

## **TELANGANA STATE FORENSIC SCIENCE LABORATORY**

### **1. - Key objectives**

1. To provide high quality and timely forensic services to the Criminal Justice Delivery System by enhancing capacity and capability in all divisions of the Forensic Science Laboratory.
2. To develop and implement new technologies and generate scientific knowledge to support the Criminal Justice Delivery System.
3. To promote case-oriented research, enhance forensic services through technology procurement and scientist training, and foster research and development in various areas of forensic science.
4. To conduct testing of crime exhibits in accordance with the Quality Manual, Quality System Executive Procedure and division-specific working procedure manuals.
5. To facilitate the Investigation Agencies in identification, collection, sampling and proper preservation of physical evidence by attending the scene of crime 24x7.
6. To provide training to Police officers, forensic experts and other state holding departments /organisation
7. To actively participate in training programs organized by any outside agency.
8. To continuously explore new avenues to enhance technical capabilities.
9. To develop plans and policies to enhance capacity building in Forensic Science.
10. To conduct examination and re-examination of cases referred by Courts of Law, NIA, CBI, and other states.
11. Active participation in Proficiency Testing Programmes for continuous quality improvement.

#### **a. Formation Background**

Forensic Science Laboratory was established by merging the Scientific Section of C.I.D. functioning under the Police Dept., and the Chemical Examiner's Department functioning under the control of Director of Medical & Health Services, vide G.O. Ms.No.1478, Home (Police.C) Department, dtd.08/11/1974. As per para 2(ii) of the G.O., the Chemical Examiner to the Government of Andhra Pradesh was re-designated and posted as the Director of the Forensic Science Laboratory. The Deputy Chemical Examiner in the Chemical Examiner's Dept and the Director, Scientific Section, C.I.D. were re-designated and posted as Joint Directors respectively. As per para 2 (vi) of the G.O., the Forensic Science Laboratory stand transferred to the Police Department and be under the administrative control of the Inspector General of Police, now DGP.

