



Undergraduate Assessment Record

Pharmacology

The TN Dr. M.G.R. Medical University
Chennai

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



Under Graduate Assessment Record

Department of Pharmacology

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 learners 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. Formative / 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	Formative Assessment	Assignments	4	
		Integrated Sessions	4	
		Self-Directed Learning	2	
	Total		50	
2	Practical Component			
a	Practical (Average of 4 tests)	PE, OSPE, DOPS, Viva	40	
b	Formative Assessment	Early Clinical Exposure	5	
		AETCOM Learning	5	
	Total		50	
	Grand Total		100	50

Note:

1. Internal assessment shall be based on day-to-day assessment. It shall relate to different ways in which learners participate in learning process including assignments, preparation for seminar, integrated classes, participation in ECE, AETCOM, SDL, Projects.
2. 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.
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.

9. 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: 2 papers of 100 marks each. (Total 200 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 common investigative data, X-rays, identification of specimens, 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 practical

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

2. Curriculum Vitae

1. Name of the Student	
2. Date of Birth	
3. Permanent Address	
4. Contact Details	
i. Residential Address	
ii. Mobile No	
iii. Land Line No	
iv. Email ID	
5. Name of Parent/Guardian	
6. Residential Address	
7. Land Line No (Home)	
8. Mobile No Parents/Guardian	

Signature

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:

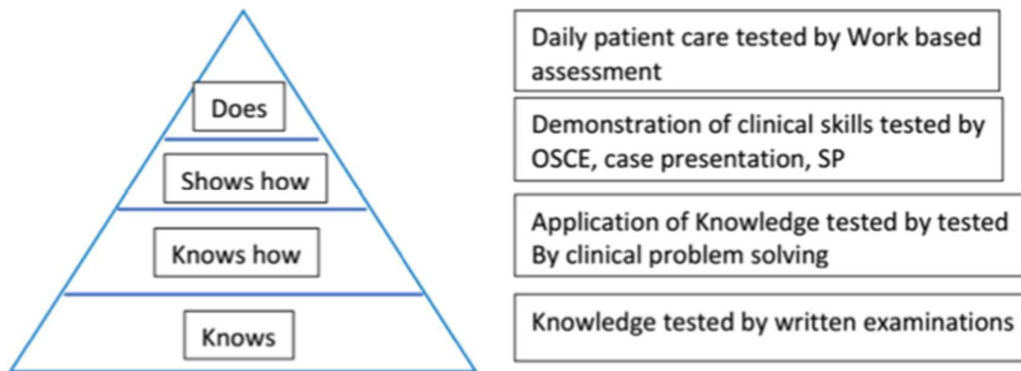


Figure 2. Assessment methods as per levels of competency (Adapted from Ramani) OSCE: Objective Structured Clinical Examination, SP: Standardised/ Simulated Patients

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
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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 be 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 (mini-CEX), 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 ignore skills, 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	Hours Attended by the Student							
		CL	PL	SDL	AET	CL	PL	SDL	AET
1	October								
2	November								
3	December								
4	January								
5	February								
6	March								
7	April								
8	May								
9	June								
10	July								
11	August								
12	September								

Note:

CL: Classroom Hours incl Lectures, Integrated Teaching, Small Group Learning

PL: Practical Learning including Clinical Pharmacy, Clinical Pharmacology and Experimental Pharmacology

SDL: Self-Directed Learning

AET: Attitude Ethics and Communication

Compensatory Study Hours offered if any

5. Formative Assessment of Classroom Learning

The term "Classroom Learning" mentioned here includes any learning that happens within the ambit of the department as large group and small group teaching, demonstrations, dissection classes, practical classes, museum classes etc. The learning in the department predominantly fits into the Scale of 1 and 2 of the 5 level Blooms Taxonomy. The Assessment Methods would include

1. End of Lecture Class/Module Assessment: 5-8 MCQ's solved over 5-8 minutes
2. End of Dissection Module / Class: OSPE of 10-12 minutes
3. End of Histology Class/Module: Spotting / OSPE

