1**  **Dr. Maria/ dr Sulman**  **Lect hall 1/ 2** | **Ocular Tumors**  **Dr sulman/ Dr Fatima**  **Even/Lect hall 1/ 2** |
| **Tuesday**  **20-5-2025** | **COMMUNITY MEDICINE**  **(LGIS)** | **EYE**  **(LGIS)** |
| **Primary Health Care** **Dr. Mehwish/ Dr. Afifa**  **Lect hall 1/ 2** | **Orbit – 2**  **Dr. Maria/ dr Sulman**  **Lect hall 1/ 2** |
| **Wednesday**  **21-05-2025** | **COMMUNITY MEDICINE**  **(LGIS)** | **Eye (LGIS)** |
| **Test of significance (t, z & chi-square tests)**  **Dr Imrana / Dr Mehjabeen**  **Lect Hall 1/2** | **Pupillary disorder**  **Dr Fatima/ Dr sulman**  **Lect hall 1/ 2** |
| **Thursday**  **22-5-2025** | **Labour day** | |
| **Friday**  **23-05-2025** | **08:00AM – 09:45AM** | **09:45AM – 10:30** | **10:30AM – 11:15AM** | | | **11:15AM – 12:00PM** | |  |
| **Community medicine/ Pathology**  **(SGD)** | **Eye**  **(LGIS)** | **Eye (LGIS)** | | | **Eye (LGIS)** | |
| **Disinfection**  **Dr Abdul Quddus/Dr Aisha / Dr Maria**  **Pathophysiology and manifestation of systemic diseases in eye**  **Dr mudassira/ dr unaiza/ dr Ayesha/ dr faiza** | **Retinal vascular disorders**  **Prof. Dr. Fuad/ dr Saira Bano**  **Lect hall 4/ 5** | **Visual pathway disorders**  **Dr. Fatima/ Dr Sulman**  **Lect hall 4/ 5** | | | **Open angle Glaucoma**  **Dr. Ambreen/ dr Saira**  **Lect hall 4/ 5** | |
| **Saturday**  **24-05-2025** | **08:00AM – 09:45am** | **09:45AM – 10:40** | **10:400AM – 11:30AM** | | | **BREAK**  **11:30AM – 12:00PM** | **12:00PM- 1:00PM** | **12:30PM – 01:00PM- 02:00PM** |
| **Community Medicine/ PATHOLOGY**  **(SGD)** | **Eye**  **(LGIS)** | **Pharma**  **(LGIS)** | | | **Community medicine (LGIS)** | **Dermatology (LGIS)** |
| **Disinfection**  **Dr Abdul Quddus/Dr Aisha / Dr Maria**  **Pathophysiology and manifestation of systemic diseases in eye**  **Dr mudassira/ dr unaiza/ dr Ayesha/ dr faiza** | **Retinal detachment**  **Prof. Dr. Fuad/ dr Saira Bano**  **Lect hall 4/ 5** | **Drugs used in glaucoma**  **Dr attiya/ dr hasiba**  **Lect hall 4/ 5** | | | **Health Planning and Management**  **Dr. Narjis/ Dr. Asif**  **Lect hall 4/5** | **An approach to a pt. with Nail Disorders.**  **Dr. Shahwana**  **CPC hall** |

**RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK TENTATIVE TIME TABLE 4th YEAR MBBS – (EYE) Module II 2025 (5th WEEK)**

