

KMLTTB/LABS/01




REPUBLIC OF KENYA  
MINISTRY OF HEALTH



**KENYA MEDICAL LABORATORY TECHNICIANS AND TECHNOLOGISTS BOARD**

**MEDICAL LABORATORY CLASSIFICATION SCHEDULE**

*Pursuant to the Medical Laboratory Technicians and Technologists Board Act (CAP 253A Laws of Kenya)*

	MEDICAL LABORATORY CLASSIFICATION SCHEDULE		<b>DOCUMENT CONTROL</b>  Serial: KMLTTB/LAB/01 Version No. 001 Date: 19 <sup>th</sup> April 2024
	<b>OWNER THE FORM</b>	<b>REGISTRAR</b>	

S/No	Laboratory Class	Level of Health Facility	Tests	Techniques	Staffing Level	Basic Requirements
1	CLASS B	LEVEL II (Dispensary/medical Clinic)	<ul style="list-style-type: none"> <li>• Specimen Collection Center</li> <li>• Strip Based Tests e.g <ul style="list-style-type: none"> <li>○ Syphilis Rapid test</li> <li>○ HIV Rapid Testing</li> <li>○ Finger prick Blood Glucose</li> <li>○ Rapid Malaria</li> <li>○ H. Pylori stool antigen</li> <li>○ Salmonella stool antigen</li> <li>○ Stool Occult Blood</li> <li>○ Hemoglobin Estimation</li> <li>○ Pregnancy Testing Strip</li> <li>○ Hemoglobin Estimation etc</li> </ul> </li> <li>• Blood Grouping: <ul style="list-style-type: none"> <li>○ ABO and Rhesus (Rh) grouping etc</li> </ul> </li> <li>• Bacteriology: <ul style="list-style-type: none"> <li>○ Gram Stain</li> <li>○ Urine Microscopy</li> <li>○ Urine Chemistry etc</li> </ul> </li> <li>• Parasitology: <ul style="list-style-type: none"> <li>○ Stool Microscopy</li> <li>○ Stool occult blood</li> <li>○ Stool for Kato Haramadori</li> <li>○ Blood Slide For Malaria And Other Blood</li> </ul> </li> </ul>	Rapid tests, Immunochromatography Microscopy Centrifugation Rocking and shaking Flocculation Concentration Precipitation Agglutination Glucose-oxidation Colorimetry Glucometry Chromatography Absobetry	a minimum of 2 medical ab technicians /Technologist, - Support staff (1) Data Clerk (1)	Working Bench. Fridge Binocular Microscope Centrifuge LIMS Store  -Must have requisite validated medical laboratory equipment, reagents and other chemicals commensurate with the specific medical laboratory test menu and any other basic requirement as may be prescribed by KMLTTB from time to time.

			<ul style="list-style-type: none"> <li>Parasites etc</li> <li>• Mycological tests <ul style="list-style-type: none"> <li>○ KOH</li> <li>○ Indian Ink test</li> <li>○ CrAg Tests</li> </ul> </li> <li>• Serology: <ul style="list-style-type: none"> <li>○ Hepatitis B Rapid Diagnostic Test</li> <li>○ Hepatitis C Rapid Diagnostic Test</li> <li>○ TB Lam</li> <li>○ Prostatic Specific Antigen (PSA) Rapid Diagnostic Test</li> <li>○ Rheumatoid Factor</li> <li>○ Rapid Plasma Reagin (RPR)</li> </ul> </li> <li>• Peripheral Blood Film Reporting</li> <li>• Erythrocyte Sedimentation Rate (ESR)</li> <li>• Differential White Blood Cell Count</li> <li>• Semen Analysis</li> <li>• ASOT</li> <li>• Brucella</li> <li>• C-Reactive Protein (CRP) Qualitative</li> <li>• Sickling test</li> <li>• <i>any other test as prescribed by the KMLTTB</i></li> </ul>			
--	--	--	---	--	--	--