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 The students should be able to	Level	GRADING SCALE					INITIAL OF FACILITATOR
			1	2	3	4	5	
PH1.1	Define and describe the principles of pharmacology and pharmacotherapeutics	K						
PH1.2	Describe the basis of Evidence based medicine and Therapeutic drug monitoring	KH						
PH1.3	Enumerate and identify drug formulations and drug delivery systems	SH						
PH1.4	Describe absorption, distribution, metabolism & excretion of drugs	KH						
PH1.5	Describe general principles of mechanism of drug action	KH						
PH1.6	Describe principles of Pharmacovigilance & ADR reporting systems	KH						
PH1.7	Define, identify and describe the management of adverse drug reactions (ADR)	KH						
PH1.8	Identify and describe the management of drug interactions	KH						
PH1.9	Describe nomenclature of drugs i.e. generic, branded drugs	SH						
PH1.10	Describe parts of a correct, complete and legible generic prescription. Identify errors in prescription and correct appropriately	SH						
PH1.11	Describe various routes of drug administration, eg., oral, SC, IV, IM, SL	KH						

Number	COMPETENCY The students should be able to	Level	GRADING SCALE					INITIAL OF FACILITATOR
			1	2	3	4	5	
PH1.12	Calculate the dosage of drugs using appropriate formulae for an individual patient, including children, elderly and patient with renal dysfunction.	SH						
PH1.13	Describe mechanism of action, types, doses, side effects, indications and contraindications of adrenergic and anti-adrenergic drugs	KH						
PH1.14	Describe mechanism of action, types, doses, side effects, indications and contraindications of cholinergic and anticholinergic drugs	KH						
PH1.15	Describe mechanism/s of action, types, doses, side effects, indications and contraindications of skeletal muscle relaxants	KH						
PH1.16	Describe mechanism/s of action, types, doses, side effects, indications and contraindications of the drugs which act by modulating autacoids, including: anti-histaminics, 5-HT modulating drugs, NSAIDs, drugs for gout, anti-rheumatic drugs, drugs for migraine	KH						
PH1.17	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of local anesthetics	KH						
PH1.18	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of general anaesthetics, and pre- anesthetic medications	KH						
PH1.19	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of the drugs which act on CNS, (including anxiolytics, sedatives & hypnotics, anti-psychotic, anti- depressant drugs, anti-maniacs, opioid agonists and antagonists, drugs used for neurodegenerative disorders, anti-epileptics drugs)	KH						
PH1.20	Describe the effects of acute and chronic ethanol intake	KH						
PH1.21	Describe the symptoms and management of methanol and ethanol poisonings	KH						
PH1.22	Describe drugs of abuse (dependence, addiction, stimulants, depressants, psychedelics, drugs used for criminal offences)	KH						
PH1.23	Describe the process and mechanism of drug deaddiction	KH						
PH1.24	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of the drugs affecting renal systems including diuretics, antidiuretics- vasopressin and analogues	KH						

Number	COMPETENCY The student should be able to	Level K/KH /S H/P	GRADING SCALE					INITIAL OF FACILITATOR
			1	2	3	4	5	
PH1.25	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of the drugs acting on blood, like anticoagulants, antiplatelets, fibrinolytics, plasma expanders	KH						
PH1.26	Describe mechanisms of action, types, doses, side effects, indications and contraindications of the drugs modulating the renin- angiotensin and aldosterone system	KH						
PH1.27	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of antihypertensive drugs and drugs used in shock	KH						
PH1.28	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used in ischemic heart disease (stable, unstable angina and myocardial infarction), peripheral vascular disease	KH						
PH1.29	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used in congestive heart failure	KH						
PH1.30	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the antiarrhythmics	KH						
PH1.31	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used in the management of dyslipidemias	KH						
PH1.32	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of drugs used in bronchial asthma and COPD	KH						
PH1.33	Describe the mechanism of action, types, doses, side effects, indications and contraindications of the drugs used in cough (antitussives, expectorants/ mucolytics)	KH						
PH1.34	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of the drugs used as below: 1. Acid-peptic disease and GERD 2. Antiemetics and prokinetics 3. Antidiarrhoeals 4. laxatives 5. Inflammatory Bowel Disease Irritable Bowel Disorders, biliary and pancreatic diseases	KH						
PH1.35	Describe the mechanism/s of action, types, doses, side effects, indications and contraindications of drugs used in hematological disorders like: 1. Drugs used in anemias Colony Stimulating factors	KH						

