

**ICMR - NATIONAL INSTITUTE OF CANCER PREVENTION AND RESEARCH**  
**Plot No. I-7 SECTOR-39 NOIDA – 201301**

NICPR/Store/Covid-19/LEH/2020-21

Dated: 30<sup>th</sup> April, 2020

**Notice Inviting Quotation**

1. The Director, National Institute of Cancer Prevention and Research (ICMR), I-7, Sec-39, Noida-201301, invites **Quotation** from reputed manufacturers, suppliers or their authorized representatives for supply, installation, testing and commissioning of equipment for **Sonam Nurboo Memorial Hospital (SNMH), LEH** (as per enclosed list at Annexure I)
2. The document containing terms and conditions and specifications of the items may be downloaded from the website [www.nicpr.res.in](http://www.nicpr.res.in) . The last date for submission of tender is **06/05/2020** by **12.00 noon.**, by e-mail on e-mail ID **director.nicpr@icmr.gov.in**. In case any bidder fails to follow any or more of these conditions, the offer shall be summarily rejected. **The Specifications of the equipment are attached at Annexure-II.**

**Critical Dates**

Bid Submission Start Date	30/04/2020	06.00 P.M.
Last date of Bid Submission	06/05/2020	12.00 noon
Opening date of Bid	06/05/2020	02.30 P.M.

Director  
ICMR-NICPR, Noida

**ICMR - NATIONAL INSTITUTE OF CANCER PREVENTION AND RESEARCH  
Plot No. I-7 SECTOR-39 NOIDA – 201301**

NICPR/Store/Covid-19/LEH/2020-21

Dated: 30<sup>th</sup> April, 2020

**Last date for submission of online Quotation: - 06/05/2020 at 12:00 noon**

**TERMS AND CONDITIONS**

1. Tenderers are requested to submit detailed techno-commercial bids for each of items mentioned in Annexure-I.
2. Submission of Bids
  - a. Submission of quotation for equipment may be sent to email ID: director.nicpr@icmr.gov.in.
  - b. Last Date and Time for submission of bid: 06th May, 2020 by 12:00 noon.
  - c. The email should be sent with subject mentioning - “Tender for (Name of the item)”
  - d. Bid received after the due date and time will not be considered under any circumstances.
3. The bidder should clearly mention whether they are Manufacturer or authorized Dealer/ Agent/Distributors/Suppliers of the Manufacturers. In the case of Dealer/ Agent/Distributors/Suppliers, latest authorization letter from the Manufacturer should be submitted along with the Bid.
4. A copy of Specification compliance sheet on vendor letter Head and available illustrated literature/Catalogue (with page number) in support of above compliance statement should accompany the Bid. All documents attached should have page numbers.
5. **Acceptance of Offer/Tender** – **As time is the essence of the contract**, therefore, for calculation of Lowest (L-1) responsive vendor, the value of each quoted item for **Free of Cost Delivery at SNMH, LEH** or any other criteria decided by the Director, NICPR, Noida will be taken into consideration. In case of Tie at L – 1 rates, **further negotiations** may be made, at the discretion of the Director, NICPR, Noida, or **Shortest Delivery period** or any other criteria decided by the Director, NICPR, Noida may be used to decide the L – 1. Decision of the Director, NICPR, Noida in this regard will be final.
6. Bid must contain the Total value not only in figures but also in words. In case of any Clerical/Typing error, value written in “words” will only be considered for assessing the L-1 Bidder and subsequent process, though the Director NICPR reserves the right **not to accept** any Bid only on the L-1 (lowest) criteria.
7. The Total Payable cost is to be quoted for **FOR** at **SNMH, LEH** . Bids **not mentioning** total cost for free delivery to **SNMH, LEH** will be **summarily rejected**.
8. Indicate the names of the reputed Indian Organizations including ICMR Institutes/Centers where similar equipment was supplied and may attach the satisfactory performance report of the equipment from user Organization and the price finally paid.
9. Based on the above information ICMR-NICPR will have its option to obtain details of the goods,

their performance, after sales services etc. for evaluation of the tender, directly from the concerned Labs/Scientist etc.

