

Uttarakhand Livestock Development Board

Pashudhan Bhawan, Ist Floor, Mothrowala Road, P.O. Mothrowala, Dehradun-248001,

Telefax: 0135-2532619

 $Email: \underline{ceo_uldb@rediffmail.com}\ Website: \underline{www.uldb.org}$

GSTIN: 05AABFU8674M1ZK

E-PROCUREMENT NOTICE

INVITATION FOR BID IN TWO BID SYSTEM (TECHNICAL BID AND FINANCIAL BID) FOR PROCUREMENT OF LABORATORY EQUIPMENTS, CONSUMABLES AND MEDIA FOR BOVINE GENOMIC LAB; BOVINE EMBRYO TRANSFER AND IN VITRO FERTILIZATION WORK AT EBRTC, ANIMAL BREEDING FARM, KALSI

Bid Reference No.	:	2150/ULDB/PROC./Vol.XVI ETT/2019-20 Dated: 23 rd October 2019		
		Schedule No. One: ₹1180.00 Schedule No. Nine: ₹1180.00		
		Schedule No. Two: ₹590.00 Schedule No. Ten: ₹1180.00		
		Schedule No. Three: ₹2360.00 Schedule No. Eleven: ₹2360.00		
Price of bidding document (non		Schedule No. Four: ₹1180.00 Schedule No. Twelve: ₹1180.00		
refundable)	:	Schedule No. Five: ₹1180.00 Schedule No. Thirteen: ₹2360.00		
		Schedule No. Six: ₹1180.00 Schedule No. Fourteen: ₹2360.00		
		Schedule No. Seven: ₹1180.00 Schedule No. Fifteen: ₹2360.00		
		Schedule No. Eight: ₹590.00		
Date of Release of Invitation for Bids in https://uktenders.gov.in	:	24 th October 2019		
Availability of Bid Document and Mode of Submission	:	The bid document is available online on https://uktenders.gov.in. The bidder would be required to register in the web site which is free of cost. The bidders are required to have Digital Signature Certificate (DSC) for online submission of bids. The DSC will be obtained from any one of the authorized certifying authorities. Details of subsequent addendum/corrigendum/ cancellation etc. may be obtained from https://uktenders.gov.in The bidder are required to submit (a) Original Demand Draft towards the cost of bid document (b) Original Bid Security and (c) Original Declaration regarding correctness of information furnished with bid documents & validity of bid till the prescribed validity period duly signed in ₹100.00 Non judicial Stamp Paper to the office of Uttarakhand Livestock Development Board, Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun- 248001, Uttarakhand, India on or before stipulated date and time. Failing which bid shall be declared as non-responsive.		
Last date and time for Receipt of Bids in https://uktenders.gov.in	:	13 th November 2019 up to 11.00 AM		
Time and date of Opening of Technical Bids	:	13 th November 2019 at 11.30 AM		
Time and date of Opening of				
Financial Bids of Technically	:	Will be intimated through https://uktenders.gov.in		
qualified bidders				
Place of Opening of Bids	:	Uttarakhand Livestock Development Board, Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun- 248001, Uttarakhand, India		
Address of Communication	:	Same as above		

The cost of bid document to be submitted in the form of Demand Draft or Bankers Cheque of any nationalized/ Scheduled Bank. The Demand Draft or Bankers Cheque will be made in favor of "Uttarakhand Livestock Development Board" payable at "Dehradun, Uttarakhand".

Chief Executive Officer, Uttarakhand Livestock Development Board



Uttarakhand Livestock Development Board

Pashudhan Bhawan, Ist Floor,

P.O. Mothrowala, Dehradun-248001, Uttarakhand, India [TIN: 05001011250]

Telefax: 0135-2532619

Email: ceo_uldb@rediffmail.com Website: www.uldb.org

SECTION 1: INVITATION FOR BID

- 1. The Uttarakhand Livestock Development Board is State Implementing Agency for implementation of Rashtriya Gokul Mission (RGM) in Uttarakhand State. Uttarakhand Livestock Development Board is inviting bids in two bidding system (Technical Bid and Financial Bid) through e-procurement portal https://uktenders.gov.in from the eligible bidders for Procurement of Laboratory Equipments, Consumables and Media for Bovine Genomic Lab; Bovine Embryo Transfer and In Vitro Fertilization work at EBRTC, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand, India..
- 2. The Chief Executive Officer, Uttarakhand Livestock Development Board is inviting from all eligible bidders for the supply of following goods:

Schedule No./ Part of Schedule	Brief Description of Item	Qty.
One Part A	Microscope Heating Plate for SMZ 1000 Zoom Stereo Microscope	01 No.
One Part B	Make	
Two	Two Heat/Warming Plate with integrated temperature control to be supplied with Warming Blocks	
Three Part A	IVF Work Station Six Feet With Temperature Control Working Platform and Zoom Stereo Microscopes	01 No.
Three Part B	IVF Work Station 4 X 2 Feet with Temperature Control Working Platform and Zoom Stereo Microscopes	01 No.
Four Part A	Headed trolley for Ovum Pick UP	01 No.
Four Part B	Bio Safety Cabinet Class II Type B	01 No.
Five Part A	Air Purification System	01 No.
Five Part B	Water Purification System	01 No.
Six Part A	Embryo cup Filter Warmer	01 No.
Six Part B	Slide Warmer	01 No.
Six Part C	Oocyte Embryo Shipping Incubator	01 No.
Six Part D		
Seven Part A Accurate Temperature Measurement Probe		01 No.
Seven Part B	Volatile Organic Compounds Level Monitor	01 No.
Eight	Embryo/ Semen Storage Type Liquid Nitrogen Vessel	02 No.
Nine	Media and Consumables Item required for In-Vivo Embryo Production	Variable
Ten	Artificial Cow	01 No.
Eleven Part A	Inverted Microscope for micromanipulation with Digital Camera & Image analysis Software	01 No.
Eleven Part B	Upright Microscope With Camera and Dedicated Karyotyping Software for Livestock Karyotyping	01 No.
Eleven Part C	Micromanipulator for Oocytes and Embryos for ICSE, Cell Injection and Biopsy	01 No.
Twelve Part A	Gradient Thermal Cycler	01 No.
Twelve Part B	Gel Documentation System	01 No.
Thirteen Part A	Laminar Air flow 4 X 2 Feet Class II (Protection of Sample and User)	02 No.
Thirteen Part B	Class II Laminar Air Flow 6 x 2 Feet	02 No.
Thirteen Part C	Bench Top Refrigerated Centrifuge	01 No.
Thirteen Part D	Automatic Autoclave	01 No.
Fourteen Part A	Fourteen Part A CO2 Incubator with Oxygen Control	
Fourteen Part B	Bench Top CO2 Incubator	01 No.
Fourteen Part C	CO2 Incubator	01 No.
Fifteen Part A	Multi Mode Microplate Reader	01 No.
Fifteen Part B	Electro Fusion Machine	01 No.

