



SRI LANKA ACCREDITATION BOARD
For CONFORMITY ASSESSMENT

SPECIFIC CRITERIA FOR

**TESTING LABORATORIES PERFORMING
CHEMICAL, BIOLOGICAL, MECHANICAL,
ELECTRICAL AND FORENSIC TESTING.**

| SRI LANKA ACCREDITATION BOARD FOR CONFORMITY ASSESSMENT | | | | |
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| Title: Specific Criteria for Testing Laboratories | | | Doc No: TL –GL (P) - 02 | |
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AMENDMENT SHEET

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ABBREVIATIONS

| | | |
|------|---|---|
| CRM | - | Certified Reference Materials |
| QC | - | Quality Control |
| RM | - | Reference Materials |
| SLAB | - | Sri Lanka Accreditation Board for Conformity Assessment |
| LIMS | - | Laboratory Information Management Systems |
| NVQ | - | National Vocational Qualifications Framework |
| SLQF | - | Sri Lanka Qualifications Framework |

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1. INTRODUCTION

- 1.1. The requirements for accreditation are laid down in the International Standard ISO/IEC 17025: General requirements for the competence of testing and calibration laboratories. These requirements apply to all types of testing, but in certain instances additional guidance is needed to streamline the accreditation process and take account of the specific type of testing and the technologies involved.
- 1.2. This document has been prepared by the Technical Advisory Committee on Testing laboratories and approved by the Council of Sri Lanka Accreditation Board (SLAB). It supplements ISO/ IEC 17025 standard and provides specific guidance on the accreditation of Chemical, Biological, Mechanical, Electrical and Forensic testing laboratories for the use of assessors and applicant and accredited laboratories.
- 1.3. This document covers the application of the ISO/ IEC 17025 for accreditation of Chemical testing laboratories, Biological laboratories, Mechanical laboratories, Electrical laboratories, Forensic laboratories and applicable to products groups as given in Appendix A to E.
- 1.4. This document should be read in conjunction with the ISO/IEC 17025:2017 and Rules and Procedures of SLAB.

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2. SCOPE

Accreditation of Testing laboratories includes Forensic Science, Chemical, Biological, Mechanical and Electrical testing laboratories.

The scope of accreditation of SLAB is applicable to the following disciplines/areas of activities in relevant laboratories.

- List of applicable product groups for Forensic Testing - Annexure – 01.
- List of applicable product groups for Mechanical Testing - Annexure – 02
- List of applicable product groups for Chemical Testing - Annexure – 03
- List of applicable product groups for Biological Testing - Annexure – 04
- List of applicable product groups for Electrical Testing - Annexure – 05

Accreditation for additional disciplines may be offered in future as per requirement arises.

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3. NORMATIVE REFERENCES

- ISO/IEC 17025 – General requirements for the competency of testing and calibration laboratories
- ILAC-G19:08/2014 - Modules in a Forensic Science Process
- ILAC G8:09/2019- Guideline on Decision rules and statement of Conformity
- ILAC G 17 – Introducing the concept of uncertainty of measurement in testing in association with application of the standard ISO/IEC 17025.
- ILAC G 18:04/2010 Guideline for the formulation of scope of accreditation for laboratories
- ILAC-G 10:2020 - Policy on Metrological Traceability of measurement results

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4. TERMS AND DEFINITIONS

4.1. Competence

Competence is the demonstrated ability to apply knowledge and skills and, where relevant, demonstrated personal attributes.

4.2. Court Statement

A Court statement is a written document or any other acceptable format of the results and interpretations of forensic tests/examinations submitted to the court. Such reports may be in a format prescribed in legislation and may also be in electronic format. In addition, a copy of the court statement may be submitted to law enforcement investigators, members of the judiciary and other relevant authorities.

4.3. Equipment

Equipment refers to all measuring instruments, software, measurement standards, reference materials, reference data, reagents, consumables or auxiliary apparatus that require the correct performance of the laboratory activities.

4.4. Non-conforming examination and testing

Non-conforming examination and testing refers to any aspect of the forensic unit's work, including, scene examination, laboratory examination, sampling, testing, results or expert witness testimony that do not conform to the forensic unit's policies, procedures or the agreed requirements of the customer. Examples are using equipment that is out of specification, misidentifying a drug or incorrectly interpreting a blood pattern.

4.5. Reference Material

A reference material is a material, sufficiently homogeneous and stable with respect to one or more specified properties, which has been established to be fit for its intended use in a measurement process.

4.6. Testing

Testing is used in the document when there is an activity including measurements and analytical techniques.

4.25 Decision Rule

Rule that describes how measurements uncertainty is accounted for when stating conformity with a specified requirements.

4.26 Risk (as per ISO 31000:2018)

Effect of uncertainty on objectives

5.0. STANDARD REQUIREMENTS

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5.1. IMPARTIALITY & CONFIDENTIALITY

The requirements of ISO/IEC 17025 clause 4.1 & 4.2 apply.

Laboratory shall have documentations to fulfil these requirements.

5.2. STRUCTURAL REQUIREMENTS

The requirements of ISO/IEC 17025 clause 5 apply.

5.3. RESOURCE REQUIREMENTS

5.3.1 Personnel

The requirements of ISO/IEC 17025 clause 6.2 apply.

The management shall define each role in the laboratory and specify minimum competency requirements for each role.

Personnel work in the laboratory to be competent to perform assigned tasks. Competencies to be proved during the assessment. Records for maintaining competencies shall be available. The evaluation of competence may take a variety of forms, dependent on the task(s) performed e.g. written and / or oral examinations; practical exercises; or direct observation by a qualified person. In many cases, some combination of continuous competency evaluation /monitoring system will be the most appropriate approach.

Records must be sufficiently detailed to show that staff who involve in testing/ any activity have been properly trained, that their subsequent ability to perform assigned task(s) has been fully assessed /training evaluated and that they have been authorized to perform work independently.

For Forensic laboratories, Court Testimony Monitoring

The laboratory must have and follow a documented procedure whereby the testimony of each examiner is monitored regular basis. Areas that must be covered in the evaluation include appearance, poise, performance, effectiveness of presentation. The monitoring procedure must also prescribe the remedial action that is to be taken should the evaluation be less than satisfactory. A record must be kept of each evaluation.

Minimum competency requirements for each field of testing are given in **Appendix A**.

Technical Management

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The officer in charge of a laboratory technical management, must be suitably qualified with a sound knowledge of the principles of the test, be able to provide adequate supervision and competent to handle all technical matters related to the laboratory activities.

Quality management

A person to document, establish, maintain and improve the management system, irrespective of other duties and responsibilities assigned to him/her. Should be competent person with a Science background and having experience in quality management system maintain and direct access to the highest level of the management.

5.3.2 Facilities and Environmental Conditions

The requirements of ISO/IEC 17025 clause 6.3 apply.