10. Device/Equipment should be ISO approved or equivalent.
11. The bidder conditions printed on the bid or otherwise sent along with the bid shall not be binding on ICMR-NICPR, NOIDA.
12. In case of any dispute regarding Interpretation of the clauses in the terms and condition of bid Document/Purchase Order decision of Director, ICMR-NICPR, NOIDA shall be final and binding on all parties.
13. The bidder is required to submit a separate bid for each equipment as mentioned in Annexure-I.
14. Concessional GST @ 5% will be applicable as per GOI norms for research institutes. In this regard, NICPR Noida will provide GST concession certificate (DSIR) to the successful bidder.
15. Tender should be preferably, typewritten and every correction in the tender should invariably be signed by the tenderer, failing which, the tender is liable to be rejected.
16. The bidder should ensure that the equipment(s) offered fully meet(s) the Specifications laid down by the Institute. If at any stage (even after placement of order/shipment/installation, etc.) it is noted that the equipment offered does not meet the specifications, The Director, NICPR Noida reserves the right to take any decision including cancellation of the bid/offer/Purchase Order etc. with forfeiture of PBG. Any dispute in this regard concerning any Terms and Conditions of the Tender and/or the supply of equipment, will be subject to Noida Jurisdiction only.
17. Tender for only one model as per our specifications should be quoted. No optional model should be included in the tender.
18. 0.1% of PO value as penalty per week till the warranty period, if the instrument remains in non-working condition for more than 18 days
19. No bidder shall be allowed at any time on any ground whatsoever, to revise or modify the rates quoted by him. The bidder will not be allowed to withdraw the offer quoted.
20. Statutory levies and duties quoted in purchase order will be final and if any change, over and above the rates quoted in our purchase order will be borne by the bidder. The Institute shall not extend validity period for any reason and it will not bind the Institute for receiving the supplies beyond the date specified in the Purchase Order.
21. **Inspection and Acceptance of Equipment** – Acceptance process of the Equipment supplied will be considered complete only after successful Installation and Commissioning of the Equipment at **SNMH, LEH**, duly Certified as such by the User/In-Charge.
22. Price shall be quoted on the Vendor's Letter Head, duly stamped and signed.

23. **Payment** – 100% Payment in INR only for the Equipment will be made after Acceptance of the Equipment's as per Para 21 above, on submission of the Invoice, Acceptance Certificate (Para – 21) and PBG as per para 27 below. No separate payment clause is to be offered/mentioned by the vendor/Tenderer in its Quotation which may entail rejection of the said Tender in Toto. Payment will be released from Director, NICPR, NOIDA after completing all the formalities as mentioned above.
24. The firms should clearly indicate the pre-installation requirements for the equipment in their tender/quotation. If the firm ignores this clause, the items required at the time of installation for the equipment and associated delay will be borne by the vendor at its own cost.
25. **Period of validity of bids:** The bid should be valid/kept open for six months from the date of opening of the bid. Further, if extension of validity would be required in future, the bidder should extend the validity only and no other modifications shall be permitted.
26. **Warranty** –The warranty period will start from the date of successful Installation & Commissioning and Acceptance of the equipment.
27. **PBG** The successful vendor will need to submit a Performance Bank Guarantee (PBG) for 10% of the total P.O. value, valid for a period of one month, beyond warranty period. In case of any warranty enforcement, the period of Warranty will get suitably extended for the affected period of Warranty repairs/replacements if it takes 15 days or more after intimation about the same in writing. PBG will be released after successful completion of warrantee period.
28. All damaged or unapproved goods shall be removed by the vendor at its own cost and risk. Any incidental expenses incurred by the Institute thereon shall be recovered from the vendor. Defective parts in the equipment, if found, before installation and during the warranty period, shall be replaced within 30 days of date of intimation from the **SNMH, LEH**, at the cost and risk of supplier, including customs duty, etc.
29. **Liquidated Damages (LD)** – LD @ 0.5% of the Total Purchase order Value, per week will be levied on the vendor for delay in Supplies, Installation & Commissioning of Equipment at **SNMH, LEH**, from the Original delivery date given in the Purchase Order, subject to maximum LD of 5%, beyond which the Purchase Order may be cancelled in Toto without any financial liability on the Part of NICPR, Noida. The LD so levied will be recovered from the vendor. For calculation of the LD, any fraction of the week (i.e. less than Seven Days) will be considered as a week.
30. **All the pages of these Terms & Conditions are to be duly signed by the Vendor and returned/attached** with the Bid, failing which the bid will be summarily rejected.