3. TECHNICAL BID: should contain scanned copy of following documents:

- i. Proof of Cost of Bid Document (Original Cost of Bid Document for the amount as specified in bid document must reach to Uttarakhand Livestock Development Board, Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun- 248001, Uttarakhand, India on or before the date & time as stipulated in bid document). Bidders are required to submit Price of bidding document in accordance to the Schedules for which the bid is quoted, failing which bid submitted will be treated as Non-responsive.
- ii. Proof of Bid Security (Original Cost of Bid Security for the amount as specified in bid document must reach to Uttarakhand Livestock Development Board, Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun- 248001, Uttarakhand, India on or before the date & time as stipulated in bid document).

- iii. Proof of Declaration (Original Declaration regarding correctness of information furnished with bid documents & validity of bid till the prescribed validity period duly signed in ₹100.00 Non judicial Stamp Paper must reach to Uttarakhand Livestock Development Board, Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun- 248001, Uttarakhand, India on or before the date & time as stipulated in bid document).
- iv. Bidder's Profile along with proof of certification having details of registration; PAN No; GSTIN No. etc.
- v. Latest GST Return Filing Statement
- vi. Summary of Latest Audited Balance Sheet.
- vii. Documentary proof of BIS &/or ISO certification or any other relevant document.
- viii. Technical Details of the items conforming to the bid along with Catalogue, Brochures etc...
- ix. Experience of the bidder conforming to the qualification criteria as specified in Section VI A of bid document & any other relevant documents establishing bidders eligibility & qualification

4. FINANCIAL BID:

Financial Bid must be submitted online in https://uktenders.gov.in.

Financial Bid should contain: Bill of Quantity (BOQ) QUOTE IN: Bidders Name and Column No. 13, 16 and 17.

(BIDDERS ARE REQUIRED TO QUOTE UNIT RATE AT COLUMN NO. 13, 16 and 17)

BOQ WILL BE CONSIDERED ONLY IF SUBMITTED ONLINE AND IN THE FORMAT UPLOADED IN WEBSITE. BOQ SUBMITTED IN OTHER FORMATS/ HARD COPY WILL NOT BE CONSIDERED.

- 5. Technical Bids will be opened in the presence of Bidders representatives who choose to attend on the specified date and time.
- 6. The Financial Bids of only Technically Qualified Bidders will be opened in the stipulated date & time. The list of Technically Qualified Bidders and date of opening of financial bids of technically qualified bidders will be intimated on https://uktenders.gov.in.
- 7. In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.

Chief Executive Officer
Uttarakhand Livestock Development Board

SECTION II: INSTRUCTIONS TO BIDDERS (ITB)

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INSTRUCTIONS TO BIDDERS (ITB) A. INTRODUCTION

1. Source of Funds:

1.1 The Uttarakhand Livestock Development Board (ULDB) is State Implementing Agency for implementation of Rashtriya Gokul Mission (RGM) in Uttarakhand State. The Uttarakhand Livestock Development Board is inviting bids in two parts from the eligible bidders for the procurement of Laboratory Equipments, Consumables and Media for Bovine Genomic Lab; Bovine Embryo Transfer and In Vitro Fertilization work at EBRTC, Animal Breeding Farm, Kalsi, Dehardun, Uttarakhand, India. The total estimated cost of the bid is approximately ₹405.00 Lakh for which this Invitation for Bids is issued.

2. Eligible Bidders:

- 2.1 The Invitation for Bids is open for all eligible bidders.
- 2.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids.
- 2.3 Government-owned enterprises in the Purchaser's country may participate only if they are legally and financially autonomous, if they operate under commercial law, and if they are not a dependent agency of the Purchaser.
- 2.4 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices in accordance with ITB Clause 31.

3. Eligible Goods and Services:

- 3.1 All goods and related services be supplied under the Contract shall have their origin in eligible source countries.
- 3.2 For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced or the place from which the related services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of goods and services may be distinct from the nationality of the Bidder.

4. Cost of Bidding:

4.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and Chief Executive Officer, Uttarakhand Livestock Development Board, hereinafter referred to as "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process. All the Demand Draft/ FDR/ Bank Guarantee/ Pay Order/ Bankers Cheque shall be in favor of/ pledged to "Uttarakhand Livestock Development Board" payable at "Dehradun, Uttarakhand, India"

B. THE BIDDING DOCUMENTS

5. Content of Bidding Documents:

- 5.1 The goods required, bidding procedures and contract terms as prescribed in the biding documents. In addition to the Invitation of Bids, the bidding documents include:
 - (a) Instructions to Bidders (ITB);
 - (b) General Conditions of Contract (GCC);
 - (c) Special Conditions of Contract (SCC);
 - (d) Schedule of Requirements;
 - (e) Technical Specifications;
 - (f) Qualification Criteria
 - (g) Declaration;
 - (h) Bid Security Form;
 - (i) Contract Form:
 - (j) Performance Security Form;
 - (k) Performance Statement Form:
 - (1) Manufacturer's Authorization Form;
 - (m) Equipment and Quality Control;
 - (n) Checklist for Submission of Technical Bid
- 5.2 The Bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in rejection of its bid at the time of evaluation of technical bid.

6. Clarification of Bidding Documents:

A prospective Bidder requiring any clarification of the bidding document may contact in person or may make telephonic contact to the office of Chief Executive Officer, Uttarakhand Livestock Development Board, Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun at any working day before the dead line of the submission of bid document.

7. Amendment of Bidding Documents:

- 7.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.
- 7.2 Details of subsequent addendum/corrigendum/ cancellation etc. may be obtained from https://uktenders.gov.in.
- 7.3 In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids.

C. PREPARATION OF BIDS

8. Language of Bid:

8.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser shall be written in English or Hindi language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in English or Hindi in which case, for purposes of interpretation of the Bid, the translation shall govern.

9. Documents Comprising / Constituting the Bid:

- 9.1 The bid prepared by the Bidder shall comprise the following components:
 - A] TECHNICAL BID: shall comprise scanned copy of all documents, cost of bid document & bid security as specified in bid document.
 - B] FINANCIAL BID: shall comprise the following components:
 - (a) Bill of Quantity (BOQ) completed in accordance with ITB Clauses 11 and 12

10. Declaration:

Declaration regarding correctness of information furnished with bid documents & validity of bid till the prescribed validity period duly signed in ₹100.00 Non judicial Stamp Paper.

11. Bid Prices:

- 11.1 The Bidder shall indicate on the Price Schedule the unit prices of the goods it proposes to supply under the Contract.
- 11.2 Prices indicated on the Bill of Quantity (BOQ) shall be entered on FOR basis.
- 11.3 Fixed Prices

Prices quoted by the Bidder shall be fixed during the Bidder's performance of Contract and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.

12. Bid Currencies:

- 12.1 Prices shall be quoted in Indian Rupees only.
- 12.2 Rates quoted shall be in figures only.

