

**LIAQUAT INSTITUTE OF MEDICAL  
AND HEALTH SCIENCES THATTA, SINDH,  
PAKISTAN**

**BIOCHEMISTRY PRACTICAL LOG BOOK**



**Undergraduate MBBS Students**

# **Biochemistry Practical LOG BOOK**

**For**

**Undergraduate Medical Students**

Liaquat Institute of Medical and Health Sciences Thatta,  
Sindh, Pakistan



**Photo**

**Full Name:**

.....

**Batch:**

.....

...

**Roll No:**

.....

...

**Signature of Student**

**Signature of Head of  
Department**

**Signature of Principal**



## **Instructions to student**

- Faculty will teach/demonstrate the practical skill, you are instructed to carry out the task / perform the practical in the lab.
- After learning/completing practical under supervision, get logbook signed from the faculty of the department involved in teaching/demonstrating skills.
- Handle the equipment with care.



**Logbook**  
**Biochemistry Practical done in Biochemistry Lab of LIMHS**

**First Year MBBS**

**Module: Foundation Module**

<b>Practical</b>	<b>Methods of Demonstration</b>	<b>Scheduled Date</b>	<b>Name of the faculty who taught/demonstrated the practical</b>	<b>Signature of faculty.</b>
Laboratory Hazards & Protection Protocols	Theoretical			
Chemicals and Reagents.	Theory Identification of items			
Use of glassware and instruments for laboratory work	Theory Demonstration			
Solutions, Concentration expression (Percent Solutions, Molarity, Molality, Normality)	Theory			
<b><u>Tests for Carbohydrates</u></b> Molisch's test, Iodine test, Benedict's test Salivanoff's test, Barfoed's test, Osazone test	Theory Demonstration			
General tests for Proteins and Amino Acids Color Reaction Tests of Proteins Separation tests Precipitation tests				
Tests for Lipids	Theory Demonstration			





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**Module: Musculoskeletal Module**

<b>Practical</b>	<b>Methods of Demonstration</b>	<b>Scheduled Date</b>	<b>Name of the faculty who taught/demonstrated the practical</b>	<b>Signature of faculty.</b>
Estimation of Serum Uric Acid	Theory Demonstration in micro-lab			
Estimation of Vitamin D	Theory Demonstration in micro-lab			
Estimation of Serum Calcium	Theory Demonstration in micro-lab			
Estimation of Serum Phosphorus	Theory Demonstration in micro-lab			
Principles and types of chromatography Interpretation of clinical conditions and investigation related to use of chromatography	Theory Demonstration			
Estimation of alkaline phosphate	Theory Demonstration in micro-lab			
Estimation of serum glucose	Theory Demonstration in micro-lab			



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**Module: Blood Module**

<b>Practical</b>	<b>Methods of Demonstration</b>	<b>Scheduled Date</b>	<b>Name of the faculty who taught/demonstrated the practical</b>	<b>Signature of faculty.</b>
Electrophoresis and its clinical significance, applications	Theory Demonstration			
Estimation of Plasma Proteins	Theory Demonstration in micro-lab			
Estimation of Serum Albumin	Theory Demonstration in micro-lab			
Lab diagnosis of Anemia	Theory No demonstration			
Introduction to photo spectrometry, significance, applications	Theory Demonstration			



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**Module: Cardiovascular System Module**

<b>Practical</b>	<b>Methods of Demonstration</b>	<b>Scheduled Date</b>	<b>Name of the faculty who taught/demonstrated the practical</b>	<b>Signature of faculty.</b>
Estimation of Serum Cholesterol	Theory Demonstration On spectro- photo meter But on micro- lab in LUMHS			
Interpretation of Lipid Profile and significance	Theory			



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**Module: Respiratory System Module**

<b>Practical</b>	<b>Methods of Demonstration</b>	<b>Scheduled Date</b>	<b>Name of the faculty who taught/demonstrated the practical</b>	<b>Signature of faculty.</b>
Introduction to pH Meter, significance, applications	Theory Demonstration on pH meter			
Arterial Blood Gases (ABGs), significance, Interpretations	Theory			
Role of emulsification in respiration and digestion	Theory			





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**Module: GIT and Liver Module**

<b>Practical</b>	<b>Methods of Demonstration</b>	<b>Scheduled Date</b>	<b>Name of the faculty who taught/demonstrated the practical</b>	<b>Signature of faculty.</b>
Estimation of Serum Urea	Theory Demonstration On spectro- photo meter But on micro- lab in LUMHS			
Estimation of HCL from given sample	Theory			
Liver Functions Tests Estimation of Albumin Globulin ratio Estimation of direct and indirect bilirubin Interpretation of Liver Functions Test and significances	Theory Demonstration On spectro- photo meter But on micro- lab in LUMHS			



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**Module: Endocrine**

<b>Practical</b>	<b>Methods of Demonstration</b>	<b>Scheduled Date</b>	<b>Name of the faculty who taught/demonstrated the practical</b>	<b>Signature of faculty.</b>
Estimation of Serum Insulin	Theory	No		
Estimation of Thyroid Hormones	Theory	No		
Estimation of Cortisol	Theory	No		



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**Module: Renal & Excretory**

<b>Practical</b>	<b>Methods of Demonstration</b>	<b>Scheduled Date</b>	<b>Name of the faculty who taught/demonstrated the practical</b>	<b>Signature of faculty.</b>
Analysis of Urine	Theory Demo on dipstick			
Estimation of Serum Creatinine	Theory Demonstration On spectro-photo meter But on micro-lab in LUMHS			
Renal Functions Tests (RFTs)	Theory			
Estimation of Serum Electrolytes	Theory			