Director  
ICMR-NICPR, Noida

## ANNEXURE-I

### **ICMR - NATIONAL INSTITUTE OF CANCER PREVENTION AND RESEARCH Plot No. I-7 SECTOR-39 NOIDA – 201301**

NICPR/Store/Covid-19/LEH/2020-21

Dated: 30<sup>th</sup> April, 2020

#### **List of Equipment**

1	Biosafety cabinet BSC 2A with stand:	1Qty
2	-80°C deep freezer with UPS:	1Qty
3	deep freezers -20C with UPS:	1Qty
4	4°C Refrigerator:	1Qty
5	UPS (2KVA with 2-hour backup):	3Qty
6	Automated RNA isolation platform (16 samples per run):	1Qty
7	Refrigerated micro centrifuge:	2Qty
8	Cold Centrifuge for 15ml VTM tubes:	1Qty
9	Ice machine:	1Qty
10	Autoclave machine:	2Qty
11	Vortex Mixer:	2Qty
12	Plate centrifuge:	1Qty
13	Microspin:	2Qty
14	Electronic Micropipette (0.5-1.2 ul and 2-125 ul):	1 set
15	Micropipettes (0.5-10 ul, 2-20 ul, 20-200 ul, 100-1000 ul):	4 sets
16	Dry Heat forcep Sterilizer:	1Qty
17	PCR workstations:	2Qty

## ANNEXURE-II

### ICMR - NATIONAL INSTITUTE OF CANCER PREVENTION AND RESEARCH Plot No. I-7 SECTOR-39 NOIDA – 201301

NICPR/Store/Covid-19/LEH/2020-21

Dated: 30<sup>th</sup> April, 2020

### Specifications of Equipment

#### **1. Biosafety cabinet with stand: Detailed specifications: QTY-1**

S. No.	Required Specifications of item	Features available Yes/No	Page No. of brochure attached
<b>Make and Model:</b>			
1.	Biosafety cabinet should be class II, type A2 with working space of atleast 4 Feet x 2 Feet		
2.	Should be $\geq 99.99\%$ inhibiting particles $\geq 0.3 \mu\text{m}$ with ULPA/HEPA filter as per ISO 9001:2015, WHO-GMP, CE & EN 12469-2000		
3.	Vibration free, noise level should be $\leq 65$ dB		
4.	Cabinet should have Fluorescent and Germicidal UV lamps with automatic control. UV lamps should be programmable for 30 min to 24 h		
5.	All interior walls should be made up of stainless steel and exterior should be powder coated.		
6.	Bio safety cabinet should have internally electrical socket outlet, and fitting for vacuum.		
7.	The system should be with dual DC motors for airflow maintenance and low energy consumption. Differential pressure gauge should be there.		
8.	The system should be provided with support stand.		
9.	The supplier should undertake periodical testing and validation, once every 12 months for 3 years		
10.	Installation, validation every year during warranty period, demonstration, and technical presentation should be conducted.		
11.	Power supply 220-240 V, 50 Hz		
12.	<b>Warranty:</b> 3 years comprehensive warranty and 2 years non comprehensive		

