# Undergraduate Assessment Record

## Ophthalmology

**The Tamil Nadu**
**Dr. M.G.R. Medical University,**
**Chennai**

# The Tamil Nadu Dr. M.G.R. Medical University,
# Chennai

# Under Graduate Assessment Record

# Department of Ophthalmology

# Preface

Competency based education implemented by this university is an outcome-based learning on a framework of competencies. The present system needs an ongoing and longitudinal assessment to identify the learning, enable learning opportunities and acquire the mandated competency. Consequently, this university is enabling this assessment record to decide if the learner has acquired the mandated competencies. This assessment record is designed to collect and analyse data of a student's learning in relation to a required competency and the learner's stage of training, based on - use of knowledge, technical skills, clinical reasoning, communication, emotions, values and reflection continuously and consistently and not isolated to the final examination. As given in the MCI document on "Competency Based Assessment Module for Undergraduate Medical Education-2019" - "Informal assessments should happen during teaching-learning activities with the express purpose of finding out the stage of the student and taking corrective action in teaching-learning methodology on an ongoing basis. During lectures, small groups or seminars, use of techniques like clickers, one-minute papers and muddiest point provide valuable information to check understanding and provide developmental feedback. Same can be done during practical/clinical teaching using one-minute preceptor (OMP) or SNAPPS technique (Summarize history and findings, Narrow the differential; Analyse the differential; Probe preceptor about uncertainties; Plan management; Select case-related issues for self-study). Many of these do not need to be considered for pass/fail decisions but are useful to aid learning and acquire competencies. These can be planned by the teachers on a day to day basis and modified depending on the tasks at hand.

*This Assessment Record for the Undergraduates is to be maintained by the Faculty of the concerned Department and shall be shown to the student during the feedback sessions and at the end of the course period.*

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# 1. University Norms for Assessment of the Course

**a. Internal Assessment**

| No | Type of Assessment | Methods of Assessment | Total Marks | Min Pass Mark |
|---|---|---|---|---|
| **1** | **Theory Component** | | | |
| a | Theory Tests (Average of 8 Tests) | MCQ, VSAQ, SAQ, LAQ | 40 | |
| b | Continuous Formative Assessment* | Integrated Sessions | 4 | |
| | | Assignments | 4 | |
| | | Self-Directed Learning | 2 | |
| | **Total** | | **50** | |
| **2** | **Practical Component** | | | |
| a | Practical (Average of 4 tests) | CE, OSCE, DOPS, Viva | 40 | |
| b | Continuous Formative Assessment* | Clinical Learning | 5 | |
| | | AETCOM Learning | 5 | |
| | | | | |
| | **Total** | | **50** | |
| | **Grand Total** | | **100** | **50** |

*Continuous Formative Assessment shall be based on a day-to-day assessment of learning. It shall relate to different ways in which learners participate in learning process including assignments, preparation for seminar, integrated classes, participation in Clinical OPD and Inpatient Classes, AETCOM, SDL, and Research Projects.

Note:

1. Regular periodic examinations shall be conducted throughout the course. There shall be no less than 8 internal assessment examinations and no less than 4 practical examinations.
2. Day to day records and log book (including required skill certifications) should be given importance in internal assessment. Internal assessment should be based on competencies and skills. Colleges and teachers should try to build their valid assessment tools.
3. Learners must secure at least 50% marks of the total marks (combined in theory and practical / clinical; not less than 40 % marks in theory and practical separately) assigned for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject. Internal assessment marks will reflect as separate head of passing at the summative examination.
4. Learners must have completed the required certifiable competencies for that phase of training and completed the log book appropriate for that phase of training to be eligible for appearing at the final university examination of that subject.
5. Feedback should be provided to learners throughout the course so that they are aware of their performance and remedial action can be initiated well in time. The feedbacks need to be structured and the faculty and learners must be sensitized to giving and receiving feedback.
6. The results of IA should be displayed on notice board within 2 weeks of the test and an opportunity provided to the learners to discuss the results and get feedback on making their performance better. Remedial measures for learners who are either not able to score qualifying marks or have missed on some assessments due to any reason(s) shall be allowed with a record.

7. It is also recommended that learners should sign with date whenever they are shown IA records in token of having seen and discussed the marks.
8. Internal assessment marks will not be added to University examination marks and will reflect as a separate head of passing at the summative examination.