13. Bid security:

Pursuant to ITB Clause 9, Bidder shall furnish, as part of its technical bid, a bid security in the amount as mentioned below:

Schedule No./ Part of Schedule	Brief Description of Item	*Bid Security (INR)	
One Part A	Microscope Heating Plate for SMZ 1000 Zoom Stereo microscope		
One Part B	Microscope Heating Plate for Inverted research microscope TiE model Nikon Make	20000.00	
Two	Heat/Warming Plate with integrated temperature control to be supplied with Warming Blocks		
Three Part A	Microscopes		
Three Part B	IVF Work Station 4 X 2 Feet with Temperature Control Working Platform and Zoom Stereo Microscopes	90000.00	
Four Part A	Headed trolley for Ovum Pick UP	30000.00	
Four Part B	Bio Safety Cabinet Class II Type B	30000.00	
Five Part A	Air Purification System	50000.00	
Five Part B	Water Purification System	30000.00	
Six Part A	Embryo cup Filter Warmer		
Six Part B	Slide Warmer	45000.00	
Six Part C	Oocyte Embryo Shipping Incubator	45000.00	
Six Part D	Embryo 0.25 ml. Straw Shipping Incubator		
Seven Part A	Accurate Temperature Measurement Probe	20000 00	
Seven Part B	Volatile Organic Compounds Level Monitor	30000.00	
Eight	Embryo/ Semen Storage Type Liquid Nitrogen Vessel	15000.00	
Nine	Media and Consumables Item required for In-Vivo Embryo Production	20000.00	
Ten	Artificial Cow for ET and AI Training	65000.00	
Eleven Part A	Inverted Microscope for micromanipulation with Digital Camera & Image analysis Software		
Eleven Part B	Upright Microscope With Camera and Dedicated Karyotyping Software for Livestock Karyotyping	140000.00	
Eleven Part C	Micromanipulator for Oocytes and Embryos for ICSE, Cell Injection and Biopsy		
Twelve Part A	Gradient Thermal Cycler	50000.00	
Twelve Part B	Gel Documentation System	50000.00	
Thirteen Part A	Laminar Air flow 4 X 2 Feet Class II (Protection of Sample and User)		
Thirteen Part B Class II Laminar Air Flow 6 x 2 Feet		110000.00	
	Thirteen Part C Bench Top Refrigerated Centrifuge		
Thirteen Part D			
Fourteen Part A CO2 Incubator With Oxygen Control			
Fourteen Part B Bench Top CO2 Incubator		90000.00	
Fourteen Part C	CO2 Incubator		

Schedule No./ Part of Schedule	Brief Description of Item	*Bid Security (INR)
Fifteen Part A	Multi Mode Microplate Reader	90000.00
Fifteen Part B	Electro Fusion Machine	90000.00

^{*} Bidders are required to furnish the Bid Security in accordance to the above details failing which bid submitted will be treated as Non-responsive.

- 13.2 The bid security is required to protect the Purchaser against the risk of Bidder's conduct, which would warrant the security's forfeiture, pursuant to ITB Clause 13.7.
- 13.3 The bid security shall be denominated in Indian Rupees and shall:
 - (a) at the bidder's option, be in the form of either a demand draft or a bank guarantee or FDR or Bankers Cheque from a nationalized/Scheduled bank located in India;
 - (b) be substantially in accordance with one of the form of bid security included in Section VIII or other form approved by the Purchaser prior to bid submission;
 - (c) be payable promptly upon written demand by the purchaser in case any of the conditions listed in ITB Clause 13.8 are invoked:
 - (d) be submitted in its original form; copies will not be accepted; and
 - (e) remain valid for a period of 90 days beyond the original validity period of bids, or beyond any period of extension subsequently requested under ITB Clause 14;
- 13.4 Any bid not secured in accordance with ITB Clauses 13.3 will be rejected by the Purchaser.
- Unsuccessful bidder's bid securities will be discharged or returned as promptly as possible but not later than 60 days after the expiration of the period of bid validity prescribed by the Purchaser, pursuant to ITB Clause 14.
- 13.6 The successful Bidder's bid security will be discharged upon the Bidder signing the contract, pursuant to ITB Clause 29, and furnishing the performance security, pursuant to ITB Clause 30.
- 13.7 Where the Bidder has quoted for more than one Schedule, if the bid security furnished is inadequate for all the Schedules for which bid is submitted, the Purchaser shall take the price bid into account only to the extent the bid is secured. For this purpose, the extent to which the bid is secured shall be determined by evaluating the requirement of bid security to be furnished for the Schedules included in the bid (offer) in the serial order of the Schedule of Requirements of the Bidding document.
- 13.8 The bid security may be forfeited:
 - (a) if a Bidder (i) withdraws its bids during the period of bid validity specified in the bid documents; or
 - (b) in case of a successful Bidder, if the Bidder fails:
 - (i) to sign the Contract in accordance with ITB Clause 29: or
 - (ii) to furnish performance security in accordance with ITB Clause 30.

14. Period of Validity of Bids:

- 14.1 Bids shall remain valid for 90 days after the deadline for submission of bids prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser considering it as non-responsive.
- In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (or by cable). The bid security shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid, except as provided in ITB Clause 14.3 hereinafter.
- 14.3 In case of fixed prices contract, in the event that the Purchaser requests and the Bidder agrees to an extension of the validity period, the contract price, if the Bidder is selected for award shall be the bid price corrected as follows:

 The price shall be increased by the factor [Country's Projected Inflation for the period in question] for each week that has elapsed from the expiration of the initial bid validity to the date of notification of award to the successful bidder.
- 14.4 Bid evaluation will be based on the bid prices including all taxes, levies & all other incidentals without taking into consideration the above corrections.

15. Format for submitting Bid:

- 15.1 The Bidder shall submit scanned copy of all documents establishing Bidders qualifications for considering the bidder eligibility for performing the contract. Please note that prices should not be indicated in the technical bid. Bids submitted without following the two bid system procedure will be summarily rejected.
- 15.2 Financial bids should be submitted in the Bill of Quantity (BOQ). The lowest offered price of Technically Qualified bid will be selected for award of contract.

D. SUBMISSION OF BIDS

16. Submission of Bids:

The Cost of bid document, Bid Security and Declaration shall be sent by Registered Post with acknowledgement due/courier so as to reach the Uttarakhand Livestock Development Board, Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun- 248001, Uttarakhand, India not later than the specified date and time. The envelope must be superscribed with "Bid for the Supply of Item mentioned in Schedule No. Part of IFB No. If the bidders or their agents in India do not propose to send the Cost of bid document, Bid Security and Declaration by Registered Post/ courier and if they wish to hand over the same personally they may do so by personally handing over the them to the Uttarakhand Livestock Development Board, Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun- 248001, Uttarakhand, India against an acknowledgement not later than the stipulated time and date.