**Item No. 2: DEEP FREEZER -80°C DEGREES (Qty: 01)****Specifications for DEEP FREEZER -80°C DEGREES**

<b>S. No.</b>	<b>Required Specifications of Item</b>	<b>Feature available Yes/No</b>	<b>Page No. of brochure attached</b>
1.	<b>Make &amp; Model:</b>		
2.	Vertical-type single-door deep freezer with temperature - 80°C±10°C and with a capacity of 700-800 litres, with pad locking system		
3.	Interior should be stainless steel/coated steel		
4.	Energy usage should be low.		
5.	Display – LCD/LED showing temperature with USB port for direct data extraction		
6.	Memory back up, Operation should resume to set temperature after power off		
7.	Low noise level ≤65 db		
8.	The system should have a vacuum release port for fast reopening of freezers.		
9.	The system should have vacuum based insulation gasket to avoid temperature leakage		
10.	The system should have dual compressors to maintain the temperature.		
11.	Safety features: Temperature alarm; Remote alarm should be provided with the system to monitoring system.		
12.	Certifications: ISO, CE, or Indian equivalent		
13.	Compatible standard stabilizer (wheel-based) should be provided with the system		
14.	Power supply 220-240 V, 50 Hz		
15.	Should be provided with compatible UPS		
16.	<b>Warranty:</b> 3 years comprehensive warranty and 2 years non comprehensive		

**Item No. 3: DEEP FREEZER -20°C DEGREES (Qty: 01)**  
**Specifications for DEEP FREEZER -20°C DEGREES**

S. No.	Required Specifications of item	Features Available Yes/No.	Page No. of brochure attached
1.	Make & Model:		
2.	Vertical-type deep freezer with temperature control from -20°C to -30°C and with a capacity of >300 litres		
3.	Front mounted microprocessor controlled digital temperature display located at convenient height		
4.	The system should have memory back up. Operation should resume to the set temperature after power off.		
5.	There should be an option for auto zero calibration through control panel.		
6.	CFC/HCFC free refrigerant		
7.	The system should be with heavy duty hermetic type compressor		
8.	Pull out drawers and with an option of adjustable shelves.		
9.	Instrument should be with low energy consumption		
10.	The system should have door with lock facility with an option of putting external lock		
11.	The system should have defrost option.		
12.	Safety features: The system should have alarm for High temperature, low temperature, door open, and power failure.		
13.	Certifications: ISO, CE, or Indian equivalent		
14.	Compatible standard stabilizer		
15.	Power supply 220-240 V, 50 Hz		
16.	<b>Warranty:</b> 3 years comprehensive warranty and 2 year non-comprehensive		
17.	Should be provided with 2 KVA compatible UPS with 30 mins backup		

**4. 4°C Refrigerator:**

<b>S.No</b>	<b>Required specifications of item</b>	<b>Features Available Yes/No.</b>	<b>Page No. of brochure attached</b>
1	Capacity-200 litre or more		
2	CFC/HCFC free refrigerant		
3	Minimum should have 4 shelves (should be removable if necessary)		
4	Temperature range-0 to 10 degree		
5	The system should have defrost option		
6	Power supply 220-240 V, 50 Hz		
7	Warranty: 3 years comprehensive warranty and 2 year non-comprehensive		
8	Certifications: ISO, CE, or Indian equivalent		

**5. UPS (2KVA with 2 hour backup): Quantity 3**

<b>S.No</b>	<b>Required specifications of item</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
1	UPS 2 KVA		
2	Output Power: 2K Watts		
3	Wave Form: Sine Wave		
4	UPS Type: Line Interactive		
5	Warranty: 2 years comprehensive warranty		
6	Certifications: ISO or Indian equivalent		

