

Government of Meghalaya

OFFICE OF THE DIRECTOR GENERAL OF POLICE
MEGHALAYA :: :: SHILLONG

SHORT TENDER NOTICE

Sealed tender affixing non-refundable Court Fee Stamp of Rs. 1000/- (Rupees One Thousand) only are invited from bonafide, established, reputed manufactures and registered intending firms and supplier(s) for entering into a rate contract for supply of items/equipment for setting up DNA unit at "Office of the Director General of Police, Meghalaya, Shillong" for 2020-21, as per terms and conditions laid down in the Tender Notice. The tenders should be in 2(Two) bids system i.e. (i) Technical Bid (ii) Price Bid.

1. Terms and conditions:

Items offered must be of reputed companies/manufactures and should meet with all the Technical Specifications as given in Annexure "A". Tender should be accompanied with catalogues/Brochures/Warranty/Guarantee (in original) and will be received up to 1200 hrs on or before the 18th March 2021 by hand. These will be opened on the same day at 1300 hrs. Tenderers or their authorized representatives' are invited to present at the time of opening of the tender.

2. (i) Tender must be accompanied by the following documents in Technical Bid:

- (a) Affixed non-refundable court fee stamp as mentioned above.
- (b) Attested Passport size photograph of the bidder.
- (c) Authenticated copy of authorized Dealership/Distributorship certificate for each item quoted from the Principal manufacturer who has authorized dealers specifically certifying that the tenderer is authorized to deal with the equipments quoted in the tender notice. Separate dealership certificate will be required to be furnished by the tenderer if asked for in the list of items.
- (d) Attested copy of SC/ST Certificate issued by the concerned competent authority of Meghalaya only (for Tribal tenderer).
- (e) Earnest money at the rate of 10% (Ten percent) in case of Non-Tribal and at the rate of 5% (Five percent) in case of Tribal from the total value of the items tendered, in any one of the following forms only:
 - (i) Crossed bank draft; or,
 - (ii) Deposit at Call.

Payable to the Asstt. Inspector General of Police, (A), Meghalaya, Shillong at any Nationalized Bank at Shillong.

- (f) Attested copy of GST Registration / Clearance to be enclosed.
- (g) Financial stability Certificate from any Nationalized Bank or Deputy Commissioner concerned.
- (h) Catalogues/Brochures (in original) from the manufacturers for the item quoted.
- (i) Attested copy of valid professional Tax Clearance Certificate.
- (j) Attested copies of valid Trading license in terms of KHADC, JHADC, GHADC for Non-Tribal (regulation Act. 1954) in case of Non-Tribal who are required to obtain such license should also be enclosed.
- (k) Tenderer should also submit the undertaking at Annexure – B.
- (l) Latest certificates with respect to work experience for supply and installation of items / equipment for setting up of DNA unit.
- (m) Should not have been black listed.

2. (ii) Tender must be accompanied by the following document/detail in price Bid:

- (a) Rate of the item quoted should be placed in separate sealed envelopes.
 - (b) The rate quoted should be as per format enclosed at Annexure- A.
3. The list of enclosed documents must be mentioned on the body of the main envelope containing the tenders (price bid & technical bid), failing which, the sealed envelope of quoting firm will not be opened.
4. **Warranty/Guarantee:** Minimum Warrantee of 2 (two) years should be offered, to be followed by an AMC from the third year.

5. Rates Quoted:

- (a) Should be inclusive of all taxes, levies, charges, packing, insurance, taxes and other installation/incidental charges.
- (b) Should be inclusive of the cost of all accessories required to make the DNA Lab functional.
- (c) Should be valid for 1(One) year from the date of acceptance of tender.
- (d) Should be quoted separately for each item in word and rates should be for 1 (one) item, 1(one) rate basis. Same items with optional rates and optional quality will not be entertained and out rightly rejected.
- (e) Should be quoted F.O.R Destination i.e., up to the Office of the Director Forensic Science Laboratory, Mawdiangdiang.
- (f) Should be written clearly in figures and in words. Any alterations or over writing must be fully signed by the tenderer along with the date.
- (g) Once the rates offered in the quotation are accepted, no enhancement will be entertained

under any circumstances and tenderers will be liable to supply the items at the rate accepted

by the Director General of Police, Meghalaya, Shillong. Failure to supply the items at the accepted rates will entail the offer being cancelled and the Security Money will be forfeited to the Government of Meghalaya.

