

Scope of EGAC for Accreditation Fields:

No	Field	Major discipline		Sub- discipline		Tests/ Properties measured
		Code	Scheme Title/Type	Code	Sample/ artifact.	
6	Proficiency Testing Provider for testing laboratories	A	Food Chemistry	1	Plant produce	Moisture, Components, Contaminates, Fat, Protein, Ash, Carbohydrate, Cholesterol, Sodium, Potassium, Iron, Magnesium, Calcium, Salt, Calories, Saturated fat, Fats, Pesticide residue, etc.
				2	Animal produce	
				3	Industrial produce	
		B	Food Microbiology	1	Plant produce	Qualitative/ Quantitative: Salmonella Species, Listeria Species, E. coli, Coagulase Positive Staphylococcus, Coliform, Yeast and Mold, Aerobic Plate Count, Bacillus cereus, Campylobacter, ...etc.
				2	Animal produce	
				3	Industrial produce	
		C	Environmental Chemistry	1	Liquids: including drinking & non- potable water	Metals, nutrients, minerals, organic & inorganic chemicals, microbiology, contaminants, pesticide residue,etc
				2	Solids	
				3	Air	
		D	Chemical testing	1	Metal alloys	Composition analysis for the alloy types - ferrous, copper, aluminum, tin, lead, magnesium, zinc, nickel, precious metals, phosphorus, cadmium, chromium, manganese, silicon, arsenic
				2	Soils	Total and water soluble fluoride, chloride, ammonia, oxidized nitrogen, extractable sulphur, copper, lead, arsenic, selenium, mercury, silver, molybdenum, chromium, nickel, zinc, iron, manganese, ...etc.
				3	Coal and fuels.	Moisture, ash, volatile matter, gross calorific value, total sulfur, pyretic sulfur, chlorine, carbon, hydrogen, nitrogen, carbonate carbon, phosphorus, relative density, fluorine, mercury, selenium, arsenic, ...etc.
				4	Fuels.	Octane rating.
		E	Physical Testing	1	Soils	Density, Particle size, Porosity, Colligative properties,etc.
					Granules	
					Concrete	
					Paints	
					Adhesives	

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					Alloys	
		F	Mechanical Testing	1	Metals.	Tensile strength, strain rate, yield stress, proof strength, elongation, Brinell hardness, Rockwell hardness, Vickers hardness, Fatigue, Fracture toughness, Impact, Creep, Stress, rupture, Crack growth
				2	Chains.	Proof strength, braking load, extension
				3	Textiles.	Qualitative fiber analysis, breaking load, extension, mass per unit area, threads per unit length.
		G	Electrical Testing	1	Electrical appliances & accessories	General Requirements & electrical Performance
						Fire Test
						Insulation & Wire tests
						Temperature Measurements
						DC Component from AC equipment
					Socket outlets current breaking tests	
		H	Biological Testing	1	Drinking water.	Water: E.coli, faecal coliforms, total coliforms, faecal streptococci, plate count
				2	Non- potable water	
				3	Food	Pathogens in Food: Qualitative and quantitative – salmonella, listeria, bacillus cereus, staphylococci Non-Pathogens in Food: Plate count, coliforms, E.coli, thermophiles, thermophilic spores
		I	Construction Material Testing	1	Asphalt.,	Bearing ratio, classification, compaction and density, strength and consolidation
				2	Aggregates.	Density, bitumen content, aggregate grading, stability and flow
				3	Soils & cement.	Sieve analysis, particle shape and size, density, water absorption
				4	Concrete.	Hardened concrete cylinders - dimensions, maximum sustained load unit, compression strength, type of failure
				5	Marble.	Density, consistency, non-volatiles by mass, non-volatiles by volume
		J	Pharmaceuticals	1	Solids.	Identification and enumeration of pharmacopeias.
				2	Semi- solids.	Chemical analysis.
				3	Liquids.	Microbiological analysis.

