



UNDERGRADUATE ASSESSMENT RECORD

Biochemistry



**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 Biochemistry

PREFACE

Competency based medical education implemented in 2019 by the TN Dr. MGR Medical University as per the then MCI norms is an outcome-based learning on a framework of competencies. Assessment drives learning and summative assessment is the domain of the university. Hence the assessment record is reframed according to the new NMC guidelines i.e. Competency Based Medical Education Curriculum (CBME) Guidelines dated 12th Sep 2024. There is a need for a robust and multifaceted assessment system encompassing all the domains of learning. Longitudinal uniform standardized assessment of all the curriculum components is mandatory to improve the quality of output in creating a responsible Indian Medical Graduate.

Consequently, this assessment record will be instrumental in

- Deciding if the learner has acquired the mandated competencies in each phase
- Monitoring the progress of the learner in the corresponding domains
- Identifying the slow learners and gaps in learning
- Focusing on the domains where special attention is needed

This assessment record is designed to collect and analyze data of a student's learning process in attaining the required competency and the learner's stage of training, based on the 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 CBME 2024 regulations, continuous class room assessment for all teaching learning activities will be documented in this assessment record. There will be more emphasis on the day-to-day teaching-learning activities which will help to identify slow learners at the earliest and support them through effective Mentor-Mentee programs. The University mandates to conduct 8 internal assessments in each subject.

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. The Assessment Record should be retained in the department until the student completes the course.

CURRICULUM VITAE

Name of Student											
Date of commencement of phase 1											
Name of Parent/Guardian											
Date of Birth & Age											
Permanent Address											
Address for Postal Communication											
Mobile Phone (Parent/Guardian)											
Mobile Phone (Parent/Guardian)											
Mobile Phone (Student)											
Email ID (Parent/Guardian)											
Email ID (Student)											

Paste recent
passport size photo

Signature of Student

DISTRIBUTION OF SUBJECT WISE TEACHING HOURS

Subject	Large group teaching	SGT/ Practical/ Tutorials/ Seminars	SDL	Total
Foundation Course				80
Anatomy	180	430	10	620
Physiology	130	305	10	445
Biochemistry *	82	157	10	249
Early Clinical Exposure (ECE)**	-	27	-	27
Community Medicine	20	20	-	40
Family adoption Program (FAP)	-	24	-	24
(AETCOM)***	-	26	-	26
Sports and extra-curricular Activities	-	-	-	10
Total	412	989	30	1521

SGT: Small group teaching, SDL: Self-directed learning

*Including Molecular Biology

**Minimum ECE hours. These hours are to be divided equally by anatomy, physiology & biochemistry.

***AETCOM module is a longitudinal programme.

CONSOLIDATED INTERNAL ASSESSMENT MARKS

THEORY AND PRACTICAL

Name of the Student:

I. Formative Assessment Theory			II. Continuous Internal Assessment Theory				Total
1 st PCT* Theory	2 nd PCT Theory	Prelims Theory (Paper I & II)	Home Assignment	Continuous Class test (LMS**)	Self-Directed Learning	Attendance Theory	
I-A	I-B	I-C	II-A	II-B	II-C	II-D	
20	20	10	10	20	10	10	

*PCT – Part Completion test – average of all theory internal assessments and the respective PCT can be taken for 20 marks;
 **LMS – Learning Management System

III. Formative Assessment			IV. Continuous Internal Assessment (Practical)				Total
1 st PCT* Practical	2 nd PCT Practical	Prelims Practical	Certifiable skill- based competencies(Through OSPE/OSCE/Spots/ Exercise/Other)	AETCOM competencies	Journal (Record book/ Portfolio)	Attendance (Practical)	
III-A	III-B	III-C	IV-A	IV-B	IV-C	IV-D	
20	20	10	20	10	10	10	

Professor & Head
Department of Biochemistry

THEORY INTERNAL ASSESSMENT

Note:

- Internal assessment marks will reflect as separate head of passing at the summative examination. There shall be no less than three internal assessment examinations in each subject.
- Learners must secure at least 50% of the total marks (combined in theory and practical; not less than 40% marks in theory and practical separately) for internal assessment in a particular subject in order to be eligible for appearing at the final University examination of that subject.
- Part completion tests can be conducted half-yearly including all topics that has been taught in the time period before the test.
- The results of internal assessment should be displayed on the notice board within one week of the test.
- **As per 59th, 60th and 61st Standing Academic Board (SAB) resolutions, the university mandates eight internal assessments per subject.**

I. FORMATIVE ASSESSMENT - THEORY

Date	Assessment	Topic	Marks obtained
	PCT– I		/100
Average Marks (out of 20)			
	PCT – II		/100
Average Marks (out of 20)			
	Prelims	Paper I	/100
		Paper II	/100
		Total	/200
		Average Marks (out of 10)	