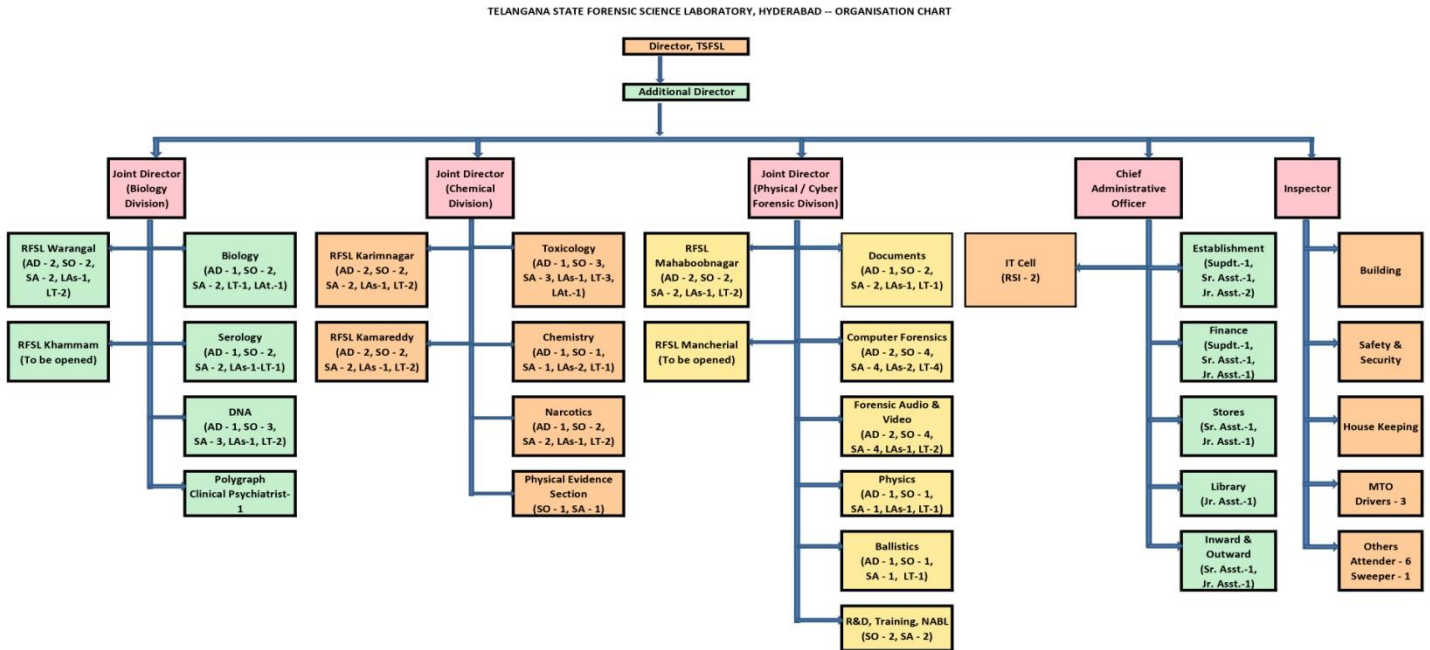
### **2. - Definition of Key Terms**

- a. DGP - Director General of Police.

- b. TSFSL -Telangana State Forensic Science Laboratory.
- c. RFSL – Regional Forensic Science Laboratory
- d. ISO – International Organization for Standardization

### 3. - Organization of Force

#### a. Organization Chart:



#### b. Organization Structure

##### State FSL HQs:

The *Telangana State Forensic Science Laboratory* which is an ISO/ IEC 17025: 2017 certified Laboratory, is primarily intended to see that all possible help that modern science can render in crime detection is made available to investigating officers. A separate chapter Scientific Aids to investigation may be seen at chapter 31 of investigation Manual TSPM Volume II "A". The Laboratory thus renders scientific analytical services to the police in the matters of investigation; besides tendering expert scientific opinion to prosecution and judiciary during prosecution and trial of criminal offences, respectively. The Laboratory, equipped with modern sophisticated instruments and tools, is headed by a Director, who is assisted by technical / scientific experts of various ranks, in the examination of different types of physical evidences in 12 different sections of Telangana State Forensic Science Laboratory at Hyderabad and Regional Forensic Science Laboratories functioning from different places. There are crime scene processing teams called Mobile Scientific Investigation Units

(CLUES Teams) at all District / City HQs., headed by a Police Officer, under the operational and functional control of the concerned Unit officers, to scientifically process the physical evidence and initiate crime scene investigations by scientific means. As per the new Laws being enacted by the Government of India, all the States shall ensure that there should be compulsory visits by Forensic teams in all Crime scenes associated with cases in which punishment is six years or more. In these cases, the Scientific staff of TS FSL shall also visit the Crime Scenes along with the Clues Teams.

The Director FSL works under the direct supervision of the DGP Telangana. Director is supported by Additional Director, Joint Directors, Assistant Directors and other Officers & staff of different ranks, including Contract & Outsourcing staff, on need basis. Organization is supported by Ministerial staff headed by Chief Administrative Officer and other staff in different ranks including IT Cell. Inspector, FSL shall assist the Director in Safety, Security of the Building, besides Housekeeping works, Motor Transport wing, and shall be responsible for proper upkeep and maintenance of all the Buildings & Vehicles at State H.Qrs besides Regional FSLs.

### **Regional FSLs:**

As on date 4 Regional FSLs are functioning at Warangal, Karimnagar, Kamareddy & Mahboobnagar. 2 more RFSLs shall start functioning at Khammam & Mancherla shortly. RFSLs are headed by Assistant Directors and supervised by one JD from State H.Qrs, as detailed in the Organizational Chart. These RFSLs shall function under the overall supervision of the Director, TS FSL. These RFSLs, branch of State FSL, shall Analyse/Examine the cases referred to them from the nearby Districts. As of now, three sections, viz Toxicology, Biology, Serology are functioning. The number of Regional FSL and the sections functional in the RFSL may change from time to time depending on need.