### 6. Automated RNA isolation platform (16 samples per run): Quantity 1

S.No	Required specifications of item	Features available Yes/No	Page No. of brochure attached
1.	Automated Nucleic Acid extraction systems to efficiently automate DNA extractions, RNA extractions, and their related purification protocols.	Yes/No	
2.	It should be benchtop open system (compatible with multiple kits) along with UPS and with all accessories.		
3.	High throughput 1 to 16 samples per run should be efficiently extracted within one hour.		
4.	Should be able to process sample volume min 25µl to 200µl and elution volume 30 to 100µl.		
5.	Performance should be		
	<ul style="list-style-type: none"> <li>High nucleic acid yields</li> </ul>		
	<ul style="list-style-type: none"> <li>Isolate pure, high quality DNA or RNA for downstream applications such as PCR, qPCR, Reverse transcription – qPCR, sequencing.</li> </ul>		
6.	The system should have heating and cooling facility and should allow to add customize protocols.		
7.	System should function smoothly and should not generate aerosol, spillage.		
8.	The unit must be provided with all necessary accessories with five years comprehensive		
9.	Easy availability of consumables/spares for five years.		
10.	All the necessary documents (Instrumental Qualification/Operational Qualification/Performance Qualification) and certification should be provided at the time of installation.		
11.	Company with good reputation.		
12.	System should have internal in-built memory to store protocols.		
13.	Certifications: ISO, CE, or Indian equivalent		

**7. Refrigerated Microcentrifuge: Quantity 2**  
**Specifications for Refrigerated Microcentrifuge**

S.No	Required specifications of item	Features available Yes/No	Page No. of brochure attached
Make & Model:			
1	Refrigerated Bench top Centrifuge with an aerosol-tight 24 x 1.5/2.0 mL tubes rotor and fixed angle rotor (autoclavable) Provide adapters for 0.6 ml tubes and 0.2 ml tubes		
2	Quick Lock rotor lid		
3	Speed up to 13,000 rpm or more		
4	Separate rpm/rcf converter button		
5	Temperature range: 0 °C to +37 °C		
6	Maintains constant 4 °C at max. speed		
7	Noise level should be low <65 dB(A)		
8	Fast pre-cooling of the centrifuge		
9	Brushless motor to provide maintenance free drive		
10	Acceleration and break time to max rpm of 15 sec. each		
11	Certifications: ISO, CE, or Indian equivalent		
12	Power supply upto 230V/50Hz		
13.	<b>Warranty:</b> 03 years comprehensive warranty and 2 years non comprehensive s		
14.	IVD (In-vitro diagnostic) certified.		

**8. Cold Centrifuge for 15ml VTM tubes:  
Specifications for Refrigerated Centrifuge**

<b>S. No.</b>	<b>Required Specification of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
1.	Centrifuge can attain Max speed of at least 16,000 rpm with Brushless maintenance free drive		
2.	Temperature range should be of -11°C to 40°C		
3.	CFC free refrigeration and fast cooling option		
4.	Corrosion resistant stainless steel chamber		
5.	Machine should turn OFF automatically after certain hours of non-use to reduce energy consumption & extend compressor life		
6.	Must be able to maintain at 4°C at max. speed		
7.	Run time: up to 99 minutes or continuous mode		
8.	Must be able to store 50 routine procedures with 5 programmable buttons for frequently used programs in the first level		
9.	Able to switch display between rcf and rpm speed setting		
10.	Separate short spin key		
11.	Low noise levels $\leq 65$ db at max speed		
12.	Audible Alarm at the end of each run		
13.	LED/LCD display depicting all possible run conditions		
14.	Automatic motorised lid locking when lid almost closed		
15.	2-point lid screwing for maximum security even at high speed centrifugation		
16.	Must follow safety standards set by IEC 1010-2-020		
17.	Rotor should be made of anodised aluminium to ensure chemical resistance		
18.	Build-in condensation drain should be available to eliminate water accumulation.		
19.	Rotor must be autoclavable at 121°C for 20 min to eliminate any contaminating material		
20.	Aerosol tightness should be certified by external body		
21.	Centrifuge should be IVD (In-vitro diagnostic) certified.		
22.	Automatic rotor recognition & imbalance detection		
23.	fixed angle rotor accommodating ~30 x 1.5/2ml tubes for speed about 15000 rpm		
24.	Fixed angle rotor accommodating 15/50ml conical tubes		
25.	Power supply up to 230V/50Hz		
26.	Warranty: 3 years comprehensive warranty and 2 years non-comprehensive		