(h) For import items rate should be indicated separately i.e., rates with **Custom duty and rates without Custom Duty.**

6. Tenderer must sign all pages of the Bid (Both Technical and Price Bid) and also submit the signed Undertaking Certificate at Annexure – ‘B’, as a proof of the tenderer having fully understood the terms and conditions mentioned in the Short Notice Tender.
7. Tender/quotation should be addressed to the undersigned by designation and not by name. Sealed envelopes containing the quotation must be super-scribed as Tender for supply and installation of DNA Unit and sent by hand delivery. The tenderer should affix his full address on the left bottom of the envelope containing the tender documents.
8. In no case tenders received after due date and time shall be accepted. All tenders received after the due date and time shall be returned to the respective tenderer without opening the same.
9. **Rates of Security Deposit:-** The successful tender will have to deposit Security Deposit @ 10% (for all categories) of the total amount of the contract.
10. Once the Model is approved, no change of brand name, shape, pattern, quality or specification will be entertained even on the plea on non-availability offer of the same quality or alternative offer of the same quality.
11. Delivery and installation must be completed within 20 (twenty) days from the date of receipt or firm orders. No extension of delivery period will be entertained.
12. **Payment will be made to the suppliers directly, only on completion of supplies, installation** and based on the recommendation of the **Line Committee.**
13. Risk of transportation will be borne by the Tenderer themselves.
14. One set of manual of (Instruction and Maintenance) should be supplied free of cost for the item wherever applicable.
15. The purchase Board reserves the right to reject the lowest rate or any of the tender without assigning any reason.
16. The Tendering Authority has the right to cancel the tender at any time without assigning any reason thereof.
17. The Tendering Authority reserves the right to alter the quantity/reduce any items/equipments before issue of supply order and the Tenderer shall not have any claim what so ever on this account.
18. The items for which the tenderers would be quoting must fulfill the given technical specifications and if it does not then it will not be accepted.

19. Eligible/qualified Tenderers should demonstrate the equipment before the Tendering

Authority.

20. Specification of the list of items/equipment to be procured for setting up of DNA Unit is at Annexure- 'A'.
21. Successful Tenderer will have to sign a contract agreement.
22. The Earnest Money of the successful/unsuccessful Tenderer shall be released after the award of tender to the successful Tenderer.
23. The Successful tenderer shall be intimated and a letter of acceptance will be issued by the undersigned.

Sd/-

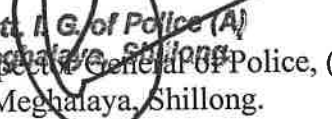
Asstt. Inspector General of Police, (A),
Meghalaya, Shillong.

Dated Shillong the 8th March, 2021.

Memo No. MPF/10/2018-19/FSL-ST/63

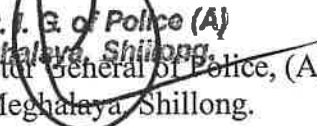
Copy to:-

1. The Addl. Director General of Police (L&O/TAP) / (SB/CID), Meghalaya, Shillong for kind information.
2. The Inspector General of Police (Admin), Meghalaya, Shillong for kind information.
3. The Inspector General of Police (ER), Meghalaya, Shillong for kind information.
4. The Dy. Inspector General of Police (WR), Meghalaya, Tura, for kind information.
5. All Superintendents of Police for kind information with a request to display the tender notice in the Notice Board.
6. The Spl. Superintendent of Police (CID), Meghalaya, Shillong for kind information.
7. The Principal, Police Training School, Umran, for kind information with a request to display the tender notice in the notice board.
8. The Director Government Press, Meghalaya, Shillong with copies for publication in two consecutive issues of Meghalaya Gazette.
9. The Director Information & Public Relation, Meghalaya, Shillong for kind information, with a request to publish the Tender Notice and the list given at Annexure – A) in 3 (three) Newspapers, i.e. English, Khasi and Garo medium which are widely circulated throughout the State.
10. The I/c Director FSL, Meghalaya, Shillong for kind information with a request to display the short tender notice in the notice board.
11. The Reserve Officer of Police Headquarters, Meghalaya, Shillong for information and necessary action.
12. The In-charge Computer Wing, Police Headquarters, Meghalaya, Shillong along with a soft copy containing the Tender Notice for uploading the same in the Website of the DGP, Meghalaya, Shillong.


Asstt. I. G. of Police (A)
Meghalaya, Shillong
Asstt. Inspector General of Police, (A),
Meghalaya, Shillong.

TENDER NOTICE

Sealed tenders along with Brouchers /Catalogues for supply of items/equipment to be procured for setting up of DNA Unit to the O/o the Director General of Police, Meghalaya, Shillong will be received by the undersigned up to 1200 hrs on or before the 18th March 2021 will be opened on the same day at 1300 hrs by the undersigned. Details may be collected from the office of the undersigned on any working days between 10Am to 4.30 Pm.


Asstt. I. G. of Police (A)
Meghalaya, Shillong.
Asstt. Inspector General of Police, (A),
Meghalaya, Shillong.

**OFFICE OF THE DIRECTOR, FORENSIC SCIENCE LABORATORY,
MAWDIANGDIANG, MEGHALAYA.**

LIST OF ITEMS FOR DNA PROFILING UNIT.