One of the key responsibility of the laboratory management is to provide an adequate and safe working environment. Laboratory facilities should reflect due consideration of space, design, security, fire, health and safety (biological safety, laser safety, radiation safety, electrical safety..etc) and waste management (biological, chemical and hazardous etc). Laboratory management is responsible to provide adequate personnel Protective Equipment (PPE) to the staff. Where appropriate, the laboratory should have safety showers and eye wash equipment of suitable locations and in good working condition.

When radioactive and X-ray work are performed, detectors must be used regularly to monitor radiation levels and the wearing of film badges by staff may be necessary.

Staff must be advised of immunization and other appropriate precautionary measures. It is recommended that relevant records be kept.

Applicable government legislations to be fulfilled.

5.3.3 Equipment

The requirements of ISO/IEC 17025 clause 6.4 apply

5.3.4 Metrological traceability

The requirements of ISO/IEC 17025 clause 6.5 apply

5.3.5 Externally provided products and services

The requirements of ISO/IEC 17025 clause 6.6 apply

All services obtained by the laboratory to be considered.

5.4 PROCESS REQUIREMENTS

5.4.1 Review of Requests, Tenders and Contracts

The requirements of ISO/IEC 17025 clause 7.1 apply

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5.4.2 Selection, Verification and Validation of method

The requirements of ISO/IEC 17025 clause 7.2 apply

The performance characteristics to be determined by the laboratory for every test method perform at the laboratory and suitability of the method for their particular needs and matrixes to be documented. It may include; a) Selectivity & specificity, b) Range, c) Linearity, d) Sensitivity e) Limit of Detection, f) Limit of Quantification, g) Ruggedness, h) Accuracy, i) Precision. etc.

5.4.3 Sampling

The requirements of ISO/IEC 17025 clause 7.3 apply

5.4.4 Handling of test items

The requirements of ISO/IEC 17025 clause 7.4 apply

5.4.5 Technical records

The requirements of ISO/IEC 17025 clause 7.5 apply

The information that is to be included in records shall be documented appropriately and may include, but not be limited to, records of any communication with the customers (verbal or written), contract review, examination and testing requested and agreements with customer, exhibit/sample receipts, descriptions of exhibits /sample including packaging and seals, subpoenas, records of observations and test/examination results, reference to procedures used, diagrams, maps, print-outs, photographs, videos etc.

5.4.6 Evaluation of measurement uncertainty

The requirements of ISO/IEC 17025 clause 7.6 apply

5.4.7 Ensuring the validity of results

The requirements of ISO/IEC 17025 clause 7.7 apply

SLAB Policy for Participation in External Quality Assurance activities (AC-RG(P)-02) is apply.

Quality control procedures must be documented. Where appropriate, quality control data must be recorded in such a way that trends in analysis can be readily evaluated.

5.4.8 Reporting of results

The requirements of ISO/IEC 17025 clause 7.8 apply

5.4.9 Complaints

The requirements of ISO/IEC 17025 clause 7.9 apply.

5.4.10 Non Conforming Work

The requirements of ISO/IEC 17025 clause 7.10 apply.

5.4.11 Control of data and information management

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The requirements of ISO/IEC 17025 clause 7.11 apply.

If the laboratory has implemented LIMS it should be validated and access control. User guides to be available.

5.5 MANAGEMENT SYSTEM REQUIREMENTS.

The requirements of ISO/IEC 17025 clause 8 apply.

If the laboratory follows Option B, Laboratory shall maintain management system as per ISO 9001 requirements. If the laboratory is certified as per ISO 9001 same system can be use. Internal audit of the laboratory to be covered both ISO 9001 requirements and ISO/IEC 17025 requirements.

If the laboratory follows Option A, Laboratory shall maintain management system documentation as per ISO/IEC 17025 clauses.

5.5.1 Management system documentation

The requirements of ISO/IEC 17025 clause 8.2 apply

5.5.2 Control of management system documents

The requirements of ISO/IEC 17025 clause 8.3 apply

The requirements for the accessibility and control of documents apply to permanent facilities and also to all sites or locations where work is performed, e.g. scene of crime.

5.5.3 Control of records

The requirements of ISO/IEC 17025 clause 8.4 apply

The forensic testing shall have documented procedures to create and maintain records relating to each case under investigation.

Retention time of the records to be complied to national information security regulations.

5.5.4 Actions to address risks and opportunities

The requirements of ISO/IEC 17025 clause 8.5 apply

5.5.5 IMPROVEMENT

The requirements of ISO/IEC 17025 clause 8.6 apply.

Laboratory can initiate and implement improvements in conjunction with risk and opportunities identified in clause 8.5.

5.5.6 CORRECTIVE ACTION

The requirements of ISO/IEC 17025 clause 8.7 apply.

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5.5.7 INTERNAL AUDITS

The requirements of ISO/IEC clause 8.8 apply.

The internal audit shall be conducted at least annually to cover all standard requirements. Witnessing of tests/ any activity performed by the laboratory personnel to be witnessed during the internal audit.

Test/activities which are infrequently encountered may require other means by which to confirm competence, e.g. mock incident or other types of simulations, market sample analysis, etc. Other activities which take place for the purpose of confirming competence.

5.5.8 MANAGEMENT REVIEW

The requirements of ISO/IEC 17025 clause 8.9 apply.

Appendix A Minimum competency requirements

| Field of Testing | Task | Educational qualification | Training | Experience & Skill |
|------------------|-------------------------|---------------------------|----------------------|----------------------------|
| Chemical Testing | Testing staff/ Analysts | GCE A/L examination with | Training on relevant | One year experience in the |

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| | | Chemistry as a subject Or | technical field | field and proven skills ** |
| | | Diploma in Laboratory Technology in Chemistry or equivalent qualifications such as NVQ level 05 or equivalent | Training on relevant technical field | Six months experience in the field and proven skills ** |
| | | Graduates in Science with Chemistry Or equivalent qualifications such as NVQ level 06/ 07 or equivalent | Training on relevant technical field | Adequate on the job training (minimum 03 months) and proven skills ** |
| | Authorized Signatory | Graduates in Science with Chemistry or equivalent qualifications such as NVQ level 07 or equivalent | Training on relevant technical field | Three years relevant work experience |
| | Providing opinion & interpretations/ compliances | Graduates in Science with Chemistry or equivalent qualifications such as NVQ level 07 or equivalent | Training on relevant tests & knowledge on manufacturing of relevant products, legislative requirements and understanding of the significance of deviations and applicable decision rule | Three years relevant work experience |
| | | | | |
| Biological | Test perform (Analysts) | Degree in microbiology or Bio | Training on relevant test | Six months experience in the |