### **c. Roles and responsibilities**

#### **I. Director shall be responsible**

- The overall functioning of the Telangana State Forensic Science Laboratories and its various wings located in Telangana State.
- Maintaining cordial working relationships with police, judiciary, prosecution, medical and other allied agencies of the criminal justice system.
- Overseeing the functions of divisions and sections with a view to ensure that the scientific work is carried out as per the procedures and instructions and simultaneously ensure timely dispatch of reports/opinions.
- Constantly upgrading the scientific and technical strengths of the Laboratory by human resources development and modernization of the laboratory equipment.
- Review of performance of divisions and sections periodically to ensure quality assurance.
- Taking corrective actions in case of non-conformances in scientific work.

- Making available adequate resources and ensure its optimum utilisation for effective delivery of services.
- Monitoring and effective implementation of all the systems to ensure quality and excellence.
- Guidance and supervision of all the officers and staff, and where necessary taking corrective or disciplinary action.
- Over all technical operations of the laboratory.
- Provision of necessary resources for carrying out laboratory operations.
- Ensuring provision of technical and managerial personnel for carrying out laboratory work.
- Ensure management and personnel are free from and due from internal and external pressures and influences.
- Ensure protection of confidential information for the customer.
- Ensure provision of adequate supervision.
- Carrying out operations of the laboratory in accordance with the ISO/IEC 17025 and the quality policy.
- Ensure availability of pertinent issues of the applicable document at all places.
- Ensure review of the requests / tender / contracts before acceptance.
- Ensure maintenance of equipment with valid calibration and good working conditions.
- Ensuring analysis of compliance.
- Ensure implementation of corrective and preventive actions as necessary.
- Ensure training of personnel.
- Selection of suitable methods of test, in association with the respective Joint Directors.
- Ensure correctness and completeness of data transfers with the help of Joint Directors concerned.
- Ensure reporting of the results and opinion in accordance with the laboratory established practices.
- Review the improvement suggested, provide direction for improvement.

**II. Additional Director shall function under the Director and shall assist the Director in:**

- Overseeing the functions of divisions and sections with a view to ensure that the scientific work is carried out as per the procedures and instructions and simultaneously ensure timely dispatch of reports/opinions.
- Constantly upgrading the scientific and technical strengths of the Laboratory by human resources development and modernization of the laboratory equipment.
- Reviewing of performance of divisions and sections periodically to ensure quality assurance.
- Ensuring its optimum utilization of resources for effective delivery of services.
- Monitoring and effective implementation of all the systems to ensure quality and excellence.
- Carrying out operations of laboratory accreditation methods in accordance with the ISO/IEC-17025 and the quality policy.
- Ensuring maintenance of equipment with valid calibration and good working conditions of modern scientific instruments and also periodical interactions with the concerned Technical Experts and also Directors of the Scientific Instrumental Manufactures.

- Ensuring correct / accurate reporting of the results and opinions in accordance with the Laboratory established practices. Reviewing the improvement suggested and provides directions for the interactions.

### **III. Joint Directors shall be responsible for**

- Supervision of the sections and units (RFSLs) attached to them.
- Overall smooth functioning of scientific sections in terms of efficiency and objectivity.
- Ensuring availability of materials and equipment required for analysis.
- Ensuring safety of the personnel and security of laboratory equipment, furniture and other physical assets.
- Maintaining scientific work environment in the sections under their control
- Additional work allotted as officer in-charge of units or any other work allotted to them by Director from time to time.
- As approving authority for the reports/opinions emanating from sections under their control.
- Internal allocation of work among the scientific staff for optimum utilization of human resources and expertise.
- Identification of improvement of the area under control and review the improvement suggested by the personnel of the laboratory.
- Ensure effective communication with the laboratory personnel.