**b. Summative Assessment - University Examination**

University examinations will consist of

1. Theory: 1 paper of 100 marks
2. Practical Exam + Viva: 100 marks

Note:

1. Theory Examinations: Nature of questions will include different types such as structured essays (Long Answer Questions - LAQ), Short Answers Questions (SAQ) and objective type questions (e.g. Multiple-Choice Questions - MCQ). Marks for each part should be indicated separately. MCQs shall be accorded a weightage of not more than 20% of the total theory marks. In subjects that have two papers, the learner must secure at least 40% marks in each of the papers with minimum 50% of marks in aggregate (both papers together) to pass.
2. Practical/clinical examinations will be conducted in the laboratory/Dissection Hall. The objective will be to assess proficiency and skills to conduct experiments, interpret data and form logical conclusion. Emphasis should be on candidate's capability to demonstrate skills, write a description, analyse the case etc
3. Viva/oral examination should assess approach to problem solving, applied situations, attitudinal, ethical and professional values. Candidate's skill in interpretation of clinical case charts, clinical photographs, common investigative data, identification of histopathology slides / specimens, radiological images etc. is to be also assessed
4. Internal assessment marks are not to be added to marks of the University examinations and should be shown separately in the grade card.
5. Pass in University Exam will be 50% marks in theory and clinical.

These concepts have been incorporated from the "Competency Based Assessment Module for Undergraduate Medical Education-2019"

# 2. Curriculum Vitae

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Name of Student | | | | | | | | | | | |
| Name of Parent/Guardian | | | | | | | | | | | |
| Date of Birth & Age | | | | | | | | | | | |
| Permanent Address | | | | | | | | | | | |
| Address for Postal Communication | | | | | | | | | | | |
| Landline Phone (Home) | | | | | | | | | | | |
| Mobile Phone (Parent/Guardian) | | | | | | | | | | | |
| Mobile Phone (Parent/Guardian) | | | | | | | | | | | |
| Mobile Phone (Student) | | | | | | | | | | | |
| Email ID (Parent/Guardian) | | | | | | | | | | | |
| Email ID (Student) | | | | | | | | | | | |

Signature of Student

# 3. Understanding Competency Based Assessment

Assessment requires specification of measurable and observable entities. This could be in the form of whole tasks that contribute to one or more competencies or assessment of a competency per se. Another approach is to break down the individual competency into learning objectives related to the domains of knowledge, skills, attitudes, communication etc. and then assess them individually. However, as stated earlier, using individual domain framework may not always result in making an accurate assessment of the specific competency. Therefore, efforts should be made to include competencies in the assessment process as much as possible. CBA is very useful to convey a message to the learners to structure their learning around competency framework.

- CBA operates within the framework of competencies. Assessment tools should align competencies/objectives.
- CBA should help to acquire competencies/objectives (*Assessment for learning*) and their certification (Assessment *of learning*).
- CBA is continuous and ongoing process with opportunities for providing developmental feedback.
- Direct observations of learners improve utility of CBA and feedback.
- Multiple assessors, multiple tools and multiple assessments improve the validity and reliability of CBA.

**Formative & Internal Assessment (IA)**

Formative assessment is an assessment conducted during the instruction with the primary purpose of providing feedback for improving learning. It also helps the teachers and learners to modify their teaching learning strategies. The feedback is central to formative assessment and is linked to deep learning, seeking to explore the educational literature and its pedagogical lessons for healthcare educational practice. It provides inputs to both learners and teachers regarding adequacy of teaching-learning. A variety of feedback principles and techniques can be used depending on the context.

Although there can be a debate on the summative or formative nature of IA, it still provides the best opportunities for formative purposes. IA is when assessment is done by the teachers who have taught the subject. It overcomes the limitations of day-to-day variability and allows larger sampling of topics, competencies and skills. In competency based curriculum, IA provides useful avenues for both formative and summative assessment. The IA focuses on the process of learning i.e. how the learners have learnt throughout the course. This assessment gives priority to psychomotor, communication and affective domains. These are those domains which are usually not assessed by the traditional assessment methods. It should involve all faculty members of a department (Senior Residents upwards) and not just one or two senior teachers. This helps to build the ownership of teaching-learning and assessment as well as provide ‘hands-on’ experience in assessment to all teachers. In that way, IA can be a very useful tool for assessing all competencies in any competency based curriculum.

IA should not be considered as an assessment without external controls and can be utilized in a manner to overcome some its perceived weaknesses. Utility of IA can be further improved by involving all teachers in the department and limiting the contribution of individual teacher, test or tool.

**Designing a system of assessment**

While designing an internal assessment, all domains of learning i.e. cognitive, psychomotor and affective should be taken into account and weightage should be assigned to these domains for assessment. We can divide various domains into smaller components and assign marks to each component. Make a blueprint of assessment, then circulate to few learners and faculty, take their comments/ views/feedback and revise as per the need.Miller's pyramid (figure 2) provides a simple way to select appropriate tool for assessment. Efforts should be made to climb higher in the pyramid.6, 13 The following adapted example illustrates this:

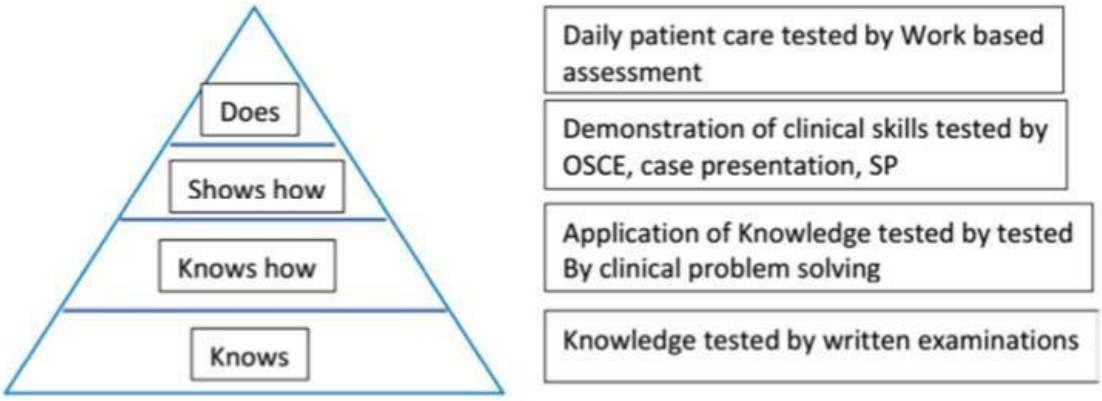


Figure 2. Assessment methods as per levels of competency (Adapted from Ramani) OSCE: Objective Structured Clinical Examination, SP: Standardised/ Simulated Patients

The key to building validity and to make CBA assessment useful is to align it with competencies/objectives. Including some aspects from competencies of other phases is useful to assess integration of concepts. Some examples of such alignment can be seen in the competency sheet given in Table1.

Table 1. Deriving assessment methods from objectives

Competency: An **observable** ability of a health professional, **integrating multiple components** such as knowledge, skills, values and attitudes.

| | | | | |
|---|---|---|---|---|
| PA42.3 | **Identify** the etiology of meningitis based on given CSF parameters | K/S | SH | Y |

Objective: Statement of what a learner should be able to do at the end of a specific learning experience

| | | |
|---|---|---|
| PA42.3.1 | At the end of the session **the PII student** must be able to enumerate the most common causes of meningitis correctly | Short note or part of structured essay: Enumerate 5 causes of meningitis based on their prevalence in India |
| PA42.3.2 | At the end of the session the PII student must be able to enumerate the components of a CSF analysis correctly | Short note or part of structured essay: Enumerate the components tested in a CSF analysis |
| PA4.3.3 | At the end of the session the PII student must be able to **describe** the CSF features for a given etiologic of meningitis **accurately** | Short note or part of structured essay:Describe the CSF findings that are characteristic of tuberculous meningitis |
| PA4.3.4 | At the end of the session the PII student must the able to identify the aetiology of meningitis correctly from a **given set of CSF parameters** | Short note / part of the structured essay/ Skill station/ Viva: Review the CSF findings in the following patient and identify (write or vocalise) the most likely ethology |

Table 1. Deriving assessment methods from objectives

A useful approach, especially for affective, psychomotor and communication domains, is to adopt the concept of assessment toolbox. A toolbox is a listing of available tools (and rating forms, if required), which are suggested for a particular competency or sub-competency and aims at improving the value of assessment data.14 The listed tools are suggestions only and can be freely used either singly or in combination by teachers to suit particular requirements. Efforts should be made to use multiple tools even for a given competency to improve validity and reliability of assessment. While assessment will continue to be subject based, efforts must be made to ensure that phase appropriate correlates are assessed to determine if the learner has internalised and integrated the concept and its application.

**Internal Assessment Scheduling of IA**

A student who has not taken minimum required number of tests for IA each in theory and practical will not be eligible for University examinations. Proper records of the work should be maintained which will form the basis for the learners' internal assessment and should be available to the assessors at the time of inspection of the college by the Medical Council of India.

**Components of IA**

(i) Theory IA can include: theory tests, send ups, seminars, quizzes, interest in subject, scientific attitude etc. Written tests should have short notes and creative writing experiences.

(ii) Practical/Clinical IA can include: practical/clinical tests, Objective Structured Clinical Examination (OSCE)/Objective Structured Practical Examination (OSPE), Directly Observed Procedural Skills (DOPS), Mini Clinical Evaluation Exercise (miniCEX), records maintenance and attitudinal assessment.

Colleges and teachers should try to build capacity to use a variety of assessment tools. A number of tools are available in the form of assessment toolbox. The construct validity and predictive utility of internal assessment is high. Many of the tools mentioned for IA may appear subjective. However, by virtue of being high on validity and by conveying a message to the learners to not ignoreskills, attitudes and communication (educational impact), they contribute to better learning. Since stakes at IA are low, the use of expert subjective assessments to cover areas which are not assessable by conventional objectivised assessment tools is appropriate. There is plenty of evidence in literature to suggest that expert subjective assessments can be as reliable as highly objective ones.

Assessment of Foundation Course should be included in formative assessment of first phase. Assessment of Early Clinical Exposure should be included in formative as well as in internal assessment in first phase subject-wise. There should be at least one assessment based on direct observation of skills, attitudes and communication at all levels. Communication and attitudinal assessment should also be built in all assessments as far as possible.