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|----------------|--|--|---|---|
| Testing | | science or an equivalent qualifications or G.C.E. Advanced Level examination with biology as a subject and Diploma/ Certificate in Laboratory Technology in Biology/Microbiology equivalent to NVQ 05 | methods to be performed at least 6 months Training on relevant field at least one year | field and proven skills One year relevant experience related to the microbiology field and proven skill ** |
| | Authorized Signatory for test report on general microbiology reports | Graduate in Science with Microbiology as one of the subjects or equivalent qualifications | Training on relevant tests to be authorized | 03 years experience in the field |
| | Authorized Signatory for test report on risk group 2 and above | Graduate in Biological science with post graduate in Microbiology | | |
| | Providing opinion & interpretations/ compliances | Graduate in Biological science with post graduate in Microbiology | Training on relevant tests & knowledge on manufacturing of relevant products, legislative requirements and understanding of the significance of deviations and applicable decision rule | 03 years experience in the field and proven skills ** |

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| Mechanical and Electrical Testing | Testing staff/ Analysts | GCE A/L with Physics as a subject Or equivalent to NVQ 05 | Field specific technical training for six months | One year experience in the field and proven skills ** |
| | | Diploma in Laboratory Technology in Physical testing or any other relevant qualification equivalent to National Vocational Qualification (NVQ) level 05 | Field specific technical training for six months | Six months experience in the field and proven skills ** |
| | | Graduates in Science (with Physics as a subject) or equivalent | Training on relevant technical field for six months | 6 months on the job training and proven skills ** |
| | Authorized Signatory | Graduates in Science (with Physics) or BSc Engineering, or equivalent qualifications such as NVQ 06 or 07 level or equivalent | Training on specifically in relevant technical field | Three years relevant work experience |
| | Providing opinion & interpretations/compliances | Graduates in Science (with Physics) with special training on specifically on the field or BSc Engineering, or equivalent qualifications such as NVQ 06 or 07 level or equivalent | Training on relevant tests & knowledge on manufacturing of relevant products, legislative requirements and understanding of the significance of deviations and applicable decision rule | Three years relevant work experience |
| | | | | |

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| Forensic Testing | Crime Scene Investigation | Graduates in science or equivalent qualifications related to the field | Training on same task at least 6 months | Three years, experience and proven skill. ** |
| | Digital Forensics (Audio, Video, Biometrics and Computer analysis) | Graduates in computer science or information technology or equivalent qualifications related to the field | Training on same task at least 6 months | One year Experience and proven skill** |
| | DNA Analysis | Graduates in Biological science or equivalent qualifications related to the field | Training at least 6 months. | 01 year in relevant work experience and proven skill ** |
| | Fire investigations, Firearms and Ballistics, Handwriting and Questioned Documents, Forensic miscellaneous, Forensic trace evidence analysis, Explosives, Marks and Impressions | Graduates in science (with Chemistry / Physics as a subject) or equivalent qualifications related to the field | One year training in the relevant field. | Three year relevant work experience with proven skill** |
| | Forensic medicine and pathology, Histopathology, Anthropology, Medical Toxicology, Clinical forensic | Medical graduate with MBBS or equivalent qualification recognized by Sri Lanka Medical Council (SLMC). | - | - |

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| Forensic Testing | medicine | | | |
| | Fingerprints | Graduates in science or equivalent qualifications related to the field | Training at least 6 months | Three year experience with proven skill** |
| | Forensic Toxicology, Narcotics and Psychotropic substances | BSc Chemistry (sp) or Graduates in science (with Chemistry as a subject) with MSc in Analytical Chemistry. | Training on relevant field at least 6 months. | Three years experience with proven skill ** |
| | Forensic Serology | Graduate in Science (Chemistry/ Biology) (sp) or Graduates in science (with Chemistry/ Biology as a subject) with MSc in relevant field. | Training on relevant field at least 6 months | Three years relevant work experience. |
| Forensic Testing | Forensic entomology | Graduate in biological science or equivalent qualification preferably with forensic entomology as a subject from a recognized university / institution approved by the UGC. or Postgraduate in forensic entomology from a recognized university / institution approved by the UGC. | Training on relevant field at least 6 months | 03 year experience in the relevant field 02 year experience in the relevant field |
| | Forensic Psychology | Graduate in Clinical Psychology or equivalent qualification preferably with | Training on relevant field at least 6 months. | Three year experience |

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| | | criminal or forensic psychology as a subject from a recognized university / institution approved by the UGC. Or Postgraduate in forensic psychology from a recognized university / institution approved by the UGC. | | |
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**** Relevant training, training evaluation, test witnessing evidences, competency evaluation to be maintained.**

Level of equivalent qualification required will be finally decided by the Accreditation Committee. Competency evaluation of authorized signatories will be carried out as per the score and competency based on GUIDELINE FOR EVALUATION OF SIGNATORIES FOR LABORATORY ACCREDITATION TL-GL(P) -09. and score of the interview.

Annex 01: Applicable Product group in Forensic Testing

The table below lists only some of the forensic disciplines but does not preclude additional activities being undertaken by a forensic unit. Even if some forensic disciplines may not be mentioned here, they may still be included in the scope of this guidance document.

1. Crime Scene Investigation
2. Digital Forensics (Audio, Video, Biometrics and Computer analysis)
3. DNA Analysis
4. Explosives
5. Fingerprints
6. Marks and Impressions
7. Fire investigations
8. Firearms and Ballistics
9. Forensic medicine and pathology
 - a. Clinical forensic medicine
 - b. Forensic Histopathology
 - c. Forensic anthropology and Odontology
10. Forensic Psychology
11. Forensic entomology
12. Forensic Toxicology

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13. Narcotics and Psychotropic substances
14. Handwriting and Questioned Documents
15. Forensic Serology
16. Forensic trace evidence analysis
17. Accident investigations
18. Forensic miscellaneous

Audio, Video and Computer Analysis

- Speech, audio and video analysis
- Biometrics
- Computers (hardware and software)
- Image enhancement
- Recovery of information from electronic devices and media
- Automated skull reconstruction and aging simulation
- CCTV
- Facial mapping
- Mobile computerized devices (including phone, GPS, PDA)

Controlled/non-controlled Substances

- Botanical material
- Related chemicals and paraphernalia
- Controlled pharmaceutical and drugs

Entomology, Botany, Archaeology, Anthropology , Odontology

Fingerprints

- Fingerprints and finger marks (development and comparison)
- Palm prints (development and comparison)
- Footprints (development and comparison)

Firearms and ballistics

- Bullets and cartridges
- Gunshot residue
- Firearms
- Stun Guns

Hairs, Blood, Body Fluids and Tissues and DNA profiling

- Animal DNA profiling
- DNA profiling
- Parentage testing
- Semen and vaginal secretion analysis
- Body fluid identification
- Mitochondrial DNA profiling
- Blood grouping
- Hair comparison