**9. Icematic machine;****Specifications for ICE FLAKING MACHINE**

<b>S. No</b>	<b>Required Specifications of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
1.	Minimum 50 kg/ day capacity		
2.	Production start time: 10-15 minutes.		
3.	Type of ice: Flakes.		
4.	Storage Capacity of bin: Min. 20 kgs.		
5.	Built-in insulated storage bin for maximum ice preservation.		
6.	Corrosion free exterior and interior.		
7.	Microprocessor based temperature control.		
8.	PUF insulation.		
9.	Quality compressor & Air Cooled condensation CFC/HCFC Free (R404A).		
10.	Automatic low water and full storage cut off system.		
11.	Castor wheels for easy movement.		
12.	Compatible Stabilizer		
13.	ISO 9001 & 14001 certified		
14.	Rugged stainless steel evaporator.		
15.	Operating Voltage: 220-240V/50Hz		
16.	Warranty: 03 comprehensive warranty with 2 years non comprehensive		

## 10. Autoclave machine: Quantity-2

S. No.	Required Specifications of item.	Features available Yes/No	Page No. of brochure attached
<b>Make &amp; Model:</b>			
1.	Steam Autoclave with Approx. 50 to 80 L capacity		
2.	The system should be able to maintain sterilization temperature up to 135°C and Pressure range of 0.1 - 0.4 MPa		
3.	The system should be microprocessor controlled. It should have set programme for different applications and option for customized programs		
4.	System should be with LED/LCD display. The system should have Pressure gauge, Steam release option		
5.	The system including lid should be made up of austenitic stainless steel sheet of SS-304 grade or better.		
6.	The system should be with double interlock option for better safety.		
7.	The system should have an inbuilt fan to cool down the chamber		
8.	Exhaust tank should be with 2 litre or more		
9.	Accessories: Two compatible stainless steel baskets, one drain hose, one exhaust tank		
10.	Safety features: Over temperature alarm, water level indicator, pressure safety valve, over temperature/over pressure limiter		
11.	Should be provided with Class 5 indicator and Biological Indicators		
12.	Certification: ISO, CE or any Indian equivalent		
13.	Power supply 220-240 V, 50 Hz		
14.	<b>Warranty:</b> 03 years comprehensive warranty and 02 non comprehensive		

**11. Vortex Mixer: Quantity-2****Specification**

<b>S. No.</b>	<b>Required Specifications of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
1	Speed Range 0-3000rpm		
2	Operating Mode Continuous / Touch		
3	Max Load 0.5 kg / 1.1lbs		
4	Rubber Platform		
5	Power supply 220-240 V, 50 Hz		
6	Should have certificates of compliance in conformity with international standards and regulations or equivalent Indian standards.		
7	Warranty: 03 years comprehensive warranty and 02 non comprehensive		

**12. Plate centrifuge: Quantity-1**

<b>S. No.</b>	<b>Required Specifications of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
1	Suitable for skirted, non-skirted and all PCR plate models.		
2	Must accommodate at least two PCR plates.		
3	Speed 2500 rpm or higher		
4	Operates at 4-30°C		
5	Certificates of compliance in conformity with international standards and regulations or equivalent Indian standards.		
6	Must come with spare rotor for plates.		
7	Warranty: 03 years comprehensive warranty and 02 non comprehensive		
8	Power supply 220-240 V, 50 Hz		