Signature of Facilitator

II. CONTINUOUS INTERNAL ASSESSMENT THEORY

II-A. HOME ASSIGNMENT

Date	Title	Marks obtained
Average Marks (out of 10)		

Signature of Facilitator

II-B. CONTINUOUS CLASS TEST (LMS)

S. No.	Topic	Competency Nos.	Marks obtained
1.	Basic Biochemistry	1.1	
2.	Enzymes	2.1 - 2.5	
3.	Chemistry and Metabolism of Carbohydrates	3.1 - 3.6	
4.	Chemistry and Metabolism of Lipids	4.1 - 4.8	
5.	Chemistry and Metabolism of Proteins & Immunology	5.1 - 5.9	
6.	Extracellular Matrix	6.1 - 6.3	
7.	Metabolism and homeostasis	7.1 - 7.2	
8.	Nutrition	8.1 - 8.6	
9.	Minerals, Electrolytes, Acid base balance	9.1 - 9.3	
10.	Molecular biology	10.1 - 10.7	
11.	Organ Function Tests & Hormones	11.1 - 11.2	
12.	Xenobiotics, Oxidative Stress & Antioxidants	12.1 – 12.3	
13.	Miscellaneous	13.1 – 13.5	
14.	Biochemical Laboratory Tests	14.1 – 14.24	
Average Marks (out of 20)			

Signature of Facilitator

Note:

- Assessment methods may include end of Lecture class/Module Assessment: 5-8 MCQs solved over 5-8 minutes / very short answers etc.,
- Learning Management Systems like Google classroom, Moodle etc., can be used to assess students' performance on a day-to-day basis.

II-C. SELF DIRECTED LEARNING

Date	Topic	Marks obtained
Average Marks (out of 10)		

Signature of Facilitator

Note:

- SDL can be based on seminar, museum study and library assignments.
- Seminar topics can be allotted to students and they can present the topic based on which assessment can be made.
- Museum study may be based on specimens, models and pictures of scientist. Students can visit the museum, have a group discussion and assessment based on the narration of the topic can be done.
- Library assignment topics can be given to students for which library books can be used as references.

PRACTICAL INTERNAL ASSESSMENT

III. FORMATIVE ASSESSMENT

Date	Assessment	Topic	Marks obtained
	PCT– I		/100
Average Marks (out of 20)			
	PCT – II		/100
Average Marks (out of 20)			
	Prelims		/200
Average Marks (out of 10)			

Signature of Facilitator

IV A. CERTIFIABLE SKILL BASED COMPETENCIES

For assessment refer logbook guidelines

Date	Competency No.	Topic	Marks obtained (out of 20 marks)
	BC 14.3	Describe the physical properties, chemical constituents of normal urine and abnormal constituents of urine and Perform urine analysis to determine normal and abnormal constituents (including dipsticks method demonstration).	
	BC 14.4	Identify abnormal constituents in urine, interpret the findings and correlate these with pathological states and prepare a urine report.	
	BC 14.7	Perform estimation of glucose by manual / semi-automated analyzer method and demonstrate glucometer usage. and interpretation of results with clinical scenarios.	
	BC 14.8	Perform estimation of urea and calculate BUN and interpretation of results in clinical scenarios.	
	BC 14.9	Perform the estimation of serum creatinine and calculate creatinine clearance.	
	BC 14.10	Perform estimation of uric acid in serum and interpretation of results with clinical scenarios.	
	BC 14.11	Perform estimation of serum proteins, albumin and A:G ratio	
	BC 14.12	Perform the estimation of serum total cholesterol	
	BC 14.13	Perform the estimation of serum Bilirubin by manual / semi automated analyzer method.	
	BC 14.21	Describe Quality control and identify basic L J charts in Clinical biochemistry lab.	
Average Marks (out of 20)			

Signature of Facilitator

IV B. AETCOM COMPETENCIES

Date	Topic	Marks obtained
Average Marks (out of 10)		

- 75% attendance in Professional Development Program (AETCOM Module) shall be mandatory for eligibility to appear in final examination for each professional year.
- **Assessment:**
- Written tests comprising of short notes and creative writing experiences, OSCE based clinical scenarios / viva voce.

**Guidelines Competency Based Medical Education (CBME) Curriculum 2024, 12.09.2024 pg.no.36*

Signature of Facilitator

IV-C. JOURNAL/RECORD/ PORTFOLIO

Journal	Marks obtained (out of 10 marks)
Record Book /Portfolio	

ATTENDANCE

No.	Details	Percentage of attendance / Marks
I.	Foundation Course (minimum 75 %) (Common for all 3 departments)	
II D.	Theory (out of 10 marks)	
IV D.	Practical (out of 10 marks)	

Signature of Facilitator