Sl. No	Name	Quantity	Remarks
1	AB 3500 Genetic Analyzer for HID (8 capillary system) with Gene Mapper ID-X version 1.6 software	1	
2	RT-PCR with HID validation certificate	1	
3	24-plex Autosomal STR Kit	1	To be included in Sl no. 1
4	Y-STR Kit	1	To be included in Sl no. 1
5	Human and Human/Male DNA Quantitation Kits	1	To be included in Sl no. 2
6	Size standard, POP-4, Buffers, other consumables for the functioning of Genetic Analyzer	1	To be included in Sl no. 1
7	Thermo mixer with inter-changeable block	1	
8	Set of Micropipettes 05 -10 μ l, 2-20 μ l, 20-200 μ l, 100-1000 μ l	6	
9	Table Top Refrigerated High Speed Centrifuge (with 1.5/2 ml and 15/50 ml rotors and adaptors)	1	
10	Online UPS 10 KVA (3KVA+3KVA+4KVA) with 90 min back up each	1+1+1	
11	Laminar air flow	1	
12	PCR Workstation	1	
13	Rotator(1.5 ml/2ml to 15/50 ml clamps or adaptors)	1	
14	Magnetic stirrer cum Hot Plate (with both heating and non-heating features)	1	
15	Vortex mixer	1	
16	Tray Shaker (without incubation)	1	
17	pH meter	1	
18	Microwave oven	1	
19	-20°C Ultra low temperature Freezer	1	
20	Refrigerator	2	
21	4° C Upright Chiller	1	
22	Air conditioner	1	
23	General plasticware (microtips, microcentrifuge tubes, centrifuge tubes, PCR tubes, 96 well plates, DNA molecular weight cutter filters, etc) and Disposables; Glasswares; and Molecular Biology chemicals and consumables		

SPECIFICATIONS OF THE EQUIPMENT

The equipment/items must have specifications equivalent or better than the following:

1. GENETIC ANALYSER

Sl. No.	Prescribed specifications; equivalent or better
1	Fluorescence based 8 capillary electrophoresis system along with all hardware and software needed for generating DNA profiles from different types of forensic samples. The system and all major accessories should be validated as per the SWGDM guidelines for forensic DNA testing.
2	The system should be capable of doing both fragment analysis and sequencing application. The instrument should come along with fragment analysis and sequencing software for performing fragment analysis and sequencing applications.
3	Capillaries should be uncoated internally with new generation of polymer optimized for its performance for medium to high throughput DNA sequencing and fragment analysis requirements.
4	The system should have capability for tracking consumables using RFID technology to monitor usage, lot nos., part nos., expiry dates, and on instrument lifetime.
5	The instrument should use virtual filters and peltier cooled charged coupled device (CCD) camera. The excitation of all fluorescent dyes should be by a long solid state laser. The instrument should be capable of detecting minimum six fluorescent dyes.
6	Forensic specific validated software (as per SWGDM and DAB guidelines) for data analysis along with operating hardware specs 2.00 GHz, windows 7, 2 GB, 250 GB HDD, CD/RW or latest configuration.
7	The equipment should be capable of analysing different forensic DNA samples especially for identification of: <ul style="list-style-type: none">➤ Autosomal-STRs.➤ Y-STRs.➤ X-STRs and➤ Sequencing of DNA fragments.
8	Equipment should be validated for running different commercially available forensic STR kits from original manufacturers for applications in forensic laboratory.
9	Equipment should have pre-installed licensed software for analysis of STRs and sequencing data.
10	Equipment should be user friendly and fully compatible for examination of forensic DNA samples.

11	Equipment should be of latest version, upgradable with software pre-installed, free of cost. Up gradation of compatible software, if any required, should be free of cost for next five years from the date of installation.
12	<p>The equipment must include:</p> <ul style="list-style-type: none"> ➤ 3500 HID & sequencing inst kit each ➤ SW- Genemapper ID-X Full V1.61 Kit ➤ DS-36 matrix standard kit (dye set J6). ➤ Gene Scan™ 600 LIZ™ size std v 2.0 each. ➤ SW.SS and SEQA each. ➤ POP.4(960) polymer 3500 series each. ➤ Cathode buffer container 3500 series each. ➤ Anode buffer container 3500 series each. ➤ HI-DI Formamide 4x5 ml bottle each. ➤ SEPTA-8 strip RUO 3500 each. ➤ Microamp 96-well RXN plate- EA No Barcode. ➤ 24-plex autosomal STR amplification kit. ➤ 24-plex Y-STR amplification kit.
13	Power backup: A compatible online 3 KVA UPS with 90 minutes back-up should be provided for the complete setup.
14	All the relevant brochure and certifications should be provided for adherence of the submitted compliance sheet for the tendered specification.
15	The satisfactory performance report should be attached. User list for at least 20 users in India should be attached with their contact details.
16	<p>Mandatory Terms and Conditions.</p> <ul style="list-style-type: none"> ➤ The firm should provide a 2 year warranty from date of installation plus comprehensive AMC (including spare parts and consumables for running machine) for next five years after the expiry of warranty period. AMC rate per annum should be quoted, separately. ➤ Company should have after sale, service support based in India. ➤ The company should quote price of consumable kits for analysis of minimum 2 x 200 rxns Autosomal kits and 100 rxns Y-STR kit annually, for five years separately. ➤ Latest configuration hardware (desktop and printer) compatible to support the software must be included. ➤ On-site installation and demonstration of equipment should include necessary literature, operational procedures/manual and training of the end users in the laboratory. ➤ Pre-installation requirement of the equipment should be mentioned at the time of submitting tender document.

