

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	
		F	Mechanical	1	Metals.	Tensile strength, strain rate, yield stress, proof

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			Testing			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
		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.	
7	Proficiency Testing Provider for calibration	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	

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				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 Humidity
		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 Radiant flux Irradiance measuring instruments Luminance Spectrophotometry	Optical System properties Lasers Quantities of Optical Radiation Fiber Optics Photometric quantities
		O	Acoustic and Vibration	1	Vibration measuring and calibration equipment	Microphones Sound Level Artificial Mastoids Noise Dosimeters
		P	Mechanical Quantities	1	Pressure,	Pressure
				2	vacuum,	vacuum
				3	Force,	Force, Extensometers, strain gauges
				4	Odometers	distance

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				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 Standard gauges Velocity standard gauges Viscosity meters	Gas and Liquid Flow Rate	
						Volume of Flowing Gases and Liquids	
						Velocity of Gases	
						Mass, Volume, & Density of Gases/Liquids	
						Viscosity	
		S	Environmental Equipment	1	Particles counters Water and Air analyzers	Enumeration	
						Water& Air contents	
		8	Proficiency Testing Provider for medical laboratories	T	Microbiology Program	1	Body fluids
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 Dried blood spots	Routine Chemistry, Bilirubin, Urine Chemistry, Blood Gases, Hemoglobin A1c	
						Therapeutic drugs, Drugs of Abuse Routine Enzymes, 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	

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		Code	Scheme Title/Type	Code	Sample/ artifact.	
						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	Cytology
					Body fluids	Routine Stains, Special Stains, ImmunoHistoChemistry
						Predictive Genetic tests
		X	Transfusion Medicine Program	1	Human Blood	Tests for blood transmitted diseases
						Hematopoietic Progenitor Cell Services
						Immunochemistry((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