### 13. Microspin: Quantity 2

<b>S. No.</b>	<b>Required Specifications of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
1	Fixed speed of 6000 rpm/2000 g		
2	2 place rotor for 8 x 0.2 ml tube strips		
3	Hinged cover lid		
4	Power supply 220-240 V, 50 Hz		
5	Accessories: One extra rotor for 8 x 0.2 ml tube strips		
6	Spare rotor: 6 places rotor for 1.5 ml tube		
7	Warranty: 03 years comprehensive warranty and 02 non comprehensive		
8	Should have certificates of compliance in conformity with international standards and regulations or equivalent Indian standards.		

**14. Electronic Micropipette (0.5-12.5 ul and 2-125 ul): 1 + 1**

<b>S. No.</b>	<b>Required Specifications of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
<b>1.</b>	Volume range: minimum volume 0.5 to maximum 12.5 $\pm$ 2.5 ul: Increments [ $\mu$ l]: 0.1 or less Quantity required : 1 (one)		
<b>2.</b>	Volume range: 2-125 ul or 2-100 ul; Increments [ $\mu$ l]: 0.5 or less Quantity required : 1 (one)		
<b>3.</b>	Compatible with universal tips		
<b>4.</b>	Repeated pipette should be single aspiration/dispensing positive pipette for repetitive serial pipetting		
<b>5.</b>	Effortless pipetting with ergonomic pointer finger actuation for reduced operating forces		
<b>6.</b>	CE OR ISO 8655 certified or any equivalent Indian standard		
<b>7.</b>	Certified of conformity and calibration certificate		
<b>8.</b>	Manual of the instrument should be available on website or supplied with instrument		
<b>9.</b>	Separate speed for filling and dispensing		
<b>10.</b>	Warranty: 03 years comprehensive warranty and 02 non comprehensive		

**15. Micropipettes (0.5-10 ul, 2-20 ul, 20-200 ul, 100-1000 ul): There should be No metal parts to rust or corrode: 4 Sets**

<b>S. No.</b>	<b>Required Specifications of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
1.	Variable Volume Micropipettes feature built-in tip ejectors and autoclavable tip cones.		
2.	Should work on a click-stop digital system, are easy to calibrate and maintain, and easy to disassemble for autoclaving.		
3.	CE OR ISO 8655 certified or any equivalent Indian standard		
4.	Calibration certificate must be provided with each pipette.		
5.	Built-in, streamlined tip ejector facilitates easy tip ejection and access to narrow necked bottles and tubes.		
6.	Variable Volume Pipette: 0.5-10 ul,		
7.	Increments [ $\mu$ l]: 0.2 or less		
9.	Accuracy ( $\pm$ ) %: 1		
10.	Warranty: 03 years comprehensive warranty		

**For : 2 to 20 ul Micropipettes**

<b>S. No.</b>	<b>Required Specifications of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
1.	Variable Volume Micropipettes feature built-in tip ejectors and autoclavable tip cones.		
2.	Should work on a click-stop digital system, are easy to calibrate and maintain, and easy to disassemble for autoclaving.		
3.	CE or ISO 8655 certified or any equivalent Indian standard		
4.	Calibration certificate must be provided with each pipette.		
5.	Built-in, streamlined tip ejector facilitates easy tip ejection and access to narrow necked bottles and tubes.		
6.	Variable Volume Pipette: 2-20 ul,		
7.	Increments [ $\mu$ l]: 0.5 ul		
9.	Accuracy ( $\pm$ ) %: 3 to 1		
10.	Warranty: 03 years comprehensive warranty		