Handwriting and Document Examination

- Copiers and copied material
- Handwriting
- Inks and printing materials
- Printers and other printed objects
- Security marks
- Embossing and embossed materials
- Indentations
- Paper
- Rubber stamps
- Typewriters and typewritten material

Marks and Impressions

- Damage examination
- Fabric impression

- Glove marks
- Shoe marks
- Tyre marks

- Non-friction ridge body marks
- Tool marks and impressions

Forensic Medicine

- Cause of death determination
- Pathology
- Examination of injuries

Scene Investigation

- Blood pattern analysis
- Fire investigation
- Scene of crime investigation
- Bullet trajectory
- Photography
- Chemical, Biological, Radioactive, Nuclear

Toxicology

- Alcohol
- Pharmaceutical products
- Drugs
- Poisons

Trace Evidence

- Acids
- Alkalis
- Botanical material (excluding controlled substances)
- Components of technical or household appliances
- Dyes and pigments
- Feeding stuffs and ancillary items
- Fibres and hairs
- Food
- Glass
- Lachrymatory chemicals
- Manufacturers marks (including serial number restoration)
- Oils and greases
- Soils
- Adhesives
- Arson & fire evidence e.g. Fire debris
- Clothing/garments
- Corrosives
- Cosmetics
- Electrical devices and components
- Explosives and explosion debris
- Fertilizers
- Firearm discharge residues
- Hydrocarbon fuels
- Light filaments
- Lubricants and spermicidal agents
- Metals and alloys
- Paints
- Plastics
- Pyrotechnic devices

Vehicles and Vehicle Accident Investigation

- Component failures including light bulbs
- Electrical failures
- Speed calculations
- Trajectory determination
- Car immobilizer systems
- Erased markings
- Tachograph charts
- Tyre examination

Annex 02 – Mechanical Testing

Applicable fields of Mechanical testing under SLAB accreditation shall be as follows

- (a) Mechanical Properties of Materials
- (b) Metallographic Test
- (c) Properties of Powder Metallurgical Products
- (d) Building Materials
- (e) Plastic, Rubber and Leather
- (f) Textile Materials
- (g) Soil and Rock

| Group - Mechanical Properties of Materials | Group - Properties of Powder Metallurgical Products |
|---|--|
| 1 Tensile test (% elongation, Y.S., T.S., Modules of Elasticity, Reduction of area) | 1 Density |
| 2 Compression Test | 2 Porosity |
| 3 Adhesion Strength Test | 3 Flow Rate |
| 4 Bonding Strength | 4 Transverse |
| 5 Shear Test | 5.Rupture Test |
| 6 Hardness Test; a) Rockwell b) Brinell c) Vickers d) Knoop e) Shore | 6 Coefficient of Friction (Dynamic) |
| 7 Hardenability Test | 7 Coefficient Friction (Static) |
| 8 Bend Test | 8. Fracture Toughness |
| 9 Formability Test | 9 Abrasive Wear Resistance |
| 10 Drawability Test | 10 Radial Crushing Strength of Sintered Bearing |
| 11 Impact Test a) Izod Impact b) Charpy Impact | 11 Compressive Yield Strength |
| 12 Machinability Test | 12 Strength Test for Sintered Gear |
| 13 Stress-rupture Test | 13 Sieve Analysis |
| 14 Creep Test; Stress Relaxation | 14 Particle Size Distribution |
| | 15 Compatibility |

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| 15 Lapping, Wrapping, Coiling Test 16 Fatigue Test a) Axial Fatigue b) Flexural Fatigue c) Rotating Bending Fatigue 17 Fracture Toughness Test a) Plain Strain Fracture Toughness Test b) Crack Opening Displacement Test c) Crack Growth Rate Test d) Nil Ductility Transition Test e) Drop Weight Test 18 Spring Test a) In Compression b) In Tension 19 Tube Testing a) Bending Test b) Flattening Test c) Crushing Strength Test d) Drift Expansion Test 20 Weldability Test (a) Impact Cold Cracking Test b) Y-groove Cracking Test c) Hot Cracking Test d) Circular Patch Test e) Diffusible Hydrogen Measurement by Hg Method & Gas Chromatography f) Thermal Cycle Reheat Cracking Test g) Thermal Hot Ductility Test h) Delta Ferrite Measurement 21 Spot/ Projection/ Seam Weld Tests (a) Cross Tension Test (b) U-Tension Test (c) Peel Off Test (d) Tensile Shear Test 22 Coated Welding Electrode Testing 23 Residual Stress Measurement a) X-ray Diffraction Stress Analyzer b) Hole Drilling Method Torsional Fatigue 24 Tests on Fasteners: a) Proof Test b) Thread Slip Measurement 25 Corrosion Tests: a). Salt Spray Test b). Cu-accelerated Acetic Acid-Salt Spray Test (CASS) c). Stress Corrosion Cracking Test d). Hydrogen Embrittlement (Stress Durability Test) 26 Wear/ Abrasion Resistance Test | 16 Case Depth Measurement |
| Group - Buildings Materials 1. Cement /Cement products | Group – Plastics, Rubber and Leather Plastics and Rubber |

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| <ul style="list-style-type: none"> a) Fineness by wet sieving b) Fineness by dry sieving c) Fineness by air permeability d) Consistency e) Setting Time (initial, final) f) False Setting g) Soundness by Le Chatelier Test h) Soundness by Autoclave Test i) Compressive Strength j) Tensile Strength k) Compressive & Flexural Strength Using Prism Moulds l) Drying Content m) Air Content n) Water Retention o) Specific Gravity p) Heat of Hydration Whiteness Index q) Bleeding of Cement Paste Mortars r) Expansion of Portland Cement Mortars Exposed to Sulphate s) Potential Expansion of Portland Cement Mortars Exposed to Sulphate t) Restrained Expansion of Expansive Cement Mortars u) Length Change of Hardened Hydraulic Cement Mortar and Concrete w) Length Change of Hydraulic Cement Mortar Exposed to a Mixed Sodium and Magnesium Sulphate Solution | <ul style="list-style-type: none"> 1 Density/ Specific Gravity 2 Hardness <ul style="list-style-type: none"> a) Durometer Hardness b) IRHD c) Rebound Value 3 Indentation Hardness Index 4 Tensile Testing and elongation at break 5 Compression Test 6 Flexing Test, Crystallinity Test 7 Impact Test <ul style="list-style-type: none"> a) Izod Impact b) Charpy Impact c) Falling Weight Impact 8 Accelerated Ageing Test 9 Abrasion Test 10 Tear Strength 11 Bond Strength 12 Brittle Point Test 13 Melt Flow Index (MFI) 14 Melting/ Softening Point 15 Flammability Test/ Limited Oxygen Index Test 16 Dimensional Stability (VICAT/ HDT) 17 Coefficient of Friction 18 Water Absorption Test 19 Permeability Test 20 Migration & Staining Test 21 Swelling Test 22 Shear Strength 23 Viscosity Test 24 Rheological Propriety Test <ul style="list-style-type: none"> Low Rate Test 25 UV Resistance and Condensation Test 26 Ozone Resistance Test <ul style="list-style-type: none"> a) Static Test b) Dynamic Test 27 Xenon/ Carbon Arc Resistance Test (Accelerated Weathering Test) 28 Resilience Test 29 Dynamic Test <ul style="list-style-type: none"> a) Dynamic Stiffness b) Loss Modulus (Tan-S) c) Material Damping Coefficient d) Dissipation Factor |
| <p>2. Pozzolana</p> <ul style="list-style-type: none"> a) Density b) Fineness (+45 μ Sieve) c) Fineness by Blaine Air Permeability Method d) Cement Reactivity e) Lime Reactivity f) Soundness g) Drying Shrinkage h) Air-entrainment of Mortar | |
| <p>3. Gypsum Board Products and Gypsum Lath</p> <ul style="list-style-type: none"> a) Flexural Strength b) Humidified Deflection c) Core, End and Edge Hardness d) End Squareness e) Nail Pull Resistance f) Nominal Thickness | |