16.2 All envelopes shall be addressed to the Purchaser at the following address:

Chief Executive Officer, Uttarakhand Livestock Development Board,

Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun-248001, Uttarakhand, India

- 16.3 All envelopes shall also indicate the name and address of the Bidder.
- 16.4 If the outer envelope is not sealed and marked as required as per ITB Clause 16.1; 16.2 & 16.3, the Purchaser will assume no responsibility for the misplacement.
- 16.5 Bids without Cost of Bid Document, Bid Security and Declaration will be rejected.
- 16.6 Technical Bid and Financial Bid (BOQ) must be submitted online on https://uktenders.gov.in and Technical Bid shall comprise scanned copies of all the documents as stipulated in invitation for bid document. Those bidders who could not submit all required technical documents Online and have submitted Technical Document in Physical Form on or before the date & time as stipulated in bid document will also be considered for Technical Evaluation.

17. Deadline for Submission of Bids:

- 17.1 The Cost of bid document, Bid Security and Declaration must be received by the Purchaser at the address specified under ITB Clause 16.2 no later than the time and date specified in the bid document. In the event of the specified date for the submission being declared a holiday for the Purchaser, the same will be received up to the appointed time on the next working day.
- 17.2 The Purchaser may, at its discretion, extend this deadline for the submission of bids by amending the bid documents in accordance with ITB Clause 7, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

18. Late Bids

Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser, pursuant to ITB Clause 17, will be rejected and returned unopened to the Bidder.

19. Modification and Withdrawal of Bids:

- 19.1 NA.
- 19.2 NA
- 19.3 Bid shall not be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Declaration. Withdrawal of a bid during, this interval may result in the Bidder's forfeiture of its bid security, pursuant to the ITB Clause 13.

E. BID OPENING AND EVALUATION OF BIDS

20. Opening of Bids by the Purchaser:

20.1 The Purchaser will open Technical Bids of only those bidders whose Cost of Bid Document, Bid security and Declaration will reach to Uttarakhand Livestock Development Board by or before the date and time as specified in bid document, in the presence of Bidder's representatives who choose to attend, at specified date & time on the following location:

Office of the Chief Executive Officer, Uttarakhand Livestock Development Board, Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun-248001, Uttarakhand, India

The Bidders representative who are present shall sign a register evidencing their attendance. In event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the appointed time and location on the next working day.

Financial bids of Technically Qualified Bidders will only be opened. The decision of the committee on technical suitability shall be final and shall not be open for discussion.

- 20.2 The bidders names, bid modifications or withdrawals and the presence or absence of requisite bid security and such other details as the Purchaser, at its discretion, may consider appropriate, will be announced at the opening.
- 20.3 The Purchaser will prepare minutes of the bid opening.

21. Clarification of Bids

21.1 During evaluation of bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substance of the bid shall be sought, offered and permitted

22. Evaluation and Comparison of Bids:

22.1 **Technical Bid Evaluation:** Technical Bid shall be evaluated by the Committee on the basis of documents submitted in Technical Bids and other requirements establishing bidders eligibility & qualification. The list of Technically Qualified Bidders and date of opening of financial bids of technically qualified bidders will be intimated on https://uktenders.gov.in. The decision of the committee on technical suitability of bids shall be final and shall not be open for discussion.

22.2 Evaluation of Financial bids: Financial Bid shall be evaluated on Each Part of Schedule basis.

- All the taxes and other levies indicated in the Financial Bid will be taken for the Financial Bid evaluation.
- Bid should be evaluated separately on Part of Schedule basis.
- In case of Discrepancy in quoted GST the bid should be evaluated on Unit Rate basis including all incidentals but excluding GST.
- The Bidder quoting the lowest price (L1) including all incidentals, taxes etc. will be selected for the award of contract
- However, ULDB does not bind itself in any way to select the bidder(s) offering the lowest price.
- **23. Domestic Preference:** The domestic preference should be given to the Bidders in accordance to the Uttarakhand Procurement Rules only upon submission of relevant documentary proofs.

24. Contacting the Purchaser:

24.1 Subject to ITB Clause 21, no Bidder shall contact the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the purchaser, it should do so in writing.

24.2 Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the bid.

F. AWARD OF CONTRACT

25. Award Criteria:

25.1 Subject to ITB Clause 27, the Purchaser will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

26. Purchaser's right to vary Quantities at Time of Award:

26.1 The Purchaser reserves the right to increase or decrease by up to 25 percentage of the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.

27. Purchaser's Right to accept any bid and to reject any or all bids:

27.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or bidders.

28. Notification of Award:

- 28.1 Prior to the expiration of the period of bid validity, the Purchaser will notify the successful bidder.
- 28.2 The notification of award will constitute the formation of the Contract.
- 28.3 Upon the successful Bidder's furnishing of performance security pursuant to ITB Clause 30, the Purchaser will discharge its bid security, pursuant to ITB Clause 13.
- 28.4 If, after notification of award, a Bidder wishes to ascertain the grounds on which its bid was not selected, it should address it's request to the Purchaser. The Purchaser will promptly respond in writing to the unsuccessful Bidder.

29. Signing of Contract:

- 29.1 At the same time as Purchaser notifies the successful bidder that its bid has been accepted, the Purchaser will send the bidder the Contract Form, incorporating the agreement to be signed between parties.
- 29.2 Within thirty (30) days of receipt of the Contract Form, the successful bidder shall sign and date the Contract on ₹100.00 Non Judicial Stamp Paper and return it to the Purchaser.

30 Performance Security:

- 30.1 Within thirty (30) days of the receipt of notification of award from the Purchaser, the successful Bidder shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the bidding documents or in another form acceptable to the Purchaser.
- 30.2 Failure of the successful bidder to comply with requirement of ITB Clause 29.2 or ITB Clause 30.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Purchaser may make the award to the next lowest evaluated bidder or call for new bids.

31 Corrupt or Fraudulent Practices

- 31.1 The board requires that Bidders/ Suppliers/ Contractors, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Board:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) "fraudulent practices" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition
 - (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
 - (c) will declare a firm ineligible, either indefinitely or for a stated period of time,

$\frac{\textbf{SECTION III: GENERAL CONDITIONS OF CONTRACT (GCC)}}{\textbf{TABLE OF CLAUSES}}$

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GENERAL CONDITIONS OF CONTRACT (GCC)

1. Definitions:

- 1.1 In this Contract, the following terms shall be interpreted as indicated:
 - (a) "The Contract" means the agreement entered into between the Purchaser and the Supplier, as recorded in the Contract Form signed by the parties, including all the attachments and appendices thereto and all documents incorporated by reference therein;
 - (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
 - © "The Goods" means all the equipment, machinery, and/or other materials which the Supplier is required to supply to the Purchaser under the Contract;
 - (d) "The Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Supplier in case of equipment, machinery covered under the Contract;
 - (e) "GCC" means the General Conditions of Contract contained in this section.
 - (f) "SCC" means the Special Conditions of Contract.
 - (g) "The Purchaser" means the organization purchasing the Goods, as named in SCC.
 - (h) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract
 - (i) "Board" means Uttarakhand Livestock Development Board, Dehradun.
 - (j) "The Project Site", where applicable, means the place or places mentioned in bid document.
 - (k) "Day" means calendar days.
 - (l) "NA" means Not applicable

2. Application:

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

3. Country of Origin:

- 3.1 All Goods and Services supplied under the Contract shall have their origin in the member countries and territories eligible under the rules of GoI.
- 3.2 For purposes of this Clause "origin" means the place where the Goods are mined, grown and produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembling of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of Goods and Services may be distinct from the nationality of the Supplier.