### **IV. Assistant Directors shall be responsible for**

- The analytical work and overall functioning of the sections.
- Safe custody of case property, case files and other case related material.
- Upkeep and maintenance of equipment and other physical assets of section.
- Timely disposal of cases/reports/opinions.
- Receipt and dispatch of case property.
- Maintenance of all documents pertaining to the section viz., case property registers, stock registers, equipment registers, equipment log books etc.
- Effective functioning of units attached.
- Undertaking any other scientific and general work entrusted by Additional Director and/or Joint Directors concerned after due approval of the Director for smooth and effective functioning of the laboratory.
- Identification of improvements in the respective areas.

### **V. Scientific Officers are responsible**

- Analytical work at bench level.
- Supervision of the work of SA, LA, LT & Lab Attendants.
- Ensuring maintenance of Daily Activity records of subordinate staff besides recording daily activity performed by them.
- Ensuring chain of custody of case property under the guidance of Asst. Director
- Additional work entrusted as in-charge of units on any other work allotted to them by Addl. Director/JD/AD from time to time after the due approval by Director.
- Identification of improvement in the technical operation of the respective area.

### **VI. Scientific Assistants are responsible for**

- Analytical work under the guidance of SO/AD.

- Additional work entrusted as i/c of units or any other work allotted to them by Addl. Director, Joint Director, Asst. Director and Scientific Officer after due approval by Director.
- Upkeep and maintenance of premises, laboratory furniture, equipment, records.
- Being the key functionaries responsible for analytical activities, they are responsible for carrying out various steps involved in physical evidence examination starting from receipt, registration, opening, storing, maintenance, analyzing packing and dispatch.
- Implementation of the improvement identified in the respective areas.

**VII. Lab Assistants are responsible for**

- Assisting SA, SO in maintaining the laboratory equipment, furniture, records.
- Assisting SA in carrying out analytical functions.
- Maintenance of chemicals, glassware, and other lab ware.

**VIII. Lab Technicians are responsible for**

- Assisting the scientific personnel in conducting various laboratory processes including washing, cleaning, weighing, cutting, measuring, marking, labeling, sealing and packing the evidentiary materials.
- Maintenance of the laboratory areas in neat and tidy condition.

**IX. Lab Attendants are responsible for**

- Carrying out miscellaneous laboratory work entrusted by AD and other scientific personnel of the section in the day-to-day analysis as well as routine laboratory activities.

d. – **Governance**

**i. Laboratory Quality manual.**

The Laboratory Quality Manual (based on ISO/ IEC 17025: 2017) is issued under the authority of the Director, Telangana State Forensic Science Laboratory, Hyderabad. All the members of laboratory shall get themselves familiarized and comply with the requirements of Laboratory Quality Manual and the associated procedures in their day to day work for smooth and effective functioning of TS FSL.

Quality Manager shall prepare and release the Laboratory Quality Manual (based on ISO/ IEC 17025: 2017) for use after getting approval of Director, Telangana State Forensic Science Laboratory, Hyderabad. Any revisions of the manual are also issued in the same way.

The laboratory Quality Manual is reissued whenever there is a major change in the Management System like the revision of the criteria (ISO/IEC 17025) or when the number of revisions in any section exceeds 10 or any major organizational changes identified by Quality Manager. In all such cases, Quality Manger is authorized to prepare and issue the manual after getting the approval of the Director.

**ii. MOUs with reputed Universities/Institutions**

Memorandum of Understanding with reputed Universities/Institutes can be entered, with regard to Research & Development/Internships, capacity building, learning latest Technologies with the approval of the Director, in line with the Government rules in force.

### **iii. Admin & Finance:**

Finance & Administrative matters are dealt by the Ministerial staff headed by Chief Administrative Officer and supportive staff.

### **iv. Technology:**

There exist one IT Cell in FSL with 2 RSIs assisted by other staff. This Cell looks after the maintenance of Modern Office Equipment, Networking issues, CCTV Surveillance monitoring besides coordinating with other Departments/units in running the CCTNS/ICJS and other Software's etc.