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| <p>g) Recessed or Tapered Edge Depth h) Width, Length i) Water Resistance Off Core-treated Gypsum Board j) Surface Water Resistance of Gypsum Boards with Water-Repellent Face Paper</p> <p>4. Joint Treatment Materials for Gypsum Board Construction Joint Compound Test</p> <p>a) Consistency b) Shrinkage c) Check Cracking Putrefaction</p> <p>5. Joint Reinforcing Tape</p> <p>a) Tensile Strength b) Dimensional Stability c) Width, Thickness</p> <p>6. Bond of Joint Reinforcing Tape to Joint Compound</p> <p>a) Bond Test b) Edge Cracking</p> <p>7. Adhesives for Pasting Gypsum Wall Board to Wood Framing</p> <p>a) Open Time b) Wetting Characteristics c) Shear Strength d) Tensile Strength e) Bridging Characteristics f) Ageing Properties g) Freeze Thaw Stability h) Vinyl – Covered Gypsum Board Compatibility i) Adhesive Staining</p> <p>8. Aggregates</p> <p>a) Grading (Sieve Analysis) b) Deleterious Substances Clay Lumps Finer Than 75μ Sieve Coal and Lignite Soft Materials c) Organic Impurities in Fine Aggregates d) Estimation of Mica e) Unit Weight and Voids (Bulk Density) f) Soundness of Aggregate g) Potential Alkali reactivity of Cement - aggregate Combinations (Mortar-Bar Method) h) Petrographic Examination i) Potential Volume Change of Cement-Aggregate Combinations j) Abrasion Value k) Impact Value l) Crushing Value m) 10% Fines Value n) Compressive Strength of Rock Samples</p> | <p>30 Gloss Finish 31 Flammable Adhesives</p> <div style="display: flex; justify-content: space-between;"> a) Open Tack Time b) Gel Point </div> <div style="display: flex; justify-content: space-between;"> c) Viscosity d) Total Solid </div> <p>e) Spreadability f) Bond Strength (Initial / Aged)</p> <p>PVC pipes& Fittings</p> <p>Hydrostatic pressure Falling weight Impact test Stress relieving test</p> <p>Leather</p> <p>1 Measurement of Width, Thickness and Area 2 Determination of Apparent Density 3 Tensile Test 4 Tear Strength 5 Double Hole Stitch Tear Strength Tongue Tear Strength 06 Shrinkage Temperature 07Absorption of Water (Gravimetric Method) 08Cracking of Grain and Grain Index 09 Two Dimensional Extension 10 Resistance to Compression 11Compressibility Test 12 Indentation Index 13 Dynamic Water Proofness of Boot and Shoe Sole Leather 14 Flexing Endurance 15 Dynamic Water Proofness Test for Upper Leather 16 Water Vapour Permeability 17 Water Proofness of Gloving Leather 18 Bond Strength of Laminated Leather 19 Thermal Conductivity 20 Area Stability on Immersion in Water and Oil 21 Spray Test for Estimating Water Repellency of Clothing Leather</p> |
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30 Gloss Finish

31 Flammable Adhesives

| | |
|-----------------------------------|----------------|
| a) Open Tack Time | b) Gel Point |
| c) Viscosity | d) Total Solid |
| e) Spreadability | |
| f) Bond Strength (Initial / Aged) | |

PVC pipes& Fittings

Hydrostatic pressure

Falling weight Impact test

Stress relieving test

Leather

1 Measurement of Width, Thickness and Area

2 Determination of Apparent Density

3 Tensile Test

4 Tear Strength

5 Double Hole Stitch Tear Strength

Tongue Tear Strength

06 Shrinkage Temperature

07 Absorption of Water (Gravimetric Method)

08 Cracking of Grain and Grain Index

09 Two Dimensional Extension

10 Resistance to Compression

11 Compressibility Test

12 Indentation Index

13 Dynamic Water Proofness of Boot and Shoe Sole

Leather

14 Flexing Endurance

15 Dynamic Water Proofness Test for Upper Leather

16 Water Vapour Permeability

17 Water Proofness of Gloving Leather

18 Bond Strength of Laminated Leather

19 Thermal Conductivity

20 Area Stability on Immersion in Water and Oil

21 Spray Test for Estimating Water Repellency of Clothing Leather

- o) Surface Moisture, Total Moisture
- p) Specific Gravity and Absorption
- q) Straining Materials in Light Weight Concrete Aggregates
- r) Angularity Number
- s) Flakiness Index t) Elongation Index
- u) Chert
- v) Effect of Organic Impurities in Fine Aggregate of Mortar

9. Bricks

9.1 Building Bricks

- a) Compressive b) Water Absorption
- c) Efflorescence d) Bond Strength - dimensional requirements
- e) Bulk Density f) wetting expansion
- g) Drying shrinkage

9.2 – Tiles

- a) Clay roofing tile
- Permeability, Water absorption, Load bearing, Transverse strength.