2. RT-PCR WITH HID VALIDATION CERTIFICATE

Sl. No.	Prescribed Specifications; equivalent or better
1	An integrated system for both Real-Time PCR & post-PCR (end-Point) analysis using in built peltier or air based PCR Machine or with better upgraded technology, with 96 well block or rotor format.
2	The system should be up to 96 well peltier/air-based.
3	Maximum ramp of the system rate should be 3°C/sec or more.
4	The instrument should have flexibility to either used individual tube, 8 tube strips or 96 well plate.
5	The system should have temperature range from ambient or 4 °C to 99 °C.
6	The systems should have wizard to automatically calculate standards and dilutions, with the ability to set up multiple standard curves.
7	The instrument should use bright white LED as excitation source with lifetime warranty.
8	The instrument should have separate filter dedicated for high resolution melt curve analysis. The instrument should be open for calibration of new dyes without requiring the addition of new filter sets.
9	The instrument software should have specific quality flags and analysis summary that allow users to quickly assess the DNA sample quality and identify samples that need further review. Software should come with at least single user license.
10	Dilution calculation and reaction setup tools should be available to speed up STR analysis workflow.
11	Should be an open system capable of running various chemistries such as Taqman, Molecular Beacon, SYBR green etc.
12	The system should be validated/certified for quantitating human and human/male DNA by latest forensic quantitation kits of different original manufacturers.
13	The system should include: <ul style="list-style-type: none"> ➤ 96-well (std) 0.2ml background ROI plate. ➤ Fast 96 well RNASE P VERIF plate. ➤ Taqman fast reagents starter kit. ➤ Human DNA quantitation kit. ➤ Human/Male DNA quantitation kit (latest kit with inhibition index/indicator).
14	The system should be provided with User friendly upgradable software with following features: <ul style="list-style-type: none"> ➤ Software should support performing absolute quantification, Relative quantification, allelic discrimination, Plus/Minus assays. ➤ The software must allow Dye discrimination and multi component algorithm ➤ The software must allow sample quality assessment by determination of Male : Female ratio; inhibition and degradation index along with this it should be capable of calculating dilution and reaction set-up for downstream applications like STR profiling using Human Identification Kits. ➤ Latest configuration hardware (desktop and printer) compatible to support the

	software. Consumables: Start-up consumables for at least 200 rxns each for Human and Human/Male DNA quantitation kits.
15	<p>Mandatory Terms and Conditions.</p> <ul style="list-style-type: none"> ➤ The firm should provide a 2 year warranty from date of installation plus comprehensive AMC (including spare parts and consumables for running machine) for next five years after the expiry of warranty period. AMC rate per annum should be quoted, separately. ➤ Company should have after sale, service support based in India. ➤ Onsite installation and demonstration of equipment should include necessary literature, operational procedures/manual and training of the end users in the laboratory. ➤ Pre-installation requirement of the equipment should be mentioned at the time of submitting tender document.
16	Instrument operational training and wet lab application training should be provided by the vendor at our institute.

3. THERMOMIXER WITH INTER-CHANGEABLE BLOCK

Sl No.	Prescribed Specifications; equivalent or better
1	Digital Vortex Mixer should have 3 in 1 option like mixing, heating and cooling for all tubes and plate format of 5 µl to 50 ml and have maximum speed of 3000 rpm.
2	System should have a temperature control range from 15°C below RT to 100°C.
3	System should be able to set from 15 sec to 99:30 h or continuous mode.
4	System should have thermo top to avoid condensate formation and sample evaporation.
5	Compatible with Eppendorf ThermoTop (condens.protect®) for condensation-free sample handling.
6	System should be supplied with 1.5 ml X 24 thermo lid with extender.
7	Predefined temperature keys (37°C, 42°C, 56°C, and 95°C) for simple and intuitive operation.
8	Very fast heat up speed of up to 18°C/min, reducing your waiting time.
9	Supporting literature of equipment with detailed specifications.
10	Warranty: 2 years from date of installation.