| **DATE / DAY** | **8:00 AM – 9:00 AM** | | **09:00am – 10:00am** | **10:30am – 11:00pm** | | | | **11:00pm - 02:00pm** | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Monday**  **26-05-2025** | **EYE**  **(LGIS)** | | **Eye (LGIS)** | |  | **Clinical Clerkship**  **Annexure -1**  **(Complete 6 weeks rotation plan attached at the end of the curriculum)** | | | | | | |
| **Secondary Glaucoma**  **Dr. Ambreen/ dr Saira**  **Lect hall 1/ 2** | | **Optic neuritis**  **Dr. Fatima/ Dr Sulman**  **Lect hall 1/ 2** | |
| **Tuesday**  **27-05-2025** | **Dermatology**  **(LGIS)** | | **EYE**  **(LGIS)** | |
| **An approach to a pt. with bullous disorders**  **Dr Shawana**  **CPC hall** | | **Angle closure Glaucoma**  **Dr. Ambreen/ dr Saira**  **Lect hall 1/ 2** | |
| **Wednesday**  **28-05-2025** | **Community medicine**  **(LGIS)** | | **Eye**  **(LGIS)** | |
| **Correlation , regression and ANOVA**  **Dr Imrana / Dr Mehjabeen**  **Lect Hall 1/2** | | **3rd, 4th, 6th and 7th Cranial nerve palsies**  **Dr. Fatima/ Dr Sulman**  **Lect hall 4/ 5** | |
| **Thursday**  **29-05-2025** | **Eye (LGIS)** | | **Eye (LGIS)** | |
| **Pediatric Ophthalmology**  **Dr. Sidra Jabeen/**  **Lect hall 1/ 2** | | **Penetrating Ocular Trauma**  **Prof. Dr. Fuad/ Dr Ambreen**  **Lect hall 1/ 2** | |
| **Friday**  **30-05-2025** | **08:00AM – 09:45AM** | | **09:45AM – 10:30AM** | | **10:30AM –11:15AM** | | **11:15AM – 12:00PM** | | | |  | | |
| **Community Medicine (SGD)** | **Pathology (SGD)** | **EYE**  **(LGIS)** | | **Eye (LGIS)** | | | | **Eye (LGIS)** | |
| **Control of surface infections**  **Dr Asif/Dr Bushra / dr saba** | **Pathophysiology and manifestation of systemic diseases in eye**  **Dr mudassara/ dr faiza/ dr Ayesha/ dr unaiza** | **Systemic Diseases affecting Eye**  **Dr. Wajeeha/ Dr Sulman**  **Lect hall 1/ 2** | | **Blunt Ocular Trauma**  **Prof. Dr. Fuad/ Dr Ambreen**  **Lect hall 4/ 5** | | | | **Ophthalmic lasers**  **Dr maria/ dr sulman**  **Lect hall 4/ 5** | |
| **Saturday**  **31-05-2025** | **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)** | **Community Medicine (SGD)** |  | | **Dermatology (LGIS)** | | **Pathology**  **LGIS** | | **Community medicine**  **(LGIS)** | | | |
| **Pathophysiology and manifestation of systemic diseases in eye**  **Dr mudassara/ dr faiza/ dr Ayesha/ dr unaiza** | **Control of surface infections**  **Dr Asif/Dr Bushra / dr saba** |  | | **An approach to a pt. with Lichen Planus**  **Dr Shawana**  **CPC hall** | | **Optic neuropathies, retinal detachment, retinal vascular disease**  **Dr.Fatima/ Dr. Kiran Fatima**  **Lect hall 4/5** | | **Millennium Development Goals & Sustainable Development Goals Dr. Asif / Dr. Narjis**  **Lect hall 1/ 2** | | | |

**RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI NEW TEACHING BLOCK**

**TENTATIVE TIME TABLE 4th YEAR MBBS – (EYE) 2023 - (6th WEEK)**

| **DATE / DAY** | **8:00 AM – 9:00 AM** | **09:00am – 10:00am** | **BREAK 10:00AM – 10:30AM** | **10:30am – 12:00pm** | | **12:00pm - 02:00pm** |
| --- | --- | --- | --- | --- | --- | --- |
| Monday  2-06-2025 | **End module-II exam (written+ AV OSPE)** | |  | | |
| **Clinical Clerkship**  **Annexure -1**  **(Complete 6 weeks rotation plan attached at the end of the curriculum)** | | |
| Tuesday  3-6-2025 | **End Block Exam (OSCE-OSVE)** | |
| Wednesday  4-06-2025 | **End Block Exam (OSCE-OSVE)** | |  | | |
| Thursday  5-06-2025 | **End Block Exam (OSCE-OSVE)** | |  | | |
| Friday  7-6-2025 | **08:00AM – 09:45AM** | **09:45AM – 10:30AM** | **10:30AM – 11:15AM** | | **11:15AM – 12:00PM** |  |
|  | | | | |
| **End Block Exam (OSCE-OSVE)** | | | | |  |
| Saturday  8-6-2025 | **End block examination (LMS)** | | | | | |