### **v. Human Resources:**

FSL shall follow GO Ms No. 38 Home (Legal) Department dt. 11.08.2022 (Subordinate Services) & GO Ms No. 39 Home (Legal) Department dt. 11.08.2022 (State Services) (new Service Rules) rules with regard to Recruitment, Training, Promotions, transfers, probation, Seniority etc, besides Telangana State & Subordinate Service Rules, Fundamental Rules etc. for Staff working on Regular Time Scale of Pay, while for Contract & Outsourcing staff, Rules envisaged in GO Ms No. 94 General Administration (SER.A) Department, dated 28.03.2003 & GO Rt No. 4271 Finance (SMPC) Department, dated 01.11.2008 shall be followed and any other relevant GO issued by the Govt from time to time.

### **vi. Internship Policy:**

Internship scheme as formulated by Government of Telangana vide GO Ms No. 34 Home (Services.I) Department dt. 27.10.2020, for students across Universities in India shall be followed.

An internship is an opportunity for a student to secure first hand and practical work exposure under the guidance of a qualified and experienced supervisor or mentor. It also aims at active participation in the learning process through experimentation and putting into practice knowledge acquired in the classrooms.

FSL shall engage students pursuing Undergraduate, Graduate or Post Graduate Degrees or Research Scholars enrolled in recognized Colleges or Institutions in Science, Information Technology or Engineering in India as "Interns". Interns shall be attached to a Vertical Division or Units of works of this laboratory and would be expected to supplement the process of collection and



scientific analysis of physical clue material and administrative procedures followed in the laboratory, within and outside the lab as necessary.

## **vii. Other Important organizational roles:**

### **a. Return Case Property :**

After analyzing/examination of the Material Objects received to FSL from IOs/Courts/Investigating agencies etc., reports are dispatched to the Forwarding authorities. Laboratories concerned shall immediately hand over the Case property to the Return Property section. These Material Objects shall be handed over to the concerned authorities regularly by the FSL on the dates as specified by FSL from time to time.

### **b. Return of Bio-Medical Waste:**

Collection and disposal of Bio-Medical waste/Viscera/Chemicals, after examination at the respective Labs shall be entrusted to an Agency authorized by the Pollution Control Board. Such Agency shall collect the materials from FSL at regular intervals and dispose them as per Rules.

## **e. - Divisions, their structure and roles and responsibilities**

### **i. There are 4 divisions in the Telangana State Forensic Science Laboratory**

- (1) Physical/General division (consists of Ballistics, Documents & Physics sections).
- (2) Chemical division (consists of Toxicology, Narcotics, Excise, Chemistry & Explosives).
- (3) Biology/Serology division (consists of Biology, Serology, DNA, Lie Detection) and
- (4) Computers Division (consists of Forensic Audio, Video & Computers).

However, with the changes in Crime trends and Investigative Technologies the nature and count of Divisions may themselves undergo change from time to time.

## **ii. Functioning of FSL:**

### **a. Biology Division**

- **Biology Section** deals with examination of Hair and Fibres for their origin, individualization and comparison; diatoms to confirm drowning by death; Insects, flies and maggots for ascertaining time and place of death and other biological materials of plant origin for determining the origin and species etc.
- **DNA fingerprinting section** examines blood, blood stains, seminal swabs, skeletal remains, hair and saliva etc., to identify and individualize persons and also materials of animal and plant origin



for identification of species.

- **Serology section** undertakes examination of blood, semen, saliva and other body fluids on clothes and other surfaces to ascertain origin and group of blood.
- **Polygraph section** examines subjects viz., suspects, witnesses and complainants to ascertain **whether** the statements given by them are true or false in order to establish or eliminate the involvement of accused in criminal offences. Polygraph or Lie – Detector instrument is used for this purpose. (consent of the person who is subjected to poly graph test is necessary).