4. SIX SETS OF MICROPIPETTES

Sl No.	Prescribed Specifications; equivalent or better
1	Single channel variable volume micropipette, adjustable volume.
2	Spring loaded tip cone for connecting tips very tightly.
3	Control button with very low operation force, colour indication for pipette volume.
4	Tip ejector with very low operating force, positioned for perfect ergonomics.
5	Volume display: 4 Digits with magnifier.
6	Secure volume lock to prevent undesirable volume drift during operation.
7	Volume range: Each set must have 0.5 - 10µl, 2-20 µl, 20-200 µl, 100-1000µl pipettes.
8	A micropipette stand/carousel must be included with each set.
9	Must be able to regulate the piston movement speed to pipette higher viscosity (for eg. Glycerol) and lower viscosity (for eg. Chloroform) liquids.
10	Calibration seal for optimal GLP specifications.
11	Supporting literature of equipment with detailed specifications.
12	Warranty: 2 years from date of installation.

5. TABLE TOP REFRIGERATED HIGH SPEED CENTRIFUGE

Sl No.	Prescribed Specifications; equivalent or better
1	Instrument should be supplied with temperature control range: -11°C to 40°C, should be able to maintain 4°C at maximum speed.
2	Instrument should be supplied with rotor for 30 x 1.5/2.0 ml with speed 14,000 rpm or better.
3	Instrument should be supplied with rotor for 6 x 15/50 ml with speed 7,800 rpm / 7700 x g or better.
4	Centrifuge should have the facility for rapid cooling and continuous cooling following centrifugation.
5	Centrifuge should have feature for minimum 5 direct key programming facilities and maximum 50 programming facility in the memory.
6	All rotors and rotor lids should be autoclavable.
7	Centrifuge should have CE, UL, ISO 9001, ISO 13485, ISO 14001 Certified and IVD compliance.
8	Instrument should have automatic rotor recognition facility to automatically recognize and set maximum speed upon rotor change.
9	Centrifuge should have max RPM of 17,500 or better.
10	Centrifuge should have Max RCF of 30,130 x g or better.
11	User-friendly digital display for time and speed.
12	Soft-touch lid closure for ergonomic lid locking.
13	Automatic lid opening at the end of the run to prevent sample warming and to allow

	easy access to samples.
14	Supporting literature of equipment with detailed specifications.
15	Warranty: 2 years from date of installation.

6. ONLINE UPS 10 KVA WITH 90 MIN BACK UP

SI No.	Prescribed Specifications; equivalent or better
1	Capacity: To be split into three individual smaller load devices: 3KVA + 3KVA + 4 KVA, each with 90 minutes back up.
2	Topology: True online Double conversion.
3	Control panel: Multifunction LCD Status and control console.
4	Intelligent transient surge, voltage fluctuations, and spike protection system should be available.
5	Bypass: Built-in Static and Maintenance Bypass.
6	Inverter efficiency: Better than 90%.
7	Battery type: Sealed Lead-Acid, Maintenance free.
8	Output Waveform type: Sinusoidal (sine wave output).
9	Supporting literature of equipment with detailed specifications.
10	Certification: ISO 9001;14001;27001; OHSAS18001;CE;ITL9000 (Mandatory with proof)
11	Warranty: 2 years comprehensive on-site OEM warranty including batteries; from date of installation.

7. LAMINAR AIR FLOW

SI No.	Prescribed Specifications; equivalent or better
1	Class 2 type A2 protection.
2	Size: 3 feet.
3	UV resistant laminated safety sash with > 6mm thickness.
4	Inflow velocity >100 FPM.
5	HEPA filter with efficiency of > 99.99 % along with ISO class 5 cleanliness.
6	Internal work area should be made up of single piece 16G type 304 stainless steel.
7	Internal work area should have >690 mm.
8	Cable port feature for safe and ergonomic way of introducing cable in to the work area.
9	Cabinet should have ss diffuser for filter protection and uniform air flow.
10	Flow type: Horizontal.
11	Supporting literature of equipment with detailed specifications.
12	Warranty: 2 years from date of installation.

8. PCR WORKSTATION

Sl No.	Prescribed Specifications; equivalent or better
1	It should offer twin decontamination action by UV inactivation of airborne and surface-bound contaminants and therefore an ideal environment for PCR sample preparation and other sensitive protocol.
2	It should have antimicrobial work surface made of stainless steel.
3	Should have one inbuilt pipette stand.
4	At least one UV tube and one white light tube internal.
5	Large working area of 72 x 54 cm (L x D).
6	Electrical supply: 230 V/50 Hz (EU/UK version), A. C supply.
7	Front and side panels should protect user from UV irradiation.
8	Internal power outlets for operating equipment such as mini centrifuge or vortex allow the combination of several working steps without interruption of the workflow.
9	Supporting literature of equipment with detailed specifications.
10	Warranty: 2 years from date of installation.