4. Standards:

4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specification, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods country of origin and such standards shall be the latest issued by the concerned institution.

5. Use of Contract Documents and Information; Inspection and Audit by the Board:

- 5.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in GCC Clause 5.1 except for purposes of performing the Contract.
- 5.3 Any document, other than the Contract itself, enumerated in GCC Clause 5.1 shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.
- 5.4 The supplier shall permit the Board to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the Board, if so required by the Board.

6. Patent Rights:

6.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in the Purchaser's country.

7. Performance Security:

- 7.1 Within thirty (30) days of receipt of the notification of Contract award, the successful Bidder shall furnish to the Purchaser the performance security in the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 7.3 The Performance Security shall be denominated in Indian Rupees and shall be in one of the following forms:
 - (a) A bank guarantee or FDR issued by a nationalized/scheduled bank located in India or a bank located abroad acceptable to the Purchaser, in the form provided in the bidding documents or another form acceptable to the Purchaser; or
 - (b) A demand draft.
- 7.4 The performance security will be discharged by the Purchaser and returned to the Supplier on written request of the supplier after completion of the Supplier's performance obligations, under the Contract, including any warranty obligations.
- 8. Inspection and Tests: NA

9. Packing:

- 9.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, tough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by the Purchaser.

10. Delivery and Documents:

Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the schedule of Requirements. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

11. Insurance

11.1 The Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in SCC.

12. Transportation:

12.1 Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within India defined as Project site, transport to such place of destination in India including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier and the related cost shall be included in the Contract Price.

13. Incidental Services:

NA

14. Spare Parts

NA

15. Warranty:

- 15.1 The Supplier warrants that the Goods supplied under this Contract are as per the prevailing Guidelines of Government of India.
- 15.2 This warranty shall remain valid for 24 months after the Goods or any portion thereof as the case may be, have been delivered & accepted at the final destination indicated in the Contract.
- 15.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.
- Upon receipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, replace the Goods, without cost to the Purchaser other than, where applicable & agreed by the Purchaser. The cost of inland delivery of the replaced Goods from ex-works or ex-factory or ex-showroom to the final destination shall be borne by the Supplier.

16. Payment:

- 16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be specified in the SCC.
- The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the contract.
- 16.3 Payments shall be made with in sixty (60) days after submission of the invoice or claim by the Supplier & verification by the user regarding satisfactory supply.
- 16.4 Payment will be made in Indian Rupees.

17. Prices:

17.1 Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in SCC or in the Purchaser's request for bid validity extension, as the case may be.

18. Change Orders:

- 18.1 The Purchaser may at any time, by written notice given to the Supplier, make changes within the general scope of the Contract in any one or more of the following;
 - drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
 - (b) the method of shipping or packing;
 - © the place of delivery; and/or
 - (d) the Services to be provided by the Supplier;
- 18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of Supplier's receipt of the Purchaser's change order.

19. Contract Amendments:

19.1 Subject to GCC Clause 18, no variations in or modifications of the terms of the Contract shall be made except by written amendment signed by the parties.

20. Assignment:

20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

21. Subcontracts:

- 21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.
- 21.2 Subcontracts must comply with the provisions of GCC Clause 3.

22. Delays in the Supplier's Performance:

- 22.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified in the Schedule of Requirements
- 22.2 If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impending timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by written notices & contract amendment.
- 22.3 Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of liquidated damages.

23. Liquidated Damages:

Subject to GCC Clause 25, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the Percentage specified in SCC. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 24.

24. Termination for Default:

- 24.1 The Purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, terminate the Contract in whole or part.
 - (a) if the supplier fails to deliver any or all of the Goods within the period (s) specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 22; or
 - (b) if the supplier fails to perform any other obligation(s) under the Contract.
 - © if the supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this Clause:

"corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.

"fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Board, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Board of the benefits of free and open competition.

24.2 In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

25. Force Majeure:

- 25.1 Notwithstanding the provisions of GCC Clauses 22, 23, 24, the Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 25.2 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolution, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26. Termination for Insolvency:

26.1 The purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.

27. Termination for Convenience:

27.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

- 27.2 The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
 - (a) to have any portion completed and delivered at the Contract terms and prices; and/or
 - (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

28. Settlement/ Resolution of Disputes:

- 28.1 The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the contract.
- 28.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as per Indian Laws, as to the matter of dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.
 - 28.2.1 Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with the Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.
 - 28.2.2 Arbitration proceedings shall be conducted in accordance with the Indian Laws
 - 28.2.3 Only local court (Dehradun) shall have jurisdiction of dispute
- 28.3 Notwithstanding any reference to arbitration herein;
 - (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
 - (b) the Purchaser shall pay the Supplier any money due the Supplier.

29. Limitation of Liability:

- 29.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement
 - (a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser; and
 - (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

30. Governing Language:

30.1 The contract shall be written in English language. Subject to GCC Clause 30, English / Hindi language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

31. Applicable Law:

31.1 The Contract shall be interpreted in accordance with the laws of the Union of India.

32. Notices:

- Any notice given by the one party to the other pursuant to this Contract shall be sent to other party in writing or by cable, telex or facsimile and confirmed in writing to the other Party's address specified in SCC.
- 32.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

33. Taxes and Duties:

33.1 The Suppliers shall be entirely responsible for all taxes, duties, octroi & other requirements etc., incurred until delivery of the contracted Goods to the Purchaser.

SECTION IV: SPECIAL CONDITIONS OF CONTRACT (SCC)

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SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the General Conditions is indicated in parentheses.

1. **Definitions (GCC Clause 1):**

- (a) The Purchaser is Chief Executive Officer, ULDB, Dehradun
- (b) The Supplier is
- 2. Country of Origin (GCC Clause 3):

All countries and territories eligible & approved by Government of India.