#### **b. Chemistry Division**

- **Chemistry section** deals with examination of remnants of explosives to ascertain the nature of explosives; petrol, diesel etc. to detect adulteration and its extent and other chemical products for qualitative and quantitative analysis.
- **Narcotics section** deals with analysis of suspected powders, liquids and unknown substances for identification of narcotic substances which come under the purview of NDPS Act; toddy / liquor to establish adulteration and its quantity and to detect poisonous substances and its quantity in adulterated toddy / liquor.
- **Toxicology section** deals with analysis of viscera and body fluids to determine the nature, composition and quantity of poisons, and bone ash, vomit and exhumed material and any other substances and objects like needles and syringes, powders etc., for detection and estimation of poisonous substances.

#### **c. Computer Division**

- **Computer Forensics** section deals with examination of computers and its components to restore erased information and also to ascertain the authenticity of software and other computer products, and deals with examination of cases of computer crimes enlisted in Information Technology Act, 2000/2008.
- **Forensic Engineering section** undertakes examination of building materials such as bricks, cement, mortar, steel etc. for their strength and specifications, and also mechanical, electrical and electronic products for their authenticity.

#### **d. Physics / General Division**

- **Physics section** undertakes examination of counterfeit coins, currency, erased numbers in stolen vehicles for restoration, glass, paint chips etc. in hit and run accident cases and of spurious articles to establish infringement of Trade Mark Act. The section also undertakes voice analysis to link suspects to crime.
- **Ballistics section** deals with examination of firearms, cartridges, cartridge cases, bullets and other discharged firearm materials and

affected surfaces to ascertain the nature of firearm, caliber and also to establish the range, direction of firing, number of shots in cases of shooting by firearms and conducts examination of cases under Arms Act.

- **Documents section** undertakes examination of various kinds of questioned documents to ascertain whether they are genuine or forged, by analysis of signatures, initials, handwriting and also to establish authorship of writings and signatures. The section also establishes the nature of tampering in documents viz., alterations, erasures and obliteration. Type writing is also examined for identification of typewriter.

### iii. Structure:

Each Division shall be supervised by one Joint Director, while each Laboratory being headed by one Assistant Director and supported by other Scientific staff.

### iv. Roles and Responsibilities :

All the Scientific staff shall adhere to the Laboratory Quality Manual in which the process of working as well as the roles and responsibilities of the staff are defined.

### f. Other responsibilities of Scientific staff.

- a. During VIP/VVIPs visits - Scientific staff of FSL may be deputed for checking the purity of food & beverages being served to VVIPs/VIPs during their visit to Telangana State as per Blue Book on Rules & instructions for the Protection of VVIPs. However, the Government vide Memo No. 731/Spl.E/2019-1 dt. 09.12.2019 has entrusted this work to the Medical & Health Department.

### g. Collection of User Charges:

Certain cases pertaining to Documents, DNA, LiD, Narcotics etc are received in FSL for examination, from the Courts in Civil Suits, Departments (Other than Police Department) etc.. User Charges for the same as fixed by the Government vide GO Ms No. 335 Home (Police.C) Department dt. 05.08.1993, GO Ms No. 286 Home (Police Budget) Department dt. 19.09.2002 & GO Ms No. 303 Home (Police Budget) Department, dated 06.10.2003 and as enhanced from time to time by the Government and paid by the individuals etc. The same is credited to Government account. The cases are examined with due approval of Director.

In order to make the facilities and expertise available in TSFSL to the public, in civil matters, it has been decided to extend these services in genuine cases by levying/collecting user charges to meet the analytical

expenses. The following services are available for public on payment of fees indicated.