9.2 Fire and Silica Refractory Materials

- a) Cold Crushing Strength b) Apparent Porosity
- c) True Density and True Specific Gravity
- d) Sizes and Shapes
- e) Bulk Density

10 Coating Material on Reinforcing Steel

- a) Resistance to Applied Voltage
- b) Chloride Permeability
- c) Adhesion of Coating
- d) Bond Strength to Concrete
- e) Abrasion Resistance
- f) Impact Test
- g) Hardness Test

11. Building Lime Field Tests

- a) Ball Test b) Impurity Test
- c) Plasticity Test d) Workability Test
- e) Visual Examination

Mechanical Tests for Lime

- a) Fineness
- b) Anhydrated Oxide of Quick Lime
- c) Volume Yield of Quick Lime

d) Compressive and Transverse Strength

Building Bricks

- a) Workability
- b) Soundness
- c) Popping and Pitting
- d) Setting Time

12. Admixtures

- a) Water Content
- b) Time of Setting
- c) Compressive Strength
- d) Flexural Strength
- e) Length Change
- f) Ash Content
- g) Relative Durability Factor
- h) Dry Material Content
- i) Relative Density

13. Concrete (Fresh)

- a) Unit Weight, Yield, Air Content
- b) Bleeding
- c) Water Content
- d) Cement Content

14. Workability

- a) Flow Table
- b) Slump
- c) Vee Bee Test
- d) Compacting Factor
- e) Kelly Ball Test
- f) K-Slump Test
- g) Temperature
- h) Time of Setting

15. Analysis of Hardened Concrete

- a) Water Content of Set Concrete
- b) Compressive Strength
- c) Flexural Strength
- d) Direct Tensile Test
- e) Indirect Tensile Strength (Split Cylinder Test, Punch Test, Frame Method)
- f) Static Modulus of Elasticity
- g) Poisson's Ratio
- h) Durability Test (Freezing and Thawing)
- i) Shrinkage and Moisture Movement
- j) Resistance of Concrete to Abrasion and Erosion
- k) Abrasion Resistance of Concrete by Sand Blasting
- l) Abrasion Resistance of Horizontal Concrete Surfaces by Revolving Disks by Dressing Wheels by Ball Bearings
- m) Abrasion Resistance of Concrete/ Mortar Surfaces by Rotating Cutter Method
- n) Permeability of Concrete
- o) Absorption of Concrete
- p) Creep of Concrete
- q) Accelerated Testing of Concrete for Compressive Strength
- r) Time of Setting of Concrete

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| <p>s) Petrographic Examination of Hardened Concrete (for Alkali-Silica Gel Formation)</p> <p>t) Mechanical Properties of Hardened Concrete Under Triaxial Loads</p> <p>u) The Break-off Number of Concrete</p> <p>v) Microscopical Determination of Parameters of the Air-Void System</p> <p>w) Dynamic Modulus of Rigidity</p> <p>x) Dynamic Poisson's Ratio</p> <p>16. Timber</p> <p>a) Moisture Content Using Moisture Meter</p> <p>b) Moisture Content Using Hot Air Oven Method</p> <p>c) Specific Gravity d) Static Bonding Test</p> <p>e) Compression Test f) Tension Test</p> <p>g) Nail Holding Test h) Screw Holding Test</p> <p>i) Impact Test j) Torsion Test</p> <p>17. Plyboard</p> <p>a) Resistance to Dry Heat b) Fire Resistance</p> <p>c) Glue Shear Strength d) Adhesion of Piles</p> <p>e) Water Resistance f) Nycological Test</p> <p>g) Fibre Diameter h) Friability</p> <p>i) Recovery After Compression j) Incombustibility</p> <p>k) Moisture Absorption l) Linear Shrinkage</p> <p>m) Water Vapour Permeance n) Dimension</p> <p>18. Bitumen</p> <p>a) Softening Point Test b) Flash Point Test</p> <p>c) Penetration Test d) Ductility Test</p> <p>e) Viscosity Test Marshall Stability Test</p> | |
| <p>Group - Textile Materials</p> <p>1.Fibers</p> <p>a)Textile Characteristics of Individual Textiles Fibres</p> <p>b) Bundle Strength</p> <p>2.Yarns</p> <p>a) Breaking Strength of Yarn in Skein Form</p> <p>b) Tensile Properties</p> <p>c) Permanent Deformation of Elastomeric Yarn</p> <p>d) Sewing Threads</p> <p>e) Shrinkage of Yarn</p> <p>f) Coefficient of Friction</p> | <p>Group - Textile Materials</p> <p>Fabric (Woven)</p> <p>a) Tensile Tests b) Abrasion Resistance Test</p> <p>c) Bursting Strength d) Pile Retention of Cord Fabric</p> <p>e) Piling Resistance Test</p> <p>f) Stretch Properties Test</p> <p>g) Stiffness Test</p> <p>h) Snagging Resistance Test</p> <p>Fabrics (Non-Woven)</p> |

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| <p>Industrial Textiles</p> <p>a) Tensile Tests b) Drop Test</p> <p>Tyre Cord Fabric Test</p> <p>a) Tensile Tests</p> <p>b) Adhesion Test of Tyre Cords to Other Reinforcing Rubber Compounds</p> <p>c) Strap Peel Adhesion of Reinforcing Cords or Fabrics to Rubber Compounds</p> <p>d) Thermal Shrinkage Test</p> | <p>a) Stiffness Test</p> <p>b) Tearing Strength Test</p> <p>Zippers and Fasteners</p> <p>a) Impact Resistance of Plastic Zips</p> <p>b) Operability of Zippers</p> <p>c) Peel Strength of Hook and Loop Touch Fasteners</p> <p>d) Resistance of Un-snapping of Snap Fasteners</p> <p>e) Shear Strength Test</p> <p>f) Strength Test of Zippers</p> |
| <p>Group - Soil and Rock Testing</p> <p>Soil Testing</p> <p>a) Specific Gravity</p> <p>b) Grain Size Analysis</p> <p>c) Atterberg's Limit (LL, PL,SL)</p> <p>d) Unit Weight</p> <p>e) Moisture Content</p> <p>f) Direct Shear Test</p> <p>g) Unconfined Compression Test</p> <p>h) Triaxial Compression Test Oedometer Consolidation Test</p> <p>i) Permeability Test</p> <p>j) Field Moisture Equivalent</p> <p>k) Centrifuge Moisture Equivalent</p> <p>l) Linear Shrinkage Test</p> <p>m) Compaction Test</p> <p>n) Vane Shear Test</p> <p>o) Free Shear Test</p> <p>p) Free Swell Index of Soil</p> <p>q) Swelling Pressure of Soil</p> <p>r) California Bearing Ratio (CBR) Test</p> <p>Soil Testing (Field)</p> <p>a) Field CBR Test</p> <p>b) Direct Shear Box Test for Soil Containing Gravels</p> <p>c) Standard Penetration Test</p> <p>d) Static Cone Penetration Test</p> <p>e) Modulus of Subgrade Reaction (K-Value) of Soil by Plate Load Test</p> <p>f) Pile Loading Testing</p> | <p>Group – Other (Acoustic Testing) - Noise & Vibration</p> <p>a) Measurement of Noise Reduction of Sound Isolating Enclosures.</p> <p>b) Measurement of Insertion Loss Ducts and Mufflers.</p> <p>c) Vibration Characteristics of Materials, Components, Assemblies and Structures.</p> <p>d) Measurement of Mechanical Vibrations & Performance.</p> <p>e) Dynamic Balancing</p> <p>f) Mechanical Shock Testing.</p> <p>g) Vibration Test on Connection and Relay</p> <p>h) Vibration Record on Transmission Line.</p> |