3. Performance Security (GCC Clause 7):

3.1 Within 30 days after the Supplier's receipt for Notification of Award, the Supplier shall furnish Performance Security to the Purchaser for an amount as detailed below, valid up to 60 days after the date of completion of performance obligations including warranty obligations:

Schedule No./ Part of Schedule	Brief Description of Item	Performance Security
One Part A	Microscope Heating Plate for SMZ 1000 Zoom Stereo microscope	8% of Net Quoted Price 8% of Net Quoted Price
One Part B	Make	
Two	Heat/Warming Plate with integrated temperature control to be supplied with Warming Blocks	8% of Net Quoted Price
Three Part A	IVF Work Station Six Feet With Temperature Control Working Platform and Zoom Stereo Microscopes	5% of Net Quoted Price
Three Part B	IVF Work Station 4 X 2 Feet with Temperature Control Working Platform and Zoom Stereo Microscopes	6% of Net Quoted Price
Four Part A	Headed trolley for Ovum Pick UP	6% of Net Quoted Price
Four Part B	Bio Safety Cabinet Class II Type B	8% of Net Quoted Price
Five Part A	Air Purification System	6% of Net Quoted Price
Five Part B	Water Purification System	6% of Net Quoted Price
Six Part A	Embryo cup Filter Warmer	8% of Net Quoted Price
Six Part B	Slide Warmer	8% of Net Quoted Price
Six Part C	Oocyte Embryo Shipping Incubator	6% of Net Quoted Price
Six Part D	Embryo 0.25 ml. Straw Shipping Incubator	6% of Net Quoted Price
Seven Part A	Accurate Temperature Measurement Probe	8% of Net Quoted Price
Seven Part B	Volatile Organic Compounds Level Monitor	6% of Net Quoted Price
Eight	Embryo/ Semen Storage Type Liquid Nitrogen Vessel	6% of Net Quoted Price
Nine	Media and Consumables Item required for In-Vivo Embryo Production	6% of Net Quoted Price
Ten	Artificial Cow for ET and AI Training	5% of Net Quoted Price
Eleven Part A	Inverted Microscope for micromanipulation with Digital Camera & Image analysis Software	5% of Net Quoted Price
Eleven Part B	Upright Microscope With Camera and Dedicated Karyotyping Software for Livestock Karyotyping	6% of Net Quoted Price
Eleven Part C	Micromanipulator for Oocytes and Embryos for ICSE, Cell Injection and Biopsy	5% of Net Quoted Price
Twelve Part A	Gradient Thermal Cycler	6% of Net Quoted Price
Twelve Part B	Gel Documentation System	6% of Net Quoted Price
Thirteen Part A	Laminar Air flow 4 X 2 Feet Class II (Protection of Sample and User)	6% of Net Quoted Price
Thirteen Part B	Class II Laminar Air Flow 6 x 2 Feet	5% of Net Quoted Price
Thirteen Part C	Bench Top Refrigerated Centrifuge	8% of Net Quoted Price
Thirteen Part D	Automatic Autoclave	8% of Net Quoted Price
Fourteen Part A	CO2 Incubator With Oxygen Control	6% of Net Quoted Price
Fourteen Part B	Bench Top CO2 Incubator	6% of Net Quoted Price
Fourteen Part C	CO2 Incubator	6% of Net Quoted Price
Fifteen Part A	Multi Mode Microplate Reader	6% of Net Quoted Price
Fifteen Part B	Electro Fusion Machine	5% of Net Quoted Price

In the event of any corrected of defects or replacement of defective material during the warranty period, the warranty for the corrected/replaced material shall be extended to a further period of 24 month

- 3.2 Substitute Clause 7.3(b) of the GCC by the following:
 - A crossed demand draft or pay order drawn in favour of ULDB, payable at Dehradun.
- 3.3 Substitute Clause 7.4 of the GCC by the following:

The Performance Security will be discharged by the Purchaser and returned to the Supplier on written notice of the Supplier 60 days following the date of completion of the Supplier's performance obligations, including the warranty obligation, under the contract.

3.4 Add as Clause 7.5 to the GCC the following:

In the event of any contract amendment, the Supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the Contract, as amended for 60 days after the completion of performance obligations including warranty obligations.

4. Inspection and Tests (GCC Clause 8):

NA

5. Packing (GCC Clause 9):

Add as Clause 9.3 of the GCC the following:

<u>Packing Instructions</u>: The Supplier will be required to make separate packages for each Consignee. Each package will be marked on three sides with proper paint/indelible ink, the following:

i) Project ii) Contract No. iii) Country of Origin of Goods iv) Supplier's Name, and v) Packing list reference number.

6. Delivery and Documents (GCC Clause 10):

(a) For Goods supplied from abroad:

Upon delivery of the Goods, the supplier shall notify the purchaser and the insurance company by cable/telex/fax the full details of the shipment including contract number, railway/ airway receipt number and date, description of goods, quantity, name of the consignee etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:

- (i) 4 Copies of the Supplier invoice showing contract number, goods' description, quantity, unit price, total amount;
- (ii) Railway/ Airway receipt/acknowledgment of receipt of goods from the consignee(s);
- (iii) 4 Copies of packing list identifying the contents of each package;
- (iv) Insurance Certificate;
- (v) Manufacturer's/Supplier's warranty certificate; Certificate narrating that Semen and embryos supplied are as per the Guideline laid down by Government of India and the embryos are meeting the IETS Manual (4th Edition) standard
- (vi) Certificate of Origin;

The above document shall be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

7. Insurance (GCC Clause 11):

The insurance shall be in an amount equal to 110 percent of the CIF or CIP value of the Goods from "Warehouse to warehouse (final destination)" on "All Risks" basic including War Risks and Strikes.

8. Incidental Services (GCC Clause 13):

No additional services other then covered under Clause 13 of GCC.

9. Spare Parts (GCC Clause 14):

Add as Clause 14 to the GCC the following: NA

10. Warranty (GCC Clause 15):

(i) G.C.C. Clause 15.2

The warranty period shall be in accordance to the period as specified in technical specification and warranty period shall start from the date of acceptance of goods. The Supplier shall, in addition, comply with the performance &/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion either;

- (a) make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests in accordance with SCC 4;
- (b) Substitute Clause 15.4 of the GCC by the following:

"Upon receipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, free of cost at the ultimate destination. The Supplier shall take over the replaced parts /goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter.

In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/ replaced material shall be extended to a further period of 24 months."

(ii) GCC Clauses 15.4 and 15.5:

The period for correction of defects in the warranty period is 15 days.

11. Payment (GCC Clause 16):

The price of the goods purchased will be paid in the Currency in which the price has been stated in the successful bid.

(i) Advance Payment: NA

12. **Prices (GCC Clause 17):**

Prices payable to the supplier as stated in the contract shall be firm during the performance of the contract.

13. Sub-contracts (GCC Clause 21):

Add at the end of GCC sub-clause 21.1 the following:

Sub-contract shall be only for bought-out item and sub-assemblies

14. Liquidated Damages (GCC Clause 23):

14.1 For delays:

GCC Clause 23.1 -- The applicable rate is 0.5% per week and the maximum deduction is 10% of the contract price after that the contract shall be cancelled & the performance security deposited by the supplier will be forfeited.

15. Notices (Clause 32):

For the purpose of all notices, the following shall be the address of the Purchaser and Supplier.

Purchaser: Chief Executive Officer, Uttarakhand Livestock Development Board, Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehradun-248011, Uttarakhand, India

Supplier: (To be filled in at the time of Contract signature)

16. Supplier shall regularly intimate progress of supply, in writing, to the purchaser as under:

- Quantity dispatched /delivered to consignees and date;
- Date of completion of entire Contract including incidental services, if any; and
- Date of receipt of entire payments under the Contract

SECTION V: SCHEDULE OF REQUIREMENTS

Note:

- 1.
- The date of delivery means the dates when goods are delivered to the consignee

 The supplier shall be responsible for safe delivery of the goods up to consignee's place.