2	CLASS C	LEVEL III (HEALTH CENTRE CLINICS/Medical Centre)	<p>In addition to the test menu of Class B above:</p> <ul style="list-style-type: none"> <li>• Total Blood Count</li> <li>• Bleeding Time</li> <li>• Sickle Test Screening</li> <li>• Blood Transfusion: <ul style="list-style-type: none"> <li>○ Donor Identification &amp; recruitment</li> <li>○ Blood donation</li> <li>○ Blood Banking, Transfusion Transmissible Infections Screening (TTIs)</li> <li>○ Blood Screening</li> <li>○ Crossmatch</li> <li>○ Coombs Tests</li> </ul> </li> <li>• Bacteriological testing, <ul style="list-style-type: none"> <li>○ Gram stain</li> <li>○ Ziehl Neelsen Stain</li> <li>○ Culture &amp; Sensitivity - Stool, Urine HVS, Pus etc</li> </ul> </li> <li>• HIV Testing (Long Elisa)</li> <li>• Hepatitis C (long eliza)</li> <li>• Hepatitis B (long eliza)</li> <li>• CD4/CD8 Counts</li> <li>• CD45 Counts</li> <li>• Coagulation profile</li> <li>• HB Electrophoresis</li> <li>• any other test that may be prescribed by the Board</li> </ul>	<p>Additional Techniques to CLASS B include;</p> <p>Chemiluminescence Spectrophotometry Culture and sensitivity Electric impedance Digital microscopy with Artificial Intelligence (AI) Immunoagglutination Neutralization tests Flow cytometry Hemagglutination</p>	<p>A minimum of four Medical lab technicians /Technologist, -Support staff (2) Data Clerk (2)</p>	<p>Working Bench. Separate Fridges for reagents, specimens, and blood for transfusion and blood components, freezer Binocular Microscope Centrifuge Biosafety Cabinet II LIMS Store</p> <p>And any other as may be prescribed by KMLTTB from time to time</p> <p>-Must have requisite validated medical laboratory equipment, reagents and other chemicals commensurate with the specific medical laboratory test menu and any other basic requirement as may be prescribed by KMLTTB from time to time.</p>
3	CLASS D	Level IV (District Hospital/ Nursing Homes) Class	<p>In addition to the test menu in Class C above,</p> <ul style="list-style-type: none"> <li>• Clinical Chemistry <ul style="list-style-type: none"> <li>○ Liver Function Tests</li> <li>○ Alkali ne Phosp hatase</li> <li>○ Aspar tate Amin</li> </ul> </li> </ul>	<p>In additional Techniques to CLASS C to include;</p> <p>Flocculation tests Complement-fixation tests Amperometry, Spectrophotometry Colorimetry Immuno turbidometry / turbidometry Chemiluminescence</p>	<p>A minimum of 6 Medical lab technicians /Technologist, -Support staff (3) Data Clerk (2)</p>	<p>Working Bench. Fridge Binocular Microscope Centrifuge LIMS Store</p> <p>-Must have requisite validated medical laboratory equipment, reagents and other chemicals commensurate with the specific medical laboratory test menu</p>

						and any other basic requirement as may be prescribed by KMLTTB from time to time.
--	--	--	--	--	--	---

			<p>otrans ferase (ASAT )</p> <ul style="list-style-type: none"> <li>• Alani ne Amin otrans ferase (ALAT)</li> <li>• Total And Direct Biliru bin</li> <li>• Total Protei n- Albu min And Globu lin</li> <li>• Renal Function Tests <ul style="list-style-type: none"> <li>○ Blood Urea <ul style="list-style-type: none"> <li>○ Blood Electrolytes (Na+, K+, Cl-)</li> <li>○ Creatinine</li> </ul> </li> <li>• Blood Uric Acid</li> <li>• Total Cholesterol</li> <li>• Bone Chemistry <ul style="list-style-type: none"> <li>○ Magnesium</li> <li>○ Phosphorus</li> <li>○ Calcium</li> </ul> </li> <li>• Histopathology/ Cytopathology <ul style="list-style-type: none"> <li>○ Cervical Smears (Pap Smears)As</li> <li>○ Cytological Examination Of Fluids, Aspirates, Tissues, Bone Marrow</li> </ul> </li> </ul> </li> </ul>		
--	--	--	--	--	--