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| <p>g) Field Permeability Test</p> <p>Rock Testing</p> <p>a) Uni-axial Compressive Strength Test</p> <p>b) Triaxial Compression Test</p> <p>c) Modulus of Elasticity and Poisson’s Ratio of Rock Material in Uniaxial Compression</p> <p>d) Slake Durability Index of Rock</p> <p>e) Tensile Strength by Indirect Test on Rock Specimen</p> <p>f) Dynamic Modulus of Rock Core Specimen</p> <p>g) Point Load Test</p> <p>h) Pullout Test on Anchor Bars and Rock Bolts</p> <p>i) Hardness Testing</p> <p>j) Shear Strength of Rock Joints by Direct Shear Box</p> <p>k) Rock Mass Deformability Using a Flexible Dilatometer</p> <p>l) Hydraulic Fracture Test</p> <p>m) Flat Jet Test</p> | | | | | | | | | | | | | |
| <p>Group - Performance Test</p> <p>1 Proof Pressure Test on Pipes and Valves</p> <p>2 Aluminium Milk Cans</p> <p>3 Air Compressor</p> <p>4 Air Blower</p> <p>5 Test on Bicycle:</p> <table><tr><td>a) Frame</td><td>b) Pedal</td></tr><tr><td>c) Crank and Chain</td><td>d) Wheels</td></tr><tr><td>e) Handle Bar</td><td>f) Hub</td></tr><tr><td>g) Spoke</td><td>h) Tubes</td></tr></table> <p>6. Test on Bip Tap and Stop Tap</p> <p>7. Test on Ball Valves</p> <p>8. Test on Centrifugal Pumps</p> <p>9. Test on Commercial Cooking Range & LPG Appliances</p> <p>10. Test on Domestic Pressure Cooker</p> <p>11. Test on Gas Cylinders, Valves & Regulators</p> <p>12. Proof load Tests on Chains</p> | a) Frame | b) Pedal | c) Crank and Chain | d) Wheels | e) Handle Bar | f) Hub | g) Spoke | h) Tubes | <p>Group - Performance Test</p> <p>27 Orque Wrench</p> <p>28 Water Meter</p> <p>29 Rubber Sealing Ring</p> <p>30 Rubber Welding Hose</p> <p>31 Speedometer Cable</p> <p>32 Prototype Transmission Tower Testing</p> <p>33 Scaled Down Model Transmission Tower Testing</p> <p>34 Industrial Air Cleaner:</p> <table><tr><td>a) Airflow Restriction and Pressure Drop Test</td></tr><tr><td>b) Initial Efficiency Test</td></tr><tr><td>c) Dust Capacity and Accumulative Efficiency</td></tr><tr><td>d) Pre-cleaner Performance</td></tr></table> <p>35 Performance of Steel Parts at Sub-Zero Temperature</p> <p>36 Performance of Rubber Parts at Sub-Zero Temperature</p> | a) Airflow Restriction and Pressure Drop Test | b) Initial Efficiency Test | c) Dust Capacity and Accumulative Efficiency | d) Pre-cleaner Performance |
| a) Frame | b) Pedal | | | | | | | | | | | | |
| c) Crank and Chain | d) Wheels | | | | | | | | | | | | |
| e) Handle Bar | f) Hub | | | | | | | | | | | | |
| g) Spoke | h) Tubes | | | | | | | | | | | | |
| a) Airflow Restriction and Pressure Drop Test | | | | | | | | | | | | | |
| b) Initial Efficiency Test | | | | | | | | | | | | | |
| c) Dust Capacity and Accumulative Efficiency | | | | | | | | | | | | | |
| d) Pre-cleaner Performance | | | | | | | | | | | | | |

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| 13. Compression Test for Bridge Bearings 14. Load Test on Draw Bar Hooks and Laminated Springs 15. Load Test on Coil Springs a) 0-1 kg b) 0-100 kg c) above 100 kg. 16. Load Test on Chain Pulley Block a) Below 10 tons b) 10 tons to 20 tons c) Above 20 tons 17. Load Test on Hand Operated Winch Load Test on Hydraulic Jacks: a) Proof load upto 100 tons b) Proof load from 100 to 150 tons c) Proof load above 150 tons 18. Load Test on Screw Jacks: a) Up to 15 tons b) Between 15 to 30 tons c) Above 30 tons 19 Load Test on Steel Wire Ropes: a) Up to 1" dia b) Between 1" & 1 ½ dia c) Above 1 ½ dia 20. Proof load Test on Electrically Operated Winch 21 Test on Hack Saw Blade 22 Test on Hurricane Lanterns 23 Test on Hand Sprayers 24 Test on Steel Files 25 Test on Twist Drill 26 Test on Sieves | 37 Performance of Diesel / Petrol Engine 38 Performance of IC Engine at Higher Altitude 39 Endurance Test for Starter Motor 40 Endurance Test for Jacks 41 Performance and Life Test for Oil Seals 42 Life Cycle Test for AC Pumps 43 Performance Test of Compete Vehicle on Chassis Dynamometer 44 Endurance Test for Bonded Rubber Wheels 45 Test of Helmets 46 Test of Safety Glass 47 Test of Surgical Gloves 48 Test on Burners |
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Annex 03
Applicable Product Group for Chemical Testing

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| 1. Adhesives & sealants, Resins, Antibiotics 2. Air, gases & atmosphere 3. Biocides 4. Building Materials | 21. Petroleum products 22. Plastics & plastic products 23. Pollution & effluents 24. Pulp & Paper |
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| 5. Cement and related products 6. Clays, Ceramics and related materials 7. Coal, Coke & other solid fuels 8. Cosmetics & essential oils 9. Drugs & Pharmaceuticals 10. Explosives & pyrotechnics 11. Fertilizers 12. Industrial & fine chemicals 13. Inks, dyes & pigments 14. Leather & Leather Products 15. Food & agricultural products 16. Metals & alloys 17. Oils & lubricants 18. Ores & Minerals 19. Organic chemicals 20. Paints & surface coatings | 25. PPE 26. Residues in water & food Products 27. Rubber & rubber products 28. Radiation level in consumables 29. Solvents 30. Sampling 31. Soil 32. Soaps & detergents 33. Pesticides 34. Package materials 35. Textile & related products 36. Water & Waste water 37. Animal feed |
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Annex 04
Applicable Product Group for Biological Testing