**Feedback in IA**

Feedback should be provided to learners throughout the course so that they are aware of their performance and remedial action can be initiated well in time. The feedbacks

need to be structured and the faculty and learners must be sensitized to giving and receiving feedback.The results of IA should be displayed on notice board within 2 weeks of the test and an opportunity provided to the learners to discuss the results and get feedback on making their performance better. It is also recommended that learners should sign with date whenever they are shown IA records in token of having seen and discussed the marks. Internal assessment marks will not be added to University examination marks and will reflect as a separate head of passing at the summative examination.

(These concepts have been incorporated in the proposed Regulations in Graduate Medical Education, 2019 (GMER 2019) and are reproduced here.

# 4. Hours of Course Work Completed

## Period of Study_____to _____

| No | Month | No of Hours of the Course | | | | | Hours Attended by the Student | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CRL | HCL | SDL | AET | Total | CRL | HCL | SDL | AET | Total |
| 1 | | | | | | | | | | | |
| 2 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 11 | | | | | | | | | | | |
| 12 | | | | | | | | | | | |

Note:
CRL: Classroom based Learning incl. Lectures, Integrated, Small Group Learning
HCL: Hospital based Clinical Learning including OPD, Wards and Other Areas of the Department
SDL: Self-Directed Learning
AET: Attitude Ethics and Communication

### Compensatory Study Hours offered if any

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# 5. Formative Assessment of Classroom Learning

The term "Classroom Learning" mentioned here includes any learning that happens within the ambit of the class rooms namely the large group and small group teaching. The learning in the department predominantly fits into the Scale of 1 and 2 of the 5 level Blooms Taxonomy.

The End of Class / Module Assessment shall include: 8-10 MCQ's solved over 8-10minutes. For effective assessment and grading of performances a Likert's scale is given as under:

| Grade | Characteristic |
|---|---|
| 1 | Score < 35% marks in the end of class assessments |
| 2 | Score 35%-50% marks in the end of class assessments |
| 3 | Score 50%-60% marks in the end of class assessments |
| 4 | Score 60%-75% marks in the end of class assessments |
| 5 | Score > 75% marks in the end of class assessments |

| Number | COMPETENCY<br>The student should be able to | Level<br>K/KH/SH/P | Grading Scale | | | | | Initial of facilitator |
|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | |
| **Topic: Introduction to Ophthalmology** | | | | | | | | |
| OP1.1 | Describe the physiology of vision | KH | | | | | | |
| OP1.2 | Define, classify and describe the types and methods of correcting refractive errors | KH | | | | | | |
| OP1.4 | Enumerate the indications and describe the principles of refractive surgery | KH | | | | | | |
| OP1.5 | Define, enumerate the types and the mechanism by which strabismus leads to amblyopia | KH | | | | | | |
| **Topic: Lids, Adnexa and Orbit** | | | | | | | | |
| OP2.1 | Enumerate the causes, describe and discuss the aetiology, clinical presentations and diagnostic features of common conditions of the lid and adnexa including Hordeolum externum/ internum, blepharitis, preseptal cellulitis, dacryocystitis, hemangioma, dermoid, ptosis, entropion, lid lag, lagopthalmos | KH | | | | | | |
| OP2.4 | Describe the aetiology, clinical presentation. Discuss the complications and management of orbital cellulitis | KH | | | | | | |
| OP2.5 | Describe the clinical features onocular examination and management of a patient with cavernous sinus thrombosis | KH | | | | | | |
| OP2.6 | Enumerate the causes and describe the differentiating features, and clinical features and management of proptosis | KH | | | | | | |
| OP2.7 | Classify the various types of orbital tumours. Differentiate the symptoms and signs of the presentation of various types of ocular tumours | KH | | | | | | |