SI No.	Description	Fees	Unit
1.	Document cases in civil matters referred by Courts in Civil Suits  GO Ms No. 303 Home (Police Budget) Department, dated 06.10.2003	Rs. 3,000/-	Examination of documents received from the Courts in Civil Suits, Departments (other than Police Department) irrespective of the number of documents which includes cost of photographs, slide transparencies, charts etc., for each case. In case where the cost of photographs are exceptionally high actual cost of photograph shall be charged as decided by the Director, Forensic Science Laboratory.
2.	Document cases in personal / individual cases GO Ms No. 303 Home (Police Budget) Department, dated 06.10.2003	Rs. 3,000/-	Up to three disputed documents.
4.	Document cases in corporate matters. GO Ms No. 286 Home (Police Budget) Department dt. 19.09.2002	Rs.5,000/-	Up to three disputed writings
6.	DNA Profiling GO Ms No. 286 Home (Police Budget) Department dt. 19.09.2002	Rs. 6,000/-	Up to three sample.
7.	Lie Detector Examination : Corporate & Commercial Individual cases GO Ms No. 286 Home (Police Budget) Department dt. 19.09.2002	Rs. 2500/- Rs. 1,000/-	Per Subject Per Subject
8.	Evidence fee for expert in case of commission conducted TS FSL, Hyderabad GO Ms No. 335 Home (Police.C) Department dt. 05.08.1993	Rs. 250/-	Per day

#### 4. - Training

- a. FSL shall conduct orientation/refresher training for all the SHOs/IOs/SDPOs /other Police Officers in the Telangana State at regular Intervals on the subjects relevant to them.
- b. FSL shall also conduct orientation/refresher training for all the staff working in the Clues Teams of all the Commissionerates/Districts in the Telangana State at regular Intervals with regard to collection, preservation and handling the Material objects from the scene of Crime. These trainings shall be compulsory for any one who is part of the Clues team.
- c. Any other training for Police, other stakeholder departments or any other organizations, as decided by the Director from time to time.

## 5. – **Administrative and Logistic wing.**

This wing is headed by Chief Administrative Officer supported by other ministerial staff. This wing shall render administrative and logistical support such as managing issues of administration, finance, pay and allowances, contingent bills, procurement and maintenance of account, etc.

### **a. Attendance and Leaves Procedures**

- i. All the staff working on regular Time Scale of Pay are governed by Telangana State Leave Rules & Fundamental Rules, District Office Manual etc.
- ii. Staff working on Outsourcing & Contract basis are governed by Rules issued in GO Ms No. 94 General Administration (SER.A) Department, dated 28.03.2003 & GO Rt No. 4271 Finance (SMPC) Department, dated 01.11.2008 shall be followed.

### **b. Conduct Rules:**

All the staff of FSL are governed by the Telangana Civil Services (Conduct) Rules, 1964 and instructions issued by the Government from time to time.

### **c. Punishments:**

All the staff of FSL are governed by the Telangana Civil Services (Classification, Control & Appeal) Rules, 1991 and instructions issued by the Government from time to time.

### **d. Budget :**

Budget is allotted by the DGP Telangana under B.Es/R.Es under different Heads of Account.

Allocation of funds under MOPF, Nirbhaya fund, Scheme for Modernization of Forensic Capacities and other schemes are also done by the Govt. of India. All these matters including claiming of Pay & allowances, Supplementary bills, Contingent Bills etc are dealt in Budget Section headed by a Supdt and other staff under the CAO.

### **e. Stores :**

It shall function under a Superintendent assisted by other staff, under the CAO. Rules & Regulations prescribed in Financial Code is followed in procurement of items, maintenance of Registers and Records.

FSL shall follow the Financial Code in procurement of items on par with other Government departments including e-Procurement, Procurement through GeM portal, Open Tender System etc.

Condemnation of Articles: FSL shall follow the Financial Code with regard to Condemnation, disposal of unserviceable articles and Government/DGP instructions issued from time to time.

**f. Maintenance of Records and disposals:**

FSL is governed by Rules, regulations & guidelines issued in District Office Manual and other instructions issued by the Government/DGP from time to time.

**g. Right to Information Act:**

FSL shall follow the rules issued in RTI Act 2005 and subsequent Government instructions in the matter.