1. **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 care, addressing patient concerns empathetically. | - Communication skills for patient-centered counseling - Professionalism and empathy | - OSCE (counseling station) - Faculty feedback - Reflective portfolios | Supervised with minimal guidance for structured counseling sessions |
| **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)

### **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 |

1. **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. |

1. **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

1. Ci-OSCE: 30 Marks
2. OSVE:20 Marks

Ci-OSCE Station: 06 (5 Marks each)

OSVE Station: 02 (10 Marks each)

1. **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 **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 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 treatment for a patient with gradual painless loss of vision | 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 |
| 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** |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **4TH Year Ophthalmology Clinical curriculum**  **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 empathic attitude towards patient | Eye OT | ● Ambulatory teaching |  | **C2** |  |  | A2 | OSVE  Ci OSCE,  MiniCEX  Faculty feedback Evidence from logbook |
| 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 | |

1. **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 |

1. **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 M C Qs | 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**   * Concepts of screening * Iceberg phenomenon of screening | 10 | 04 | 05 | 01 |
| 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** |

1. **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 |

1. **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 |
| C1 | C2 | C3 | C1 | C2 | C3 | C1 | C2 | C3 | 5 marks each |
| 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 | 1 | 4 | 2 |
| 4 | Lens | 15 | 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 | 1 | 2 |  | 1 | 1 |  | 1 |
| 2 | Strabismus | 7 | 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** |  |

**Ci- OSCE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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 * Cherry red spot * ROP * Retinoblastoma * RP | 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. |
| 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:**

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 |

1. **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. |

1. **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

1. Ci-OSCE: 30 Marks
2. OSVE:20 Marks
3. **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 |

# Department of Medical Education

# Rawalpindi Medical University/Allied Hospitals

**Preamble**

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**

1. MCQs
2. SAQs & SEQs

**Practical Assessment**

1. Objectively Structured Viva Examination (OSVE).
2. Objectively Structured Practical Examination (OSPE)
3. 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  mark  each) | **5+1**  **SAQ +EMQ**  (5 marks each) | **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 Based)** | **Total Block marks** |
| **Module I** | | **Module 2** | | **Observed** | **Unobserved** | **Video assisted** |
| **I**  **Otorhinola**  **ryngology** | **ENT**  **I & II** | Total marks | Total marks | Total marks | MC  Qs  (19) | SAQ/  SEQ  +EMQ  (7+1) | MC  Qs  (4) | SAQ  /SEQs  (2) | MC  Qs  (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**    **Ophthal**  **mology** | **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**

1. **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.



1. **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.

1. **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.

1. **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.

1. **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
2. Lens extraction
3. Goniotomy
4. Trabeculotomy
5. Cyclolaser ablation
6. Anterior chamber paracentesis
7. 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
8. Evisceration
9. Exenteration
10. Chemotherapy
11. Radiotherapy
12. Enucleation
13. The most common primary orbital malignancy in childhood is
14. Rhabdomyosarcoma
15. Optic nerve sheath meningioma
16. Capillary hemangioma
17. Neuroblastoma
18. 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.**
2. What will be your immediate management of this case? (02)
3. Write Roper-Hall grading of the chemical injury? (02)
4. Write two long term complication of the chemical injury? (01)
5. **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.**
   1. Based on the history and examination, the most probable diagnosis in this patient would be? (1)
   2. What would be a suitable management plan for this patient? (3)
   3. State two neurological complications that can be associated with this condition? (1)
6. **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**
7. Based on these findings, the most probable diagnosis in this case would be? (1)
8. What would the treatment plan for this patient? (2)
9. What are the options to prevent such attacks in future in this patient? (2)
10. **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.**
11. What investigations you would like to do that in patient? (1)
12. What treatment modalities are available currently for this disease? (2)
13. 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**

1. **What is the most likely diagnosis?**
2. **What are the clinical signs shown?**
3. **How will you manage the patient?**
4. **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 expectedto 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

**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.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Da**  **y** | **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 |
| 1  st    day | instructing / demonstrati on on Practical Manual based Assignment  s | Visit to CHC  • SGIS on Health days  commemor ation 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) |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2  nd    day | Follow up session on.  - HM-DTD work - HHS work - health days commemorat  ion 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 |
| 3  rd    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) |
| 4  th    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) |
| 5  th    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 |
| 6  th    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) |
| 7  th    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 | |