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|---|---|---|---|---|---|---|---|---|
| **Topic : Conjunctiva** | | | | | | | | |
| OP3.3 | Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications. and management of various causes of conjunctivitis | H | | | | | | |
| OP3.4 | Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of trachoma. | KH | | | | | | |
| OP3.5 | Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of vernal catarrh | KH | | | | | | |
| OP3.6 | Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of pterygium | KH | | | | | | |
| OP3.7 | Describe the aetiology, pathophysiology, ocular features, differential diagnosis, complications and management of symblepharon | KH | | | | | | |
| **Topic: Corneas** | | | | | | | | |
| OP4.1 | Enumerate, describe and discuss the types and causes of corneal ulceration | KH | | | | | | |
| OP4.2 | Enumerate and discuss the differential diagnosis of infective keratitis | KH | | | | | | |
| OP4.3 | Enumerate the causes of corneal edema | KH | | | | | | |
| OP4.4 | Enumerate the causes and discuss the management of dry eye | KH | | | | | | |
| OP4.5 | Enumerate the causes of corneal blindness | KH | | | | | | |
| OP4.6 | Enumerate the indications and the types of keratoplasty | KH | | | | | | |
| OP4.7 | Enumerate the indications and describe the methods of tarsorraphy | KH | | | | | | |
| OP4.9 | Describe and discuss the importance and protocols donation and eye banking | KH | | | | | | |
| **Topic: Sclera** | | | | | | | | |
| OP5.1 | Define, enumerate and describe the aetiology, associated systemic conditions, clinical features complications indications for referral and management of episcleritis | KH | | | | | | |
| OP5.2 | Define, enumerate and describe the aetiology, associated systemic conditions, clinical features, complications, indications for referral and management of scleritis | KH | | | | | | |
| **Topic: Iris and anterior chamber** | | | | | | | | |
| OP6.1 | Describe clinical signs of intraocular inflammation and enumerate the features that distinguish granulomatous from non-granulomatous inflammation. Identify acute iridocyclitis from chronic condition | KH | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OP6.3 | Enumerate systemic conditions that can present as iridocyclitis and describe their ocular manifestations | KH | | | | | | |
| OP6.4 | Describe and distinguish hyphema and hypopyon | KH | | | | | | |
| OP6.5 | Describe and discuss the angle of the anterior chamber and its clinical correlates | KH | | | | | | |
| OP6.7 | Enumerate and discuss the aetiology, the clinical distinguishing features of various glaucomas associated with shallow and deep anterior chamber. Choose appropriate investigations and treatment for patients with above conditions. | KH | | | | | | |
| **Topic: Lens** | | | | | | | | |
| OP7.1 | Describe the surgical anatomy and the metabolism of the lens | KH | | | | | | |
| OP7.2 | Describe and discuss the aetio-pathogenesis, stages of maturation and complications of cataract | KH | | | | | | |
| **Topic: Retina and optic nerve** | | | | | | | | |
| OP8.1 | Discuss the aetiology, pathology, clinical features and management of vascular occlusions of the retina | KH | | | | | | |
| OP8.2 | Enumerate the indications for laser therapy in the treatment of retinal diseases (including retinal detachment, retinal degenerations, diabetic retinopathy & hypertensive retinopathy) | K | | | | | | |
| OP8.4 | Enumerate and discuss treatment modalities in management of diseases of the retina | KH | | | | | | |
| OP8.5 | Describe and discuss the correlative anatomy, aetiology, clinical manifestations, diagnostic tests, imaging and management of diseases of the optic nerve and visual pathway | KH | | | | | | |
| **Topic: Miscellaneous** | | | | | | | | |
| OP9.2 | Classify, enumerate the types, methods of diagnosis and indications for referral in a patient with heterotropia/ strabismus | KH | | | | | | |
| OP9.3 | Describe the role of refractive error correction in a patient with headache and enumerate the indications for referral | K | | | | | | |
| OP9.4 | Enumerate, describe and discuss the causes of avoidable blindness and the National Programs for Control of Blindness (including vision 2020) | KH | | | | | | |

# 6. Formative Assessment of Clinical Learning

The term "Clinical Learning" mentioned here includes any learning happens within the ambit of the department OPD, Wards and Other areas as small group bed side teaching, clinical demonstrations, observation classes. The learning in the department predominantly fits into the Scale of 1 - 4 of the 5 level Blooms Taxonomy. The End of Class/Module Assessment shall include: DOPS / OSCE / Spotters / Viva of 10 minutes. For effective assessment and grading of performances a Likert's scale is given as under:

| Grade | Characteristic |
|---|---|
| 1 | Score < 35% marks in the end of class assessments |
| 2 | Score 35%-50% marks in the end of class assessments |
| 3 | Score 50%-60% marks in the end of class assessments |
| 4 | Score 60%-75% marks in the end of class assessments |
| 5 | Score > 75% marks in the end of class assessments |