Number	COMPETENCY The student should be able to	Level K/KH/S H/P						
PH1.36	Describe the mechanism of action, types, doses, side effects, indications and contraindications of drugs used in endocrine disorders (diabetes mellitus, thyroid disorders and osteoporosis)	KH						
PH1.37	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used as sex hormones, their analogues and anterior Pituitary hormones	KH						
PH1.38	Describe the mechanism of action, types, doses, side effects, indications and contraindications of corticosteroids	KH						
PH1.39	Describe mechanism of action, types, doses, side effects, indications and contraindications the drugs used for contraception	KH						
PH1.40	Describe mechanism of action, types, doses, side effects, indications and contraindications of 1. Drugs used in the treatment of infertility, and 2. Drugs used in erectile dysfunction	KH						
PH1.41	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of uterine relaxants and stimulants	KH						
PH1.42	Describe general principles of chemotherapy	KH						
PH1.43	Describe and discuss the rational use of antimicrobials including antibiotic stewardship program	KH						
PH1.44	Describe the first line antitubercular drugs, their mechanisms of action, side effects and doses.	KH						
PH1.45	Describe the drugs used in MDR and XDR Tuberculosis	KH						
PH1.46	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of antileprotic drugs	KH						
PH1.47	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used in malaria, KALA-AZAR, amebiasis and intestinal helminthiasis	KH						
PH1.48	Describe the mechanisms of action, types, doses, side effects, indications and contraindications of the drugs used in UTI/ STD and viral diseases including HIV	KH						
PH1.49	Describe mechanism of action, classes, side effects, indications and contraindications of anticancer drugs	KH						

Number	COMPETENCY The student should be able to	Level K/KH/S H/P						
PH1.50	Describe mechanisms of action, types, doses, side effects, indications and contraindications of immunomodulators and management of organ transplant rejection	KH						
PH1.51	Describe occupational and environmental pesticides, food adulterants, pollutants and insect repellents	KH/						
PH1.52	Describe management of common poisoning, insecticides, common sting and bites	KH						
PH1.53	Describe heavy metal poisoning and chelating agents	KH						
PH1.54	Describe vaccines and their uses	KH						
PH1.55	Describe and discuss the following National Health Programmes including Immunisation, Tuberculosis, Leprosy, Malaria, HIV, Filariasis, Kala Azar, Diarrhoeal diseases, Anaemia & nutritional disorders, Blindness, Non-communicable diseases, cancer and Iodine deficiency	KH						
PH1.56	Describe basic aspects of Geriatric and Pediatric pharmacology	KH						
PH1.57	Describe drugs used in skin disorders	KH						
PH1.58	Describe drugs used in Ocular disorders	KH						
PH1.59	Describe and discuss the following: Essential medicines, Fixed dose combinations, Over the counter drugs, Herbal medicines	KH						
PH1.60	Describe and discuss Pharmacogenomics and Pharmacoeconomics	KH						
PH1.61	Describe and discuss dietary supplements and nutraceuticals	KH						
PH1.62	Describe and discuss antiseptics and disinfectants							
PH1.63	Describe Drug Regulations, acts and other legal aspects							
PH1.64	Describe overview of drug development, Phases of clinical trials and Good Clinical Practice	KH						

Number	COMPETENCY The student should be able to	Level K/KH/S H/P						
SKILLS: Topic: Clinical Pharmacy Number of competencies:04 Number of procedures that require certification: NIL								
PH2.1	Demonstrate understanding of the use of various dosage forms (oral/local/parenteral; solid/liquid)	SH						
PH2.2	Prepare oral rehydration solution from ORS packet and explain its use	SH						
PH2.3	Demonstrate the appropriate setting up of an intravenous drip in a simulated environment	SH						
PH2.4	Demonstrate the correct method of calculation of drug dosage in patients including those used in special situations	SH						
SKILLS: Topic: Clinical Pharmacology Number of competencies: 08 Number of procedures that require certification: 04								
PH3.1	Write a rational, correct and legible generic prescription for a given condition and communicate the same to the patient	P						
PH3.2	Perform and interpret a critical appraisal (audit) of a given prescription	P						
PH3.3	Perform a critical evaluation of the drug promotional literature	P						
PH3.4	To recognise and report an adverse drug reaction	SH						
PH3.5	To prepare and explain a list of P-drugs for a given case/condition	P						
PH3.6	Demonstrate how to optimize interaction with pharmaceutical representative to get authentic information on drugs	SH						
PH3.7	Prepare a list of essential medicines for a healthcare facility	SH						
PH3.8	Communicate effectively with a patient on the proper use of prescribed medication	SH						