9. ROTATOR

Sl No.	Prescribed Specifications; equivalent or better
1	Ideal for biological samples, particularly blood samples.
2	Suitable for separating and mixing processes of powdered and liquid samples in Eppendorf tubes and Greiner tubes up to 50 ml.
3	Type of movement rotating.
4	Speed Range (Adjustable) from 0-80 rpm.
5	Speed control rpm step with LED speed display.
6	Timer setting & display: Timer: 1 sec - 5999 min, Display 7 segments LED.
7	Tilt angle turntable minimum: 0°; maximum: 90°.
8	Accessories to be supplied: Universal Disc one, Spare Clops for 1.5ml/2.0 ml tubes, 15ml tubes and 50ml tubes, 12 each.
9	Supporting literature of equipment with detailed specifications.
10	Warranty: 2 years from date of installation.

10. MAGNETIC STIRRER CUM HOT PLATE

Sl No.	Prescribed Specifications; equivalent or better
1	Magnetic stirrer with heating and ceramic or stainless steel heating plate which offers excellent chemical resistance.
2	Powerful motor for stirring quantities of up to 10 litres or more (H ₂ O).

3	Speed range: 0 to 1500 rpm.
4	Simultaneous digital display of target and actual temperatures via LCD display.
5	Heating temperature range: 50°C to 500°C with step less heating controller.
6	Heating rate: 5k/min or higher.
7	Fixed safety circuit of 550°C.
8	Top plate dimensions (mm) 260 x 260 or bigger.
9	Equipment must be included with magnetic stirring bars and magnetic stirring bar retriever.
10	Equipment must possess versatility and offer Heating-Stirring, Heating-Non-stirring, Non-heating-Stirring and simple heating features simultaneously.
11	Should have IVD conformity.
12	Supporting literature of equipment with detailed specifications.
13	Warranty: 2 years from date of installation.

11. VORTEX MIXER

Sl No.	Prescribed Specifications; equivalent or better
1	Must have mixing and vortexing capability.
2	Controllable speed range from 300 to 3000 rpm with tubes 1.5/2ml and higher volumes.
3	Touch and continuous vortex capability.
4	Should have IVD conformity.
5	Supporting literature of equipment with detailed specifications.
6	Warranty: 2 years from date of installation.

12. TRAY SHAKER (WITHOUT INCUBATION)

Sl No.	Prescribed Specifications; equivalent or better
1	Small, quiet shaker with ideal swivel motion, for a maximum shaking weight of 2 kg or more.
2	Electronic adjustment of speed and timer.
3	Digital LCD display for reading speed, timer function and operating modes.
4	Type of movement- orbital or linear.
5	Speed range (rpm): 0-800.
6	Time setting range (min): 1-599.
7	Supporting literature of equipment with detailed specifications.
8	Warranty: 2 years from date of installation.

13. pH Meter

Sl No.	Prescribed Specifications; equivalent or better
1	Benchtop meter type.
2	3-in-1 electrode (pH, mV, Temperature).
3	pH range 0 to 14; pH accuracy ± 0.01 ; pH resolution 0.01, 0.1
4	Calibration: 1 to 3 points.
5	Temperature range: 0 to 100°C.
6	mV range: -2000 to 2000; mV accuracy $\pm 0.01\%$ full scale.
7	Must include calibration buffer packs.
8	Large colour TFT display.
9	Supporting literature of equipment with detailed specifications.
10	Warranty: 2 years from date of installation.

14. MICROWAVE OVEN

Sl No.	Prescribed Specifications; equivalent or better
1	Capacity: 20 to 30 litres.
2	In-built power regulator/stabilizer.
3	Supporting literature of equipment with detailed specifications.
4	Warranty: 2 years from date of installation.

15. -20°C ULTRA LOW TEMPERATURE FREEZER

Sl No.	Prescribed Specifications; equivalent or better
1	Microprocessor controller with digital display.
2	Door key lock.
3	Stainless steel exterior & interior.
4	Automatic door closing.
5	Forced air cooling.
6	Adjustable shelves.
7	Lockable castors Optional.
8	Visual and acoustic alarm.
9	Adjustable high/low temperature alarm; Door open alarm.
10	Gross Capacity: 650 litres.
11	Upright cabinet model.
12	Temperature range: -20°C; Temperature display: Digital; Microprocessor controller: Yes; Lock: Yes
13	No. of Shelves/Drawers: 3 + 1 shelves (or more); Wheels: Yes
14	Supporting Literature of equipment with detailed specification.