 The delivery schedule will start from the date of placement of order. 2.

Schedule No./ Part of Schedule	Brief Description of Item	Qty.	Delivery schedule
One Part A	Microscope Heating Plate for SMZ 1000 Zoom Stereo microscope	01 No.	Two month from the date of Order
One Part B	Microscope Heating Plate for Inverted research microscope TiE model Nikon Make	01 No.	Two month from the date of Order
Two	Heat/Warming Plate with integrated temperature control to be supplied with Warming Blocks	01 Set	Two month from the date of Order
Three Part A	IVF Work Station Six Feet With Temperature Control Working Platform And Zoom Stereo Microscopes	01 No.	Two month from the date of Order
Three Part B	IVF Work Station 4 X 2 Feet with Temperature Control Working Platform and Zoom Stereo Microscopes	01 No.	Two month from the date of Order
Four Part A	Headed trolley for Ovum Pick UP	01 No.	Two month from the date of Order
Four Part B	Bio Safety Cabinet Class II Type B	01 No.	Two month from the date of Order
Five Part A	Air Purification System	01 No.	Two month from the date of Order
Five Part B	Water Purification System	01 No.	Two month from the date of Order
Six Part A	Embryo cup Filter Warmer	01 No.	Two month from the date of Order
Six Part B	Slide Warmer	01 No.	Two month from the date of Order
Six Part C	Oocyte Embryo Shipping Incubator	01 No.	Two month from the date of Order
Six Part D	Embryo 0.25 ml. Straw Shipping Incubator	01 No.	Two month from the date of Order
Seven Part A	Accurate Temperature Measurement Probe	01 No.	Two month from the date of Order
Seven Part B	Volatile Organic Compounds Level Monitor	01 No.	Two month from the date of Order
Eight	Embryo/ Semen Storage Type Liquid Nitrogen Vessel	02 No.	Two month from the date of Order
Nine	Media and Consumables Item required for In-Vivo Embryo Production	Variable	Two month from the date of Order
Ten	Artificial Cow	01 No.	Two month from the date of Order
Eleven Part A	Inverted Microscope for micromanipulation with Digital Camera & Image analysis Software	01 No.	Two month from the date of Order
Eleven Part B	Upright Microscope with Camera and Dedicated Karyotyping Software for Livestock Karyotyping	01 No.	Two month from the date of Order
Eleven Part C	Micromanipulator for Oocytes and Embryos for ICSE, Cell Injection and Biopsy	01 No.	Two month from the date of Order
Twelve Part A	Gradient Thermal Cycler	01 No.	Two month from the date of Order
Twelve Part B	Gel Documentation System	01 No.	Two month from the date of Order
Thirteen Part A	Laminar Air flow 4 X 2 Feet Class II (Protection of Sample and User)	02 No.	Two month from the date of Order
Thirteen Part B	Class II Laminar Air Flow 6 x 2 Feet	02 No.	Two month from the date of Order
Thirteen Part C	Bench Top Refrigerated Centrifuge	01 No.	Two month from the date of Order
Thirteen Part D	Automatic Autoclave	01 No.	Two month from the date of Order
Fourteen Part A	CO2 Incubator With Oxygen Control	01 No.	Two month from the date of Order

Schedule No./ Part of Schedule	Brief Description of Item	Qty.	Delivery schedule
Fourteen Part B	Bench Top CO2 Incubator	01 No.	Two month from the date of Order
Fourteen Part C	CO2 Incubator	01 No.	Two month from the date of Order
Fifteen Part A	Multi Mode Microplate Reader	01 No.	Two month from the date of Order
Fifteen Part B	Electro Fusion Machine	01 No.	Two month from the date of Order

Address of Consignee:

 Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand, India

SECTION VI: TECHNICAL SPECIFICATIONS

Notes for Preparing the Technical Specifications

In the specifications of standards for equipment, materials, and workmanship, recognized national & international standards are used. The specifications should state that equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable.

Sample Clause: Equivalency of Standards and Codes

Where reference is made in the Technical Specification to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest current edition or revision of the relevant standards or codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number is avoided as far as possible; where unavoidable they should be followed by the words " or at least equivalent".

Where appropriate, drawings including site plans as required may be furnished by the Purchaser with the bidding documents. Similarly the Supplier may be requested to provide drawings with its bid for prior review by the Purchaser during contract execution.

SCHEDULE NO.: ONE PART A:

TECHNICAL SPECIFICATION OF MICROSCOPE HEATING PLATE FOR SMZ 1000 ZOOM STEREO MICROSCOPE:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

- Imported Glass heating plate for Nikon SMZ 1000 model purchased in 2006, with heating system-temperature control, ambient room temperature to 50 °C, Dimension: As suitable for the microscope and for 35/50/60 mm dishes and multiwell plate. The heating plate is to be fitted in SMZ 1000 Nikon make purchased in 2006. The bidder has to fit the heating plates on the microscopes at Lab.
- Warranty: 5 Years.

Must provide catalogue number of all parts as above

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: ONE PART B

TECHNICAL SPECIFICATION OF MICROSCOPE HEATING PLATE FOR INVERTED RESEARCH MICROSCOPE TIE MODEL NIKON MAKE:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

- Imported Glass heating plate heating system- temperature control, ambient room temperature to 50 °C, Dimension: As suitable for the microscope and for 35/50/60mm dishes and multiwell plate. The heating plate is to be fitted in Nikon TiE model purchased in 2010. The bidder has to fit the heating plates on the microscopes at Lab.
- Warranty: 5 Years.

Must provide catalogue number of all parts as above

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: TWO:

TECHNICAL SPECIFICATION OF HEAT/ WARMING PLATE WITH INTEGRATED TEMPERATURE CONTROL TO BE SUPPLIED WITH WARMING BLOCKS:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Imported warming plates with integrated inbuilt temperature control and display of temperature control that can be used for maintaining the temperature of oocytes and sperm samples at 37°C or during oocyte pickup and IVF procedure. Made of Aluminum or HI-MACS or better material, non toxic and non adherent and easy to clean surface.

Temperature control ambient to 45°C or more with temperature accuracy ±0.5° C or below.

Minimum heating area of 1200 square CM or bigger then this size. Power consumption 90 - 250 W. Fit to Indian electrical system such as plugs and frequency. Should be supplied with following Warming Blocks:

Warming block size	Quantity
Warming block for 15 ml conical falcon tube tilt (14/17CC)	01
Warming block for 15 ml conical falcon tube (14/17CC)	01
Warming block for 10 ml syringe	01
Warming block 50 ml for three tubes	01
Warming block for 35 mm round petridish	04
Warming block for 60 mm round petridish	02
Warming block for 4 well IVF NUNC dish	04

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

SCHEDULE NO.: THREE PART A:

TECHNICAL SPECIFICATION OF IVF WORK STATION SIX FEET WITH TEMPERATURE CONTROL WORKING PLATFORM AND ZOOM STEREO MICROSCOPES:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Imported IVF working Cabinet Class II all stainless steel made, vertical air flow for both sample and human protection 1800 mm size (6 feet), Stainless Steel built which can hold one stereo zoom microscopes and one Inverted research microscope (with anti vibration table) that is to be used for micromanipulation. It must be indicated for use as in assisted reproduction technologies and IVF laboratory.

