New Delhi, June 15: The Department of Biotechnology’s Hyderabad-based Centre for DNA Fingerprinting and Diagnostics (CDFD) has drawn up a detailed standard operating procedures for the COVID-19 testing facility set up at its campus.

The institute is getting Naso-Pharyngeal swab samples from government hospitals from all the districts across the State of Telangana in south India. The document provides the detailed protocol to be followed to test them for COVID-19.

The Standard operating procedures have been made based on inputs from different recommendations by the World Health Organisation, United State’s Centers for Disease Control and Prevention (CDC) and the handbook prepared by the office of the Principal Scientific Advisor to the Government of India for COVID-19 testing in research laboratories.

The document covers all aspects beginning from how the security guard of the Institute must receive the vehicle carrying samples at the entrance to the building to how the samples will be analysed and a report sent to the office of the district medical and health officer of the district from where the specific sample had come. It also gives clear protocol for how the biohazardous waste produced in the process should be handled and disposed of, how to
sanitise the work and how to protect those engaged in the analysis from getting exposed to the virus.
Workflow for COVID-19 testing at CDFD

1. Receipt of call from government hospitals for samples
   - PPE donning by personnel. Samples boxes are unpacked. Thermocol boxes are wiped with 1% sodium hypochlorite.

2. Delivery of samples at the CDFD main gate by ambulances
   - Sample boxes are brought to table outside BSL2 ROOM 1.
   - Thermocol boxes are unpacked in BSL2 Room 1. Unique codes are assigned to the samples. Condition of samples in noted.
   - Samples in transport boxes are brought to 3rd floor C-wing cold room through the Freight elevator.

3. Security Officer notes down the details - No. of samples, case sheets, date and time of receipt of samples, hospital from which the sample has been received.

4. BSL2 ROOM 1 BSC surface, tip boxes, discard beakers, markers, racks, etc. are wiped with disinfectant; UV is ON for 20 min.

5. All Biohazard waste is disposed in marked biohazard bags; autoclaved prior to pickup by agency.

6. Data reporting to state government and hospitals, and to NIV
   - Data interpretation and analysis.
   - Sample decoding
   - RT-qPCR is set up in laminar flow hoods and run on RT-PCR machines in ROOM 3.

7. Inactivated sample for RNA isolation is taken to RNA ISOLATION ROOM (ROOM 2).
   - RNA isolation (manual or automated) is done using Viral RNA isolation kit.