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7	Proficiency Testing Provider for calibration laboratories	K	Physical and Dimensional Metrology	1	Length measuring devices	Length, diameter, distance, Laser Wavelength, Line Scales & Distances Measurements				
				2	Limit gauges	Thread quantities				
				3	angle standards	Angle measurements				
				4	Load cells Calibers	Index Tables Clinometers				
				5	Volumetric equipment	Volume measurements				
				6	Torque measuring devices	Torque measurements				
				7	Flow measuring devices	Flow measurements				
				8	Pressure and vacuum measuring devices	Pressure and vacuum measurements				
				9	Hydrometers	Hydrometric measurements				
		L	Thermo physical Properties	1	Temperature measuring equipment - Thermometers - Thermocouples	Resistance Thermometry				
						Thermocouples				
						Liquid-In-Glass Thermometers				
						Radiation Thermometers				
		M	Electrical Quantities	1	Resistors Dividers Magnetic materials Capacitors Inductors Transformers Voltage standards Attenuators Precision transfer instruments Calibrators	Voltage, Current, Voltage Ratio, AC/DC transfer (voltage and current), Power and Energy Resistance Capacitance Inductance Dissipation Factor, Oscilloscope Functions, Process calibrators Logic State Analysis, High Voltage quantities Modulation (AM, FM, PM), Impedance (reflection coefficient), Power, Attenuation, Adaptors, Antennas, Function Generation, Spectrum Analysis, S-parameters, Noise, Electric/Magnetic Field quantities.				
						N	Optics and Radiometry	1	Optical components and systems	Optical System properties
									Radiant flux	Lasers
									Irradiance measuring instruments	Quantities of Optical Radiation
									Luminance	Fiber Optics
						O	Acoustic and	1	Vibration measuring and	Photometric quantities
										Microphones

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			Vibration		calibration equipment	Sound Level Artificial Mastoids Noise Dosimeters		
		P	Mechanical Quantities	1	Pressure,	Pressure		
				2	vacuum,	vacuum		
				3	Force,	Force, Extensometers, strain gauges		
				4	Odometers	distance		
				5	Torque	Torque Wrenches		
				6	Scales& balances	Weights		
				7	Mass gauges.	Mass		
		Q	Time & Frequency	1	Tachometer Optical/ Mechanical	Period Time Frequency		
		R	Fluid Quantities	1	Flow	Gas and Liquid Flow Rate		
					Standard gauges	Volume of Flowing Gases and Liquids		
					Velocity	Velocity of Gases		
					standard gauges	Mass, Volume, & Density of Gases/Liquids		
					Viscosity meters	Viscosity		
		S	Environmental Equipment	1	Particles counters	Enumeration		
					Water and Air analyzers	Water& Air contents		
		8	Proficiency Testing Provider for medical laboratories	T	Microbiology Program	1	Body fluids	Bacteriology Hepatitis A,B,C
							Simulated samples in Universal Transport Medium	Mycology HIV
							Swabs in Transport Medium	Mycobacteriology Virology
							Freeze dried fluids	Intestinal Parasites Parasitology
							Dried blood spots	Molecular Microbiology Miscellaneous tests
U	Chemistry Program			1	Body fluids	Routine Chemistry, Bilirubin, Urine Chemistry, Blood Gases, Hemoglobin A1c		
					Dried blood spots	Therapeutic drugs, Drugs of Abuse Routine Enzymes,		

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						Cardiac Markers, Lipids, Endocrinology, Immunology
		V	Hematology Program	1	Human Blood	Routine Hematology Flow Cytometry- Hematological Disorders Flow Cytometry-HIV Flow Cytometry-Stem Cells Reticulocytes Body fluids Routine Coagulation D-dimer Assay Factor Assay Heparin Assay Thrombophilia Red Cell Disorders- Hemoglobin Fraction Quantitation HBs Screen Hematology Morphology Hematology Bone Marrow
		W	Pathology Program	1	Human Tissues Body fluids	Cytology Routine Stains, Special Stains, ImmunoHistoChemistry Predictive Genetic tests
		X	Transfusion Medicine Program	1	Human Blood	Tests for blood transmitted diseases Hematopoietic Progenitor Cell Services Immunoematology((ABO group&Rh type), Antibody detection (transfusion),Antibody detection(Non transfusion), antibody identification,Compatibility testing)
		Y	Serology program	1	Body fluids	Serology for infectious diseases Miscellaneous tests
		Z	Cytogenetics program	1	Blood/ Urine	Metabolite analysis