| Number | COMPETENCY<br>The student should be able to | Level<br>K/KH/SH/P | Grading Scale | | | | | Initial of facilitator |
|---|---|---|---|---|---|---|---|---|
| | | | 1 | 2 | 3 | 4 | 5 | |
| OP1.3 | Demonstrate the steps in performing the visual acuity assessment for distance vision, near vision, colour vision, the pin hole test and the menace and blink reflexes | SH | | | | | | |
| OP2.2 | Demonstrate the symptoms & clinical signs of conditions enumerated in OP2.1 | S | | | | | | |
| OP2.3 | Demonstrate under supervision clinical procedures performed in the lid including: bells phenomenon, assessment of entropion/ ectropion, perform the regurgitation test of lacrimal sac. massage technique in cong. dacryocystitis, and trichiatic cilia removal by epilation | SH | | | | | | |
| OP2.8 | List the investigations helpful in diagnosis of orbital tumors. Enumerate the indications for appropriate referral | KH | | | | | | |
| OP3.1 | Elicit document and present an appropriate history in a patient. presenting with a "red eye" including congestion, discharge, pain | SH | | | | | | |
| OP3.2 | Demonstrate document and present the correct method of examination of a "red eye" including vision assessment, corneal lustre, pupil abnormality, ciliary tenderness | SH | | | | | | |
| OP3.8 | Demonstrate correct technique of removal of foreign body from the eye in a simulated environment | SH | | | | | | |
| OP3.9 | Demonstrate the correct technique of instillation of eye drops in a simulated environment | SH | | | | | | |
| OP4.2 | Enumerate and discuss the differential diagnosis of infective keratitis | KH | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OP4.3 | Enumerate the causes of corneal edema | KH | | | | | | |
| OP4.4 | Enumerate the causes and discuss the management of dry eye | KH | | | | | | |
| OP4.5 | Enumerate the causes of corneal blindness | KH | | | | | | |
| OP4.6 | Enumerate the indications and the types of keratoplasty | KH | | | | | | |
| OP4.7 | Enumerate the indications and describe the methods of tarsorraphy | KH | | | | | | |
| OP4.8 | Demonstrate technique of removal of foreign body in simulated environment | SH | | | | | | |
| OP4.9 | Describe and discuss the importance and protocols donation and eye banking | KH | | | | | | |
| OP4.10 | Counsel patients and family about eye donation environment | SH | | | | | | |
| OP6.2 | Identify and distinguish acute iridocyclitis from chronic iridocyclitis | KH | | | | | | |
| OP6.3 | Enumerate systemic conditions that can present as iridocyclitis and describe their ocular manifestations | KH | | | | | | |
| OP6.6 | Identify and demonstrate the clinical features and distinguish and diagnose common clinical conditions affecting the anterior chamber | SH | | | | | | |
| OP6.7 | Enumerate and discuss the aetiology, the clinical distinguishing features of various glaucomas associated with shallow and deep anterior chamber. Choose appropriate investigations and treatment for patients with above conditions. | KH | | | | | | |
| OP6.8 | Enumerate and choose the appropriate investigation for patients with conditions affecting the Uvea | KH | | | | | | |
| OP6.9 | Choose the correct local and systemic therapy for conditions of the anterior chamber and enumerate their indications, adverse events and interactions | KH | | | | | | |
| OP6.10 | Counsel patients with conditions of the iris and anterior chamber about their diagnosis, therapy and prognosis in an empathetic manner in a simulated environment | SH | | | | | | |
| OP7.3 | Demonstrate the correct technique of ocular examination in a patient with a cataract | SH | | | | | | |
| OP7.4 | Enumerate the types of cataract surgery and describe the steps, intra-operative and post-operative complications of extracapsular cataract extraction surgery. | KH | | | | | | |
| OP7.5 | To participate in the team for cataract surgery | SH | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OP7.6 | Administer informed consent and counsel patients for cataract surgery in a simulated environment | SH | | | | | | |
| OP8.3 | Demonstrate the correct technique of a fundus examination and describe and distinguish the funduscopic features in a normal condition and in conditions causing an abnormal retinal exam | SH | | | | | | |
| OP8.4 | Enumerate and discuss treatment modalities in management of diseases of the retina | KH | | | | | | |
| OP9.1 | Demonstrate the correct technique to examine extra ocular movements (Uniocular& Binocular) | P | | | | | | |
| OP9.2 | Classify, enumerate the types, methods of diagnosis and indications for referral in a patient with heterotropia/ strabismus | KH | | | | | | |
| OP9.3 | Describe the role of refractive error correction in a patient with headache and enumerate the indications for referral | K | | | | | | |
| OP9.5 | Describe the evaluation and enumerate the steps involved in the stabilisation, initial management and indication for referral in a patient with ocular injury | KH | | | | | | |

# 7. Formative Assessment of Integrated Sessions

Note:

1. Formative Assessment of integrated teaching sessions involves assessment of student level of sessional learning.
2. The student shall be given a 15-20 MCQ test at the end of the session. This can be both in the offline and online modes,
3. The grading of the assignment shall be done by the faculty team as follows

| Faculty Decision | Grade |
|---|---|
| Poor content & presentation | 1 |
| Below Average content & presentation | 2 |
| Average content & presentation | 3 |
| Above Average content & presentation | 4 |
| Excellent content & presentation | 5 |

| No | Title of Assignment | 1 | 2 | 3 | 4 | 5 | Initial of Facilitator |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
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# 8. Formative Assessment for Assignments

Note:

1. Formative Assessment involves various methods of which out of class assignments are an important instrument.
2. The structure for the assignment should be clear mentioned at the start. The structure should include an introduction, main body of the assignment and a conclusion if it is an essay work. Illustrations, flow charts, tables and graphs should be part of the submission where ever necessary.
3. Plagiarism should be discouraged.
4. The grading of the same shall be done by the faculty team as follows:
   Scale
   1 : End of Session Assessment <35%
   2 : End of Session Assessment 35-50%
   3 : End of Session Assessment 50-60%
   4 : End of Session Assessment 60-75%
   5 : End of Session Assessment >75%

| No | Topic of Integrated Session | 1 | 2 | 3 | 4 | 5 | Initial of Facilitator |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
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# 9. Formative Assessment of Self-Directed Learning