Heated Working Surface with its Control: It should have uniform and stable temperature in the working surface with its controlling system and temperature display.

Should hold imported stereo zoom microscopes (Specifications below) in the working area with their mounting assembly.

Heated Glass Stage built in the Workstation: It should have suitable heated glass their temperature control. The light source for the microscope must be LED which can be easily adjustable for dark and bright light illuminations and filters for light.

Noise Level below 51 dB, Must have UV light provision for disinfection and germicidal.

Humidification system (should be inbuilt or otherwise separately provided) to provide humidified gas (with heating system) in the gas port inside laminar. Suitable glass lid to hold the culture dishes in the micro environment of humidified gas tubing from the gas cylinders may be provided.

Adjustable fan speed velocity with airflow not to exceed 0.35 m/s. HEPA filter class H-14 that can remove at least 99.9 % of all airborne particles down to 0.3 microns (To be replaced every year by successful bidder for two years). Provision for carbon filters to remove VOC

Should have built in software/ System that can show all vital parameters of IVF work station such as Air flow, Light intensity, temperature of working zones, filters integrity and various other parameters in the LED display, temperature control for heated stage and heated glass.

Integrated LCD monitor 15 inch or more size suitably attached to the inner of the workstation with power plug for it. The monitor should be low radiation and medical grade. The monitor should support most of the signals coming from modern digital cameras and supports DVI, HDMI as well as analog signals. It should be capable to connect the monitor to external PC.

Standard table plate working height: 800 -1100 mm/ adjustable for better comfort during work.

Dimensions: External depth of minimum of 690 mm with working depth of minimum 560 mm, External width minimum of 1900 mm and working width of 1800 mm, Working height minimum 630 mm.

Suitable number of electric ports for all instruments such as two microscopes, including monitor with two extra ports.

Must be fitted with Indian electric system with voltage, frequency and plug.

The device must comply and certified with the safety requirements of IEC latest editions. The workstation should be imported and must comply to ISO, EC, safety standards UL.

Must provide breakdown visit within one week from the date of complaint. Must provide technical visit every 6 months till warranty period.

Warranty: 5 Years manufacturer warranty

Must provide catalogue number of all parts as above.

Specifications For Zoom Stereo Microscope:

Imported zoom stereo microscope with Optics & Zoom Ratio: Imported Research stereo zoom microscope with minimum optical zoom of 10:1 zoom ratio with total magnification range of 0.7 x to 16 x or better with 1X Objective.

Objective: Plan Apochromat 1x objective with minimum working distance of 60 mm and N.A. 0.17 or better.

Eyepiece: 10x paired with Field of view 23 mm or better with diopter adjustment in both eyepieces.

The entire optics of the microscope should be fully apochromatically corrected including the zoom optics.

Observation tube: Binocular observation tube inclined at 30° to 45° or better with light path distribution of 100:0, 50:50/80:20, 0:100

Camera and software: CMOS HD Camera with minimum 5 Mpixel. All components of the microscope, camera and software must be from the same manufacturer. Software and Camera have Auto and Manual Exposure settings, Image Calibration tool, Scale Bar (micron Bar) displayed on the live image to indicate image size, Digital Image Acquisition, Thumbnail Gallery, Distance Tools for straightforward image annotation, Interactive Linear Measurement Tools Angle, area, perimeter) both for Live & Acquired Image, Image Comparison Tools, Pan & Zooming and Image overlay

Certification: CE conformity certified and provide certificate in original.

The device must comply and certified with the safety requirements of IEC latest editions. The workstation should be imported and must comply to ISO, EC, safety standards UL.

Must provide breakdown visit within one week from the date of complaint. Must provide technical visit every 6 months till warranty period.

Warranty: 5 Years manufacturer warranty.

Must provide catalogue number of all parts as above.

Bidders must submit the sole/exclusive distributor certificate issued by the manufacturer

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

SCHEDULE NO.: THREE PART B:

TECHNICAL SPECIFICATION OF IVF WORK STATION 4 X 2 FEET WITH TEMPERATURE CONTROL WORKING PLATFORM AND ZOOM STEREO MICROSCOPES:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Imported IVF working Cabinet Class II, All stainless steel made, vertical air flow, for both sample and human protection 1200 mm size (4 feet), Stainless Steel built which can hold one stereo zoom microscopes and one Inverted research microscope that is to be used for micromanipulation. It must be indicated for use as in assisted reproduction technologies and IVF laboratory.

Heated working Surface with its Control: It should have uniform and stable temperature in the working surface with its controlling system and temperature display

Stereo zoom microscopes: Should hold imported stereo zoom microscopes (Specifications below) in the working area with their mounting assembly. Optical zoom of 10:1 zoom ratio with total magnification range of 0.7x to 16 x or better with 1X Plan Apochromat objective. Eyepiece: 10x paired with Field of view 23 mm or better with diopter adjustment in both eyepieces. The entire optics of the microscope should be fully apochromatically corrected including the zoom optics.

Heated Glass stage built in the workstation: It should have suitable heated glass their temperature control. The light source for the microscope must be LED which can be easily adjustable for dark and bright light illuminations and filters for light.

Noise Level below 51 dB, Must have UV light provision for disinfection and germicidal.

Humidification system should be inbuilt or otherwise separately provided to provide humidified gas (with heating system) in the gas port inside laminar. Suitable glass lid to hold the culture dishes in the micro environment of humidified gas tubing from the gas cylinders may be provided.

Adjustable fan speed velocity with airflow not to exceed 0.35 m/s. HEPA filter class H-14 that can remove at least 99.9 % of all airborne particles down to 0.3 microns (To be replaced every year by successful bidder for two years). Provision for carbon filters to remove VOC.

Should have built in software/System that can show all vital parameters of IVF work station such as Air flow, Light intensity, temperature of working zones, filters integrity and various other parameters in the LED display, temperature control for heated stage and heated glass.

Standard table plate working height: 800 -1100 mm / adjustable for better comfort during work.

Dimensions: 4X2 Feet

Suitable number of electric ports for all instruments such as two microscopes, including monitor with two extra ports.

Must be fitted with Indian electric system with voltage, frequency and plug.

The device must comply and certified with the safety requirements of IEC latest editions. The workstation should be imported and must comply to ISO, EC, safety standards UL.

Must provide breakdown visit within one week from the date of complaint. Must provide technical visit every 6 months till warranty period.

Certification: CE conformity certified and provide certificate in original.

Warranty: 5 Years manufacturer warranty.

Must provide catalogue number of all parts as above. Bidders must submit the sole/exclusive distributor certificate issued by the manufacturer.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: FOUR PART A:

TECHNICAL SPECIFICATION OF HEADED TROLLEY FOR OVUM PICK UP:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Imported heated trolley or Z table for adjustable height to be used in doing oocyