

DEPARTMENT OF BIOCHEMISTRY
Raja Rajeshwari Medical College and Hospital, Kambipura,
Bangalore-560060

Certificate Course

Title	“Good Laboratory Practices”
Target group	I MBBS Students
Goal & Objective of the Course	<p>Clinical laboratory services are an integral part of diagnosis, treatment, disease surveillance and clinical research. Good lab practices incorporate a set of guidelines that ensure generation of good quality lab results and provision of safe working environment for all laboratory personnel.</p> <p>Objectives of the course:</p> <ul style="list-style-type: none"> ➤ To understand the importance of Hand Hygiene. ➤ To know the correct methods of PPE donning and doffing. ➤ To understand the basic steps of Phlebotomy and sample collection. ➤ To know the handling of MSDS, Spill Management and Needle stick Injury. ➤ To understand the lab errors (pre-analytical, analytical and post-analytical). ➤ To understand the critical alerts in laboratory. ➤ To learn about importance of quality control and Quality assurance. ➤ To learn Biomedical waste management in Laboratory medicine. ➤ Role of Pathology and Microbiology in Laboratory medicine. ➤ Fire safety <p>Course outcome:</p> <p>At the end of the successful completion of this course the student will be able to understand various factors affecting laboratory results and also will be able to correct interpretation of the laboratory data. The student will also understand how the clinical biochemistry laboratory helps effectively to meet the requirements of the end users by systematic communication between the clinician and laboratory persons.</p>
Course content:	<p>Duration of the Course: The duration of the course will be of 16 hours.</p> <p>Eligibility for admission. I MBBS Students of RRMCH</p> <p>Medium of teaching and examination.</p> <ul style="list-style-type: none"> A. Medium of instruction of course will be in English. B. Evaluation of course will be on the basis of attendance, behavior and discipline practical knowledge obtained during the training period. <p>After completion of evaluation / examination, certificate will be issued by RRMCH, Dr. MGR University.</p> <ul style="list-style-type: none"> A. The details of the Course Content (Syllabus) – Refer Annexure I

Planned method of teaching – learning	This course will be delivered in discrete sections, following the subject areas outlined in the syllabus. Each topic area will be introduced with lectures/videos/demonstration (online/offline). The classes will be interactive with the description of role of clinical biochemistry laboratory in contribution towards the proper diagnosis, prognosis and the follow up in various diseases.
Planned method of assessment:	Examination: Theory and Practical.
Infrastructure	Lecture hall & Clinical biochemistry laboratory services

ANNEXURE I : SYLLABUS

Sl. No.	Content	hours
01.	Hand Hygiene.	1hr
02.	PPE donning and doffing.	1hr
03.	Fire safety & Drill	1hr
	Preliminary Test	
04.	MSDS, Spill Management and Needle stick Injury.	1hr
05.	Biomedical waste in Laboratory medicine.	1hr
06.	Phlebotomy	1hr
07.	Sample collection	1hr
08.	Pre-analytical Errors	1hr
	Screening test for the selection of qualified Candidates	
09.	Analytical & Post analytical Errors	1hr
10.	Critical alerts in laboratory.	1hr
11.	Role of Pathology in Laboratory medicine.	1hr
12.	Blood Banking	1hr 30 minutes
13.	Role of Microbiology in Laboratory medicine.	1hr 30 minutes
14.	Quality control and Quality assurance.	1hr
15.	Introduction to basic research	1hr
	Final test for certification	
	TOTAL	16 Hours.

Reference books:

1. Varley's Practical Clinical Biochemistry.
2. Tietz fundamentals of clinical chemistry and molecular biology
3. Clinical Biochemistry by Michael L Bishop.
4. Text book of medical laboratory technology by Praful B Godkar