Note:

a Formative Assessment of SDL sessions involves assessment of student level of learning through assessment of the synopsis and biblliography

b The student shall submit the same at the end of the session. This can be both in the offline and online modes.

c The grading of the same shall be done by the faculty team as follows:

Scale

| **Faculty Decision** | **Grade** |
|---|---|
| Poor content & presentation | 1 |
| Below Average content & presentation | 2 |
| Average content & presentation | 3 |
| Above Average content & presentation | 4 |
| Excellent content & presentation | 5 |

| No | Assigned SDL Topic | 1 | 2 | 3 | 4 | 5 | Initial of Facilitator |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
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# 10. Formative Assessment of AETCOM Learning

Note:

1. Formative Assessment of AETCOM sessions involves assessment of student level of learning through DOPS, OSPE sessions

2. The grading of the same shall be done by the faculty team as follows:

1 : End of Session Assessment <35%
2 : End of Session Assessment 35-50%
3 : End of Session Assessment 50-60%
4 : End of Session Assessment 60-75%
5 : End of Session Assessment >75%

| No | Assigned AETCOM Topic | 1 | 2 | 3 | 4 | 5 | Initial of Facilitator |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
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# 11. Formative Feedback Record

**Note:**

1. Feedback should be provided to learners throughout the course so that they are aware of their performance and remedial action can be initiated well in time.
2. The feedbacks need to be structured and the faculty and learners must be sensitized to giving and receiving feedback.
3. The evaluation of tests should be provided to the student within 2 weeks of the test and an opportunity provided to the learners to discuss the results and get feedback on making their performance better.
4. The learner should sign with date whenever they are shown the test records in recognition of their having seen and discussed the performance.
5. The learner Internal assessment marks will not be added to University examination marks and will reflect as a separate head of passing at the summative examination
6. Some suggestions for handling the Feedback process
    a. Start with the learner's agenda for the session
    b. Evaluate the performance of the learner in the previous sessions and outcomes the learner is trying to achieve
    c. Enquire about problems faced by the learner in the process of learning in the classroom, at home and during the assessments.
    d. Encourage the learner to think about goal setting
    e. Encourage self-assessment and self-solving problems
    f. Offer space for the learner to make suggestions, to generate solutions
    g. Be non-judgmental and specific, prevent vague generalisation, provide balanced feedback
    h. Offers suggestions and alternatives, make suggestions rather than prescriptive comments. Be valuing and supportive
    i. Structure and summarise the session to ensure that learner has some specifics to take home.

| Formative Feedback Session | 1 |
|---|---|
| **Date** | |

| | | | |
|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 2 |
|---|---|
| **Date** | |

| | | | |
|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 3 |
|---|---|
| **Date** | |

| | | | |
|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 4 |
|---|---|
| **Date** | |

| | | | |
|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 5 |
|---|---|
| **Date** | |

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|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 6 |
|---|---|
| **Date** | |

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|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 7 |
|---|---|
| **Date** | |

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|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 8 |
|---|---|
| **Date** | |

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|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 9 |
|---|---|
| **Date** | |

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|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 10 |
|---|---|
| **Date** | |

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|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 11 |
|---|---|
| **Date** | |

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|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 12 |
|---|---|
| **Date** | |

| | | | |
|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 13 |
|---|---|
| **Date** | |

| | | | |
|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 14 |
|---|---|
| **Date** | |

| | | | |
|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 15 |
|---|---|
| **Date** | |

| | | | |
|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

| Formative Feedback Session | 16 |
|---|---|
| **Date** | |

| | | | |
|---|---|---|---|
| **Type of Assessment** | | | |
| **Topic of Assessment** | | | |
| **Feed Back received from Student** | | | |
| **Feed Back given to the Student** | | | |
| **Remedial Action Suggested** | | | |
| **Timeline of Remedial Action** | | | |
| **Signature of Mentor** | | **Signature of Student** | |

# 12.Certification of Skills

**Note:**

1. Certification of Skills (COS) should be provided to learners at all points of the course so that they are aware of their performance and remedial action can be initiated well in time for the student to achieve the goal of obtaining a certified skill.
2. The feedbacks need to be structured and the faculty and learners must be sensitized to giving and receiving feedback.
3. The results of assessment for COS should be discussed at the the end of the assessment and an opportunity provided to the learners to discuss the results and get feedback on making their performance better.
4. The learner should be given a date for remedial session wherein they will be reassessed.
5. A maximum of 5 remedial sessions may be offered beyond which he shall not be certified for the current academic session. The university and MCI regulations will be mandatory.
6. Example:

| | |
|---|---|
| OP9.1 | Demonstrate the correct technique to examine extra ocular movements (Uniocular& Binocular) |