**For 20-200  $\mu$ l, Micropipettes**

<b>S. No.</b>	<b>Required Specifications of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
1.	Variable Volume Micropipettes feature built-in tip ejectors and autoclavable tip cones.		
2.	Should work on a click-stop digital system, are easy to calibrate and maintain, and easy to disassemble for autoclaving.		
3.	CE or ISO 8655 certified or any equivalent Indian standard		
4.	Calibration certificate must be provided with each pipette.		
5.	Built-in, streamlined tip ejector facilitates easy tip ejection and access to narrow necked bottles and tubes.		
6.	Increments [ $\mu$ l]: 1		
7.	Volume [ $\mu$ l]: 20 to 200		
8.	Accuracy ( $\pm$ ) %: 0.6 to 1		
9.	Warranty: 03 years comprehensive warranty		

**For 1 ml micropipette Micropipettes**

<b>S. No.</b>	<b>Required Specifications of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
1.	Variable Volume Micropipettes feature built-in tip ejectors and autoclavable tip cones.		
2.	Should work on a click-stop digital system, are easy to calibrate and maintain, and easy to disassemble for autoclaving.		
3.	CE or ISO 8655 certified or any equivalent Indian standard		
4.	Calibration certificate must be provided with each pipette.		
5.	Built-in, streamlined tip ejector facilitates easy tip ejection and access to narrow necked bottles and tubes.		
6.	Variable Volume Pipette: 100-1000 $\mu$ l		
7.	Increments [ $\mu$ l]: 1-5, Accuracy ( $\pm$ ) %: 1 to 0.5		
8.	Warranty: 03 years comprehensive warranty		

**16. Dry Heat forcep Sterilizer: Quantity 1**

<b>S. No.</b>	<b>Required Specifications of item.</b>	<b>Features available Yes/No</b>	<b>Page No. of brochure attached</b>
<b>1.</b>	Dry heat sterilizer for forceps		
<b>2.</b>	Temperature should reach upto 250°C or higher		
<b>3.</b>	Digitally temperature monitor or LED		
<b>4.</b>	Heat control system		
<b>5.</b>	ISO, CE or any other equivalent Indian standard		
<b>6.</b>	Warranty: 03 years comprehensive warranty and 02 non comprehensive		

### 17. PCR workstations: Quantity- 2

S.no	Required Specifications of item.	Features available Yes/No	Page No. of brochure attached
<b>1.</b>	Main specifications		
<b>a.</b>	Class 100 vertical laminar flow air		
<b>b.</b>	Interior working area (W × D): approximately 25”x 22”		
<b>c.</b>	Exterior: stainless steel or epoxy powder-coated metal.		
<b>d.</b>	Interior: stable formed stainless steel.		
<b>e.</b>	UV shelf with integrated pipette holder		
<b>f.</b>	Side panels transparent, able to absorb wavelengths below 400 nm.		
<b>g.</b>	Overhead UV light for DNA decontamination of 15W/254 nm		
<b>h.</b>	Timer and key lock for UV lamp; timer operates only when key lock is on.		
<b>i.</b>	Overhead white light; 15 W; at least 800 lux.		
<b>j.</b>	At least two plug outlets built into the chamber; AC 110 ± 10 V; 60 Hz; 5A fuse.		
<b>k.</b>	Should come with support stand with castor wheels		
<b>2.</b>	Electricity requirements		
<b>a.</b>	Supply voltage: 230 ± 10 V, AC, 50/60 Hz.		
<b>b.</b>	Voltage and plugs to be adapted to meet the country requirements. The line cord / Power		
<b>3.</b>	Cord supplied with the equipment shall be of acceptable durability, length, and current		
<b>4.</b>	Carrying capacity complying with Indian Standards.		
<b>a.</b>	Power consumption: Depends on the electrical equipment used inside the workstation; maximum 1200 W.		
<b>5.</b>	Documentation		
<b>a.</b>	Manufacturer’s certificate		
<b>b.</b>	The manufacturer must have a management system certified to ISO 9001 and a type-test		
<b>6.</b>	Certificate of relevant optical and mechanical tests.		
<b>a.</b>	Quality and safety standards met by the product must be listed.		
<b>7.</b>	05 years comprehensive warranty		