SKILLS: Topic: Experimental pharmacology								
Number of competencies: 02			Number of procedures that requires certification: NIL					
PH4.1	Administer drugs through various routes in a simulated environment using mannequins	SH						
PH4.2	Demonstrate the effects of drugs on blood pressure (vasopressor and vaso-depressors with appropriate blockers) using computer aided learning	SH						

COMMUNICATION: Topic: Pharmacology								
Number of competencies:07			Number of procedures that require certification: NIL					
PH5.1	Communicate with the patient with empathy and ethics on all aspects of drug use	SH						
PH5.2	Communicate with the patient regarding optimal use of a) drug therapy, b) devices and c) storage of medicines	SH						
PH5.3	Motivate patients with chronic diseases to adhere to the prescribed management by the health care provider	SH						
PH5.4	Explain to the patient the relationship between cost of treatment and patient compliance	SH						
PH5.5	Demonstrate an understanding of the caution in prescribing drugs likely to produce dependence and recommend the line of management	KH						
PH5.6	Demonstrate ability to educate public & patients about various aspects of drug use including drug dependence and OTC drugs	SH						
PH5.7	Demonstrate an understanding of the legal and ethical aspects of prescribing drugs	KH						

6. Formative Assessment of 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 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							
7							
8							
9							
10							
11							
12							

No	Title of Assignment	1	2	3	4	5	Initial of Facilitator
13							
14							
15							
16							
17							
18							
19							
20							

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 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							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

8. Formative Assessment of Case Based Learning

Note:

1. Formative Assessment of CBL sessions involves assessment of student level of learning through case interpretation.
2. The student shall submit the same at the end of the session. This can be both in the offline and online modes.
3. 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 ECE session	1	2	3	4	5	Initial of Facilitator
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

9. Formative Assessment of Self-Directed Learning

Note:

1. Formative Assessment of SDL sessions involves assessment of student level of learning through assessment of the synopsis and bibliography
2. The student shall submit the same at the end of the session. This can be both in the offline and online modes.
3. 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							
5							
6							
7							
8							
9							
10							
11							
12							

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:

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	Assigned AETCOM Topic	1	2	3	4	5	Initial of Facilitator
1							
2							
3							
4							
5							
6							
7							
8							

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 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.
4. The learner should sign with date whenever they are shown IA records in token of having seen and discussed the marks.
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			
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			
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			
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			
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			
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			
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			
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	

[illegible]

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	

Formative Feedback Session		17	
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		18	
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		19	
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		20	
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		21	
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 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:

PH3.2	Perform and interpret a critical appraisal (audit) of a given prescription
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Type of Skill	PH3.2 A: List the salient features of critical appraisal of prescription PH3.2 B: Perform under supervision audit of a given prescription PH3.2 C: Interpret the critical appraisal of an audit		
Type of Assessment	A: SAQ: Describe the salient features of critical appraisal of prescription B: OSPE: Perform under supervision audit of a given prescription C: OSPE and viva: Interpret the critical appraisal of an audit		
Performance of Student	A: SAQ: Not able to list B: OSPE: Performs inadequately C: OSPE: Not able to interpret		
Feed Back of Learner	The learner "Mr.AXR" stated that the day these prescriptions were given in the lab he was having fever and did not attend the class		
Feed Back of Facilitator	Facilitator reassures the learner. "Mr.AXR" is advised to view the prescriptions again. The facilitator explains the key points about critical appraisal of a prescription. The learner is shown how to interpret critical appraisal and asked to do the same at home and submit the same next working day.		
Remedial Action Suggested	"Mr.AXR" is advised to repeat the assessments 10days later		
Remedial Assessment	1	A: SAQ: Describe the salient features of critical appraisal of prescription B: OSPE: Perform under supervision audit of a given prescription C: OSPE and viva: Interpret the critical appraisal of an audit	
Performance of Student	A: SAQ: Able to List B: OSPE: Performs adequately C: OSPE: Able to Interpret		
Certification of Skill	Certified that the learner has successfully completed the certification of the Skill for competency PH3.2		
Date of COS			
Signatures			
	Learner	Facilitator	Professor

Certification of Skills - Competency PH:.....

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 PH:.....

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 PH:.....

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 PH:.....

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 PH:.....

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 PH:.....

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 PH:.....

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 PH:.....

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

[illegible]

13B. Record of Internal Assessment Tests-Practical

[illegible]

14. Record of University Examinations

[illegible]

