

# 1. FIREARM TESTS

Tests related to firearms and operational parameters of firearms; Dispersion Test, Cold Air Test, Hot Air Test, Oil Testing, Oil Free Testing , Strength Test, Firearm examination and identification, Residue examination etc.

## 2. DOCUMENT EXAMINATION

Tests related to examination of documents for forensic purposes; Signature and handwriting examination, General Document examination etc.

## 3. BIOLOGICAL AND BIOCHEMICAL TESTS

Tests applied on body liquids, living tissues, plants, seeds, viruses, bacteria, mould and yeast cultures, biological living organism systems by using molecular, immunological, morphological, botanical, genetic, pathological, and serological techniques; Budding, Seed purity, Activity tests, Ecosystem studies etc.

## 4. ENVIRONMENTAL AND CLIMATIC ENVIRONMENTAL ENGINEERING TESTS

Tests aimed at determining atmospheric conditions for establishment of environmental conditions in a way to cover air, soil, water and waste; Dust, Organic Vapours, Metal and metal alloys, inorganic gases, engine emissions determination etc.

## 5. SENSORY ANALYSES

Tests conducted to determine characteristics of products by using visual, olfactory, gustatory, tactile and auditory senses; Tests applied to food products and beverages etc.

## 6. ELECTRICAL AND ELECTRONIC TESTS

Electric-related tests applied to electrical and electronic devices, appliances, products, components and materials; Lighting tests, Cable tests etc.

## 7. EMC TESTS

Electromagnetic compatibility tests;

## 8. INSTRUMENTAL ANALYSES AND EXAMINATIONS

Analysis methods aimed at determining quality and quantity conducted with devices such as Spectroscopy, Chromatography, Mass Spectroscopy, DSC, Electrophoresis; metal detection by Spectroscopic methods, organic compound detection by Chromatographic methods etc.

## 9. PHYSICAL TESTS

Tests carried out by using physical techniques to determine physical properties of substances; Freezing point, Melting point, thermal conductivity, viscosity, determination of density, determination made by using a hydrometer, Sieve analyses, Permeability, Particle size distribution, Dimensional tests etc.

## **10. SAFETY TESTS**

Tests applied to buildings, vehicles, toys and other consumer products aimed at establishing whether products are safe to use.

## **11. STABILITY TESTS**

Tests aimed at determining whether properties of products such as solutions, chemicals, reactants, reference materials have deteriorated.



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## **12. ADDITIVES AND RESIDUE ANALYSES**

Analyses aimed at detecting additives such as antioxidants, vitamins, colorants, preservatives and residues such as pesticides, hormones, mycotoxin, phenolic compounds that are unintentionally involved in air, water, soil, waste and products such as food or that are added during production stages by using chemical, spectroscopic, chromatographic techniques;

## **13. CHEMICAL TESTS AND ANALYTICAL CHEMISTRY TESTS**

Qualitative and quantitative analyses made by using titrimetric, gravimetric, electrochemical, physicochemical etc. techniques instead of advanced techniques such as Spectroscopy, Chromatography. Determination of Acidity by Titration, determination of sugar by the Lane and Eynon method, determination of alcohol by distillation method etc.

### **14. CRIMINAL TESTS**

Examination of products, materials and a crime scene for a forensic investigation and related tests, Ballistic examinations, Narcotic and psychotropic substances examinations, Criminal toxicology, Paternity (Maternity – Paternity) tests etc.

### **15. MECHANICAL TESTS**

Tests carried out to determine mechanical properties of products by using devices when necessary; Corrosion tests, Hardness tests, Toughness tests, Crash tests, Tensile and Compression tests, Fatigue tests.

### **16. METALLOGRAPHIC TESTS**

Tests carried out to determine macroscopic structures of metals and metal alloys by using microscopic techniques.

## **17. MICROBIOLOGICAL TESTS**

Tests aimed at identifying and quantifying viruses, bacteria, alga, yeast and mould in products; Mesophilic Bacteria Detection, *Salmonella* detection, *E. Coli* detection, *Legionella* detection etc.

#### **18. SAMPLING METHODS**

All kinds of sampling methods carried out by a laboratory in case of having any effect on the test result.

## **19. RADIOCHEMISTRY AND RADIATION TESTS INCLUDING NUCLEAR TESTS**

Tests carried out to determine presence and quantity of radiation and radioactive substance in soil, water, other raw materials or finished products, or living things, nuclear tests; Uranium detection, Dosimeter measurements etc.

#### **20. CRIME SCENE INVESTIGATION**

Investigation of a crime scene for forensic investigation purposes, Evidence collection, Blood trails analyses, Firearm or Gunshot residue analysis etc.

#### **21. FINGERPRINT DETECTION**

Analyses conducted to associate criminal samples to the source by using various methods, Fingerprint detection, Palm print detection etc.

### **22. PERFORMANCE TESTS**

Tests carried out to determine fitness of finished products such as mechanical products,



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meters, vehicles for their intended use.

# **23. SIGNAL PROCESSING TESTS**

Tests aimed at examining samples that can be expressed as signals such as sound, image for forensic investigation purposes.

## 24. NON-DESTRUCTIVE INSPECTION TESTS

Tests carried out to determine properties of materials without destroying the products by using methods such as Radiographic, Ultrasonic, Magnetic Particle, Penetrant, Electromagnetic, Underwater techniques.

## 25. CLINICAL TESTS RELATED TO HUMAN MEDICINE AND VETERINARY MEDICINE

Clinical tests such as Toxicity, Endotoxin tests, bioassays of Enzymes, Vitamins, Hormones, Immunologic, Pharmacologic Products and tests on safety and effectiveness of these products, Animal bioassays, antibiotic tests on Food and Food Additives.

### 26. ACOUSTIC AND NOISE TESTS INCLUDING VIBRATION NOISE

Tests that include measurement of noise emissions, noise exposure, sound transmission and sound absorption, Acoustic tests, Noise tests, Vibration tests etc.

### **27. FIRE TESTS**

Tests of resistance and reaction to fire, Flame resistance, flaming, deflagration and flame speed tests, tests on Fire detectors, and warning, protection and fire-fighting equipment.

#### **28. SOFTWARE TESTS**

Tests applied to software products to determine security, functionality, performance and conformity of the software, Information security tests, Game programming tests, Acceptance tests, Functionality tests, Performance tests etc.

#### **29. WEAR AND TEAR TESTS**

Tests applied to finished products to determine behaviour of products during their lifecycle. Colour durability, Ageing tests etc.