			<ul style="list-style-type: none"> <li>○ Frozen Sections</li> <li>○ Biopsies</li> <li>○ Autopsies</li> <li>• any other test that may be prescribed by the Board</li> </ul>			
4	CLASS E	Level V (County Hospital/Primary)	<p>In addition to the tests menu in Class D above,</p> <ul style="list-style-type: none"> <li>• Lipid Profile (Complete Profile)</li> <li>• Alcohol Determination</li> <li>• Cardiac Function Test</li> <li>• Creatine Phosphokinase</li> <li>• Lactic Dehydrogenase</li> <li>• Tumour Markers <ul style="list-style-type: none"> <li>○ CEA</li> <li>○ CA19-9</li> <li>○ CA 125</li> <li>○ AFP</li> <li>○ PSA Total</li> </ul> </li> <li>• Immunological Tests <ul style="list-style-type: none"> <li>○ Thyroid Function Tests</li> <li>○ Thyroid Antibodies Test</li> </ul> </li> <li>• Reproductive Panels &amp; Other hormones <ul style="list-style-type: none"> <li>○ HCG</li> <li>○ LH</li> <li>○ FSH</li> <li>○ Testosterone</li> <li>○ Prolactin</li> <li>○ AMH</li> </ul> </li> <li>• Cholinesterase Test</li> <li>• Allergy Tests <ul style="list-style-type: none"> <li>○ IGE</li> <li>○ IgG</li> <li>○ IgM</li> <li>○ IgA</li> </ul> </li> <li>• Cloning tests</li> <li>• Torch Profile <ul style="list-style-type: none"> <li>○ Toxoplasma,</li> <li>○ Rubella,</li> <li>○ Cytomegalovirus,</li> <li>○ Herpes</li> </ul> </li> </ul>	<p>In additional Techniques to CLASS D to include;</p> <p>Flocculation tests Complement-fixation tests Amperometry,Spectrophotometry Colorimetry Immuno turbidometry / turbidometry Chemiluminescence Immunological Histochemistry,</p>	<p>Minimum of 12 Medical lab technicians /Technologist, -Support staff (6) Data Clerk (4)</p>	<p>Working Bench. Fridge Binocular Microscope Centrifuge LIMS Store</p> <p>-Must have requisite validated medical laboratory equipment, reagents and other chemicals commensurate with the specific medical laboratory test menu and any other basic requirement as may be prescribed by KMLTTB from time to time.</p>

			any other test that may be prescribed by the Board			
5	CLASS F	Level VI (Referral ,Teaching and Research Hospitals )	In addition to tests menu in Class E above, <ul style="list-style-type: none"> <li>• SARS, Yellow Fever, Polio</li> <li>• Molecular techniques <ul style="list-style-type: none"> <li>○ real time PCR,</li> <li>○ Genotyping,</li> <li>○ HLA typing</li> <li>○ sequencing</li> </ul> </li> </ul> They are also used for disease surveillance and monitoring of disease trends emerging and reemerging and research any other test that may be prescribed by the Board	In addition to Class E, include National recognition in EQA Provision and confirmatory tests Molecular (sequencing and genotyping)	A minimum of 18 Medical lab technicians /Technologist, -Support staff (6) Data Clerk (6)	Working Bench. Fridge Binocular Microscope Centrifuge LIMS Store -Must have requisite validated medical laboratory equipment, reagents and other chemicals commensurate with the specific medical laboratory test menu and any other basic requirement as may be prescribed by KMLTTB from time to time.
6	CLASS G	International and National Referral and Clinical Research Laboratory	In addition to Class F, include Biosafety Level facilities to deal with hemorrhagic fever viruses and other infectious agents of national and international public health concerns	International Recognition In EQA Provision and confirmatory tests	A minimum of 25 Medical lab technicians /Technologist, -Support staff (6) Data Clerk (6)	Working Bench. Fridge Binocular Microscope Centrifuge LIMS Store -Must have requisite validated medical laboratory equipment, reagents and other chemicals commensurate with the specific medical laboratory test menu and any other basic requirement as may be prescribed by KMLTTB from time to time.

*NOTE: Gene Xpert is a class F categorized equipment for molecular tests, it may be allowed to conduct TB investigations in other medical laboratory classes at the discretion of the board.*

LIMS-Laboratory Information Management System

EQA-External Quality Assessment