| | | | |
|---|---|---|---|
| **Type of Skill** | Demonstrate the correct technique to examine extra ocular movements (Uniocular& Binocular) | | |
| **Type of Assessment** | Direct Observation of Procedural Skills | | |
| **Performance of Student** | The student is able to<br>1. Explain the procedure to the patient in vernacular language<br>2. Reassure the patient<br>3. Asks the patient to close one eye with their palm and tests – elevation, depression, adduction, abduction, intorsion and extorsion in the open eye and does the same for the other eye<br>4. Asks the patient to keep both eyes open and tests for – dextro-version, dextro-elevation, dextro-depression, levo-version, levo-elevation, levo-depression, convergence and divergence, incyclo-torsion and excyclo-torsion. | | |
| **Feed Back of Learner** | Mr.AXR tells that he is not able to demonstrate incyclo-torsion and excyclo-torsion | | |
| **Feed Back of Facilitator** | Facilitator reassures the learner. “Mr.AXR” is adviced to learn again. The facilitator explains the key points to perform and explains the procedure .The learner is adviced to write it in the log book and get it verified. | | |
| **Remedial Action Suggested** | "Mr.AXR" is adviced to repeat the assessments 10days later | | |
| **Remedial Assessment** | 1 | Mr. AXR performs the procedure as required | |
| **Performance of Student** | Is adequate for certification | | |
| **Certification of Skill** | Certified that the learner has successfully completed the certification of the Skill for competency OP9.1. | | |
| **Date of COS** | | | |
| **Signatures** | | | |
| | Learner | Facilitator | Professor |

| Certification of Skills - Competency OP:..... | | | |
|---|---|---|---|
| **Type of Skill** | | | |
| **Type of Assessment** | | | |
| **Performance of Student** | | | |
| **Feed Back of Learner** | | | |
| **Feed Back of Facilitator** | | | |
| **Remedial Action Suggested** | | | |
| **Remedial Assessment** | 1 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 2 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 3 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 4 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 5 | **Date** | |
| **Performance of Student** | | | |
| **Certification of Skill** | Certified / Not Certified | | |
| **Date of COS** | | | |
| **Signatures** | | | |
| | Learner | Facilitator | Professor |

| Certification of Skills - Competency OP:..... | | | |
|---|---|---|---|
| **Type of Skill** | | | |
| **Type of Assessment** | | | |
| **Performance of Student** | | | |
| **Feed Back of Learner** | | | |
| **Feed Back of Facilitator** | | | |
| **Remedial Action Suggested** | | | |
| **Remedial Assessment** | 1 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 2 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 3 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 4 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 5 | **Date** | |
| **Performance of Student** | | | |
| **Certification of Skill** | Certified / Not Certified | | |
| **Date of COS** | | | |
| **Signatures** | | | |
| | Learner | Facilitator | Professor |

| Certification of Skills - Competency OP:..... | | | |
|---|---|---|---|
| **Type of Skill** | | | |
| **Type of Assessment** | | | |
| **Performance of Student** | | | |
| **Feed Back of Learner** | | | |
| **Feed Back of Facilitator** | | | |
| **Remedial Action Suggested** | | | |
| **Remedial Assessment** | 1 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 2 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 3 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 4 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 5 | **Date** | |
| **Performance of Student** | | | |
| **Certification of Skill** | Certified / Not Certified | | |
| **Date of COS** | | | |
| **Signatures** | | | |
| | Learner | Facilitator | Professor |

| Certification of Skills - Competency OP:..... | | | |
|---|---|---|---|
| **Type of Skill** | | | |
| **Type of Assessment** | | | |
| **Performance of Student** | | | |
| **Feed Back of Learner** | | | |
| **Feed Back of Facilitator** | | | |
| **Remedial Action Suggested** | | | |
| **Remedial Assessment** | 1 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 2 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 3 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 4 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 5 | **Date** | |
| **Performance of Student** | | | |
| **Certification of Skill** | Certified / Not Certified | | |
| **Date of COS** | | | |
| **Signatures** | | | |
| | Learner | Facilitator | Professor |

| Certification of Skills – Competency OP:..... | | | |
|---|---|---|---|
| **Type of Skill** | | | |
| **Type of Assessment** | | | |
| **Performance of Student** | | | |
| **Feed Back of Learner** | | | |
| **Feed Back of Facilitator** | | | |
| **Remedial Action Suggested** | | | |
| **Remedial Assessment** | 1 **Date** | | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 2 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 3 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 4 | **Date** | |
| **Performance of Student** | | | |
| **Remedial Assessment** | 5 | **Date** | |
| **Performance of Student** | | | |
| **Certification of Skill** | Certified / Not Certified | | |
| **Date of COS** | | | |
| **Signatures** | | | |
| | Learner | Facilitator | Professor |

## 13A. Record of Internal Assessment Tests-Theory

| No | Topic of Assessment | Type of Assessment | Max Mark | Mark Given | % Mark | Initals of FIC |
|---|---|---|---|---|---|---|
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## 13B. Record of Internal Assessment Tests-Clinical

| No | Topic of Assessment | Type of Assessment | Max Mark | Mark Given | % Mark | Initals of FIC |
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# 14. Record of University Examinations

| No | Examination | Max Mark | Mark Given | % Mark | Initals of FIC |
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