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| 1 Food and Agricultural Products Animal Feeds Bakery & Confectionery Products Beverages (Alcoholic / Non-Alcoholic) Canned & Processed Foods Cereals, Pulses & Cereal Products | 2 Drugs and Pharmaceuticals Antibiotics Ayurvedic Drugs Biotechnology derived pharmaceuticals Chemotherapeutic Agents Drug Intermediates & Raw Materials Endotoxins |
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| <p> Coffee & Cocoa Products Edible Colours & Flavours Edible Oils & Fats Eggs & Egg Products Essential Nutrients Including Vitamins Fish & Sea Foods Food Additives & Preservatives Fruit & Fruit Products Gelatin and Other Gums Genetically Modified Foods and agricultural products Herbs, Spices & Condiments Honey & Honey Products Infant Foods Jams, Juices, Sauces & Concentrates Meat & Meat Products Milk & Dairy Products Margarine Natural Waxes Nutritional Supplements Nuts & Nut Products Oil Seeds & By-Products Pet Foods Poultry & Poultry Products Starch & Starch Products Sugar & Sugar Products Tea Tobacco & Tobacco Products Vegetables & Vegetable Products Other Specified Food Items Sensory Evaluation Tests on Foods </p> | <p> Enzymes Filterable Solutions & Soluble Preparations Hormones Herbal drugs Immunological Products Microbial limit tests Natural Drugs Non-Filterable Preparations Including Ointments Preservative efficacy Pyrogen tests Sterility tests Surgical Dressings Synthetic Drugs Vaccines Veterinary Drugs Vitamins Bioassays of Other Products (<i>Other Than Those Products Mentioned Above</i>) Tests for Medical devices and Medical Textile Specific Pathogens Sterility Other Specified Tests </p> |
| <p>3 Water</p> <p> Drinking water Potable water Packaged Drinking Water Packaged Natural Mineral Water Water for Swimming Pool and Spas Water for Construction Purpose Water Purifiers Ground Water/ Surface Water Water for Medicinal Purposes </p> | <p>4 Pollution and Environment</p> <p> Air Effluents Solid waste Sewage Soil </p> |

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| Distilled /Demineralized Water Water for Processed Food Industry Water for industrial purpose Ice Test for Efficacy of Water Filtering Plants | |
| 5 Biocides Algacides Bactericides Fungicides Herbicides Insecticides Sporicides Vermicides Weedicides Antiseptics, Disinfectants | 6 Cosmetics, Perfumes and Essential Oil Pathogens Microbial Count Preservative Efficacy Sterility Tests |
| 7 Industrial Cultures Dairy Starter Cultures Rizhobial Cultures Yeast and Other Ferments Mushroom Spawn Meat Starter Cultures Other specified cultures | 8 Seed Testing Sampling Moisture Purity Germination Tertazolium Fluorescence Other Specified Tests |
| 9 Plants and Plant Materials for Presence of Disease Identification of Bacterial Pathogens Identification of Fungal Pathogens Identification of Viral Pathogens Other Specified Tests | 10 Molecular Biology (Tests for Various Matrices) Genotyping Promoter/Terminator Screening Pathogen Detection Gene Expression Gene Copy Number Bacterial Mutagenicity Tests Sister Chromatid Exchange Tests Transformation Assays In Cell culture Other Specified Tests |
| 11 GMO Testing Detection by DNA Detection by Protein | 12 Cell Culture Cytotoxicity Cytogenetics |

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| | Cell permeability test |
| 13 Resistance to Microbial Attack Textiles and Fabrics Paints and surface coatings Adhesives, glues and other bonding Paper and paper pulp Electrical Components Timber and Allied Material Other Specified Materials | 14 Biological Tests on Other Miscellaneous Test Items Adhesives Glues and Sealant Fuels and Oils Lubricants Packaging Materials Paints & Surface Coatings Pulp & Paper Soaps & Detergents Textiles & Fabrics Wood & Wooden Products Toys and Other Children's Products Bio-fertilizer Soil Conditioners and Organic Fertilizer |
| 15 Factory Hygiene Purposes Surfaces Air Water | 16 Toxicology Acute Toxicity Subacute Toxicity Neurobehavioral Toxicity Evaluation Promoter screening Reproductive Toxicity Chronic toxicity Generation Study Mucous membrane irritation test Skin sensitization test Hypersensitivity/allergenicity test Eye irritation test Neurotoxicity Carcinogenicity Environmental toxicity Mutagenicity Teratogenicity Fish Toxicity Studies Bird Toxicity |
| 17 Identification of Bacterial and Viral Pathogens in Food Items by: Test Kits ELISA | 18 Residue Analysis Antibiotic residue analysis by ELISA or any microbial method |

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| PCR | |
| 19 Veterinary Testing Specified tests in biochemistry, haematology, cytopathology, histopathology etc | 20 Phytosanitary Tests Testing of quarantine pathogens |
| 21 Medical devices PPE | 22 Sampling |

Annex 5
Applicable field in Electric / Electrical

Electrical appliances
Electrical MCCBs
RCBs
Electric meters
Isolators
Electrical lighting
Electrical Switches and sockets
Electric cables
Generators and motors

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| SRI LANKA ACCREDITATION BOARD FOR CONFORMITY ASSESSMENT | | | | |
| Title: Specific Criteria for Testing Laboratories | | | | Doc No: TL –GL (P) - 02 |
| Issue No: 02 | Date of Issue: 2021-04-06 | Rev No: 00 | Date of Rev: | Page No: 37 of 39 |

Annex 06
COMPOSITION OF THE TECHNICAL ADVISORY COMMITTEE

| SI No | Name | Designation | Status |
|--------------|---------------------------|---|---------------|
| 01 | Dr. S.I.Abegunawardana | Retired Senior Lecturer. University of Kelaniya, Kelaniya | Member |
| 02 | Ms.W.A.J.Sajeevika Perera | Principle Research Scientist - Quality Assurance, Industrial Technology Institute | Member |
| 03 | Ms.Hasika Thilakaratne | Technical Manager – Bamber & Bruce Laboratory (Pvt) Ltd | Member |
| 04 | Mr.E G Somapala | Retired Government Analyst | Member |
| 05 | Ms.Dilani Rodrigo | Senior Deputy Director (Acting), Sri Lanka Standard Institution | Member |
| 06 | Dr. H.P.P.S.Somasiri | Principle Research Scientist, Industrial Technology Institute | Member |
| 07 | Mr. T S Amarawansa | Former Deputy Director General- Sri Lanka Standard Institution | Member |
| 08 | Mr.Sanath Perera | Assistant Director, Sri Lanka Standard Institution | Member |
| 09 | Ms.Devaki Rodrigo | President/Sri Lanka Association of Testing Laboratories | Member |
| 10 | Dr.Amal Vadysinghe | Senior Lecturer , Faculty of Medicine, University of Peradeniya | Member |
| 11 | Prof. Indira Kithulwatte | Head/Department of Forensic Medicine, Faculty of Medicine, University of Kelaniya | Member |
| 12 | Mrs. Vajirapani De Silva | Senior Scientist, Genetech Molecular Diagnostics and School of Gene Technology | Member |
| 13 | Mr. R G Perera | Head of Calibration- Lanka Calibration Services (Pvt) Ltd. | Member |