15	Warranty: 2 years from date of installation.
----	--

16. REFRIGERATOR

Sl No.	Prescribed Specifications; equivalent or better
1	Capacity: 400-500 litres approximately.
2	Frost-free freezer.
3	In-built power regulator/stabilizer.
4	Vertical cabinet type with double door.
5	Temperature range: -18°C to 4°C.
6	Cooling retention: 2 hours or more.
7	Supporting literature of equipment with detailed specifications.
8	Warranty: 2 years from date of installation.

17. 4°C UPRIGHT CHILLER

Sl No.	Prescribed Specifications; equivalent or better
1	1030 litres capacity or more.
2	Temperature range: 2 to 10 °C.
3	Must contain wheels.
4	Number of shelves 4 + 4; must be adjustable.
5	Number of doors should be 2.
6	In-built power regulator/stabilizer.
7	Cooling retention: 2 hours or more.
8	Should preferably have internal power outlet for operating equipment internally.
9	Door key lock.
10	Supporting literature of equipment with detailed specifications.
11	Warranty: 2 years from date of installation.

18. AIR CONDITIONER

Sl No.	Prescribed Specifications; equivalent or better
1	Split AC with hybrid jet inverter technology.
2	Energy rating: 5 star.
3	Capacity: 1.5 ton suitable for medium sized room.
4	Variable speed compressor which adjusts power depending on heat load for higher energy savings.
5	Must have dust filter and dehumidifier filters.
6	Remote control.

7	Voltage at 230 V.
8	Low noise emission.
9	Supporting literature of equipment with detailed specifications.
10	Warranty: 2 years from date of installation.

19. GENERAL PLASTICWARE (MICROTIPS, MICROCENTRIFUGE TUBES, CENTRIFUGE TUBES, PCR TUBES, 96 WELL PLATES, DNA MOLECULAR WEIGHT CUTTER FILTERS, ETC) AND DISPOSABLES; GLASSWARES; AND MOLECULAR BIOLOGY CHEMICALS AND CONSUMABLES

I) GENERAL PLASTICWARE AND DISPOSABLES

Sl No.	Name of Plasticware	Qty
1	96 Well plate semi skirted Compatible with AB 3500 Genetic Analyzer	20
2	96 Well plate Compatible with 7500 real time PCR System	20
3	Aluminum foil 9meter	10 pkt
4	Bottle brush large	5
5	Bottle brush medium	5
6	Centrifuge tube with cap 15 ml Sterile (conical bottom)	500
7	Centrifuge tube with cap 50 ml Sterile and Racked (conical bottom)	2x100
8	Disposable Polythene Gloves	500
9	0.2 ml Micro centrifuge tube Flat Cap Sterile DNase, RNase Free	2 x 1000
10	1.5 or 2ml Micro centrifuge tube sterile DNase, RNase Free	5 x 1000
11	Disposable Mask	500
12	Disposable Shoe Cover	300
13	Maximum Recovery Filtered Micro Tip up to 10µl XL universal racked	500
14	Maximum Recovery Filtered Micro Tip up to 10µl universal racked	2000
15	Filtered Micro Tip up to 50µl universal racked	1000
16	Filtered Micro Tip up to 200µl universal racked	2000
17	Filtered Micro Tip up to 200µl universal bulk pack	5000
18	Filtered Micro Tip 100 to 1000µl universal Bulk Pack	500
19	Nitrile Hand Gloves- Medium	500 pkt
20	Nitrile Hand Gloves- Small	200 pkt
21	Blotting paper to be used as absorbent surface on working table	20 ream
22	PCR tube rack with Cover 96 position for 0.2ml tube	10
23	Scissors 6" blunt	10
24	Scissors 6" sharp	10
25	Wash bottle (250ml)	5
26	Cryo Box for 1.5/2.0 ml tube 80 or more Places	5
27	Labelling Tape	10 pkt
28	Sterile Scalpel blade No. 20, 22 with stainless steel scalpel holder	1 pkt

26	Cryo Box for 1.5/2.0 ml tube 80 or more Places	5
27	Labelling Tape	10 pkt
28	Sterile Scalpel blade No. 20, 22 with stainless steel scalpel holder	1 pkt each
29	Aspirator Bottle capacity 5 L	4
30	Sterile Disposable Petri plate 90 mm diameter	100
31	Sterile Disposable Petri plate 150 mm diameter	500
32	Autoclavable Bag for waste Disposable 20x40 inch	20
33	Sterile Cotton Swab individually packed	200
34	Spatula stainless steel- 8 inch	10
35	Glass Marking Pen with tungsten carbide tip	20
36	Autoclave Indicator tape 1"x500'	2
37	Forceps Pointed - Stainless Steel 6" blunt	10
38	Forceps blunt - Stainless Steel 6" sharp	10
39	Biohazards waste container- 3 litres, 5 litres and 20 litres	3, 3, 2
40	0.2ml tube strip-8 with cap for real time PCR	100
41	Parafilm M 2'x250'	3
42	Cryo gloves Medium -Mid arm	2 Pairs
43	Universal Combi rack	10
44	Reversible rack with Cover 1.5/2 ml tube	20
45	Float Rack 16 Places	10
46	2ml Concentration Device for DNA Conc. 70K molecular weight cutter	96
47	0.5ml Concentration Device for DNA Conc. 70K molecular weight cutter	3x96
48	Whatmann Filter Paper No.1	20 pkt
49	Kimwipes	5 pkt
50	Tissue Paper stand	5
51	Tissue paper roll	30
52	pH Strips range 5-9	3

II) GLASSWARES

Sl No.	Name of Glassware	Qty
1	Glass measuring Cylinder- 500ml Graduated	2
2	Glass measuring Cylinder- 250ml Graduated	2
3	Glass measuring Cylinder- 100ml Graduated	6
4	Glass measuring Cylinder- 50ml Graduated	4
5	Glass measuring Cylinder- 10ml Graduated	3
6	Reagent glass bottle amber colour wide mouth, screwcap and pouring ring, graduated- 250ml	4
7	Reagent glass bottle amber colour wide mouth, screwcap and pouring ring, graduated- 100ml	4

8	Reagent glass bottle wide mouth, screwcap and pouring ring , graduated- 100ml	10
9	Reagent glass bottle wide mouth, screwcap and pouring ring , graduated- 250ml	10
10	Reagent glass bottle wide mouth, screwcap and pouring ring , graduated- 1000ml	2
11	Beaker-Griffin, Low form, with spout, graduated- 100ml	6
12	Beaker-Griffin, Low form, with spout, graduated- 250ml	6
13	Beaker-Griffin, Low form, with spout, graduated- 500ml	4
14	Conical flask- 250ml	3
15	Conical flask- 100ml	6
16	Funnel- 100 mm Diameter	2

III) MOLECULAR BIOLOGY CHEMICALS AND CONSUMABLES

Sl No.	Name of Chemicals/Items	Qty
1	(Dithiothreitol) DTT, MB Grade	2 x 2 gm
2	Phenol: Chloroform: Isoamyl Alcohol (24: 24:1) pH 8.0, MB grade	4 x 250 ml
3	TRIS, MB grade	500 gm
4	(Ethylenediamine Tetra acetic Acid) EDTA, MB Grade	5 x 100 gm
5	SYBR Safe DNA Gel Stain	2 x 100 µl
6	Glycerol, MB Grade	100 ml
7	Bromophenol Blue	5 g
8	Proteinase-K	2 x 500 mg
9	Sarkosyl, MB grade	100 gm
10	(Sodium Dodecyl Sulphate) SDS , MB Grade	1 x 500 gm
11	Hydrochloric Acid, MB grade	1 x 500 ml
12	Glacial Acetic Acid, MB Grade	2 x 500 ml
13	Sodium Chloride, MB Grade	6 x 500 gm
14	Sodium Hydroxide, MB Grade	1 x 500 gm
15	Sodium Acetate anhydrous, MB Grade	500 gm
16	Ethanol Absolute	10 x 500 ml
17	Boric Acid, MB Grade	1 x 500 gm
18	Sodium Hypochlorite (4%)	5 x 1000 ml
19	MgCl ₂ , MB Grade	1 x 500 gm
20	Sucrose, MB Grade	1 x 500 gm
21	H ₂ O ₂ , AR Grade	2 x 500 ml
22	Hand disinfectant rub (liquid)	5 x 500 ml
23	Surface Sanitizer	2 x 5 litre
24	Rapid body fluid identification kit for human blood (forensic validated)	20 x 10 nos

	kit)	
25	Rapid body fluid identification kit for human PSA (forensic validated kit)	20 x 10 nos
26	Liquid Detergent (for washing glasswares, etc.)	10 litre
27	pH capsules for calibration of pH meter pH-4, 7, 9.2	2 pack each

Bidder should quote the above items as below:-

Sl. no	Item	Qty	Make & model	Unit price (inclusive of all taxes)	Total
1					
2					
3					
4					
	Other items (if any)				
	Grand total				

CERTIFICATE OF ACCEPTANCE OF TERMS AND CONDITIONS

(To be furnished along with the tender documents)

I/We have read and fully understood the terms and conditions as laid down in the Short Tender Notice. Vide No. **Memo No. MPF/10/2018-19/FSL-ST/63, dt. 8th March 2021** in respect of supply/setting up of DNA Unit to the Office of the Director General of Police, Meghalaya, due to be opened on **18th March 2021**.

I/We agree to abide by the same.

I/ We have signed all the pages of the tender documents as laid down.

Signature and seal of the Tenderer or
his/her Authorized signatory.

Dated.....

Name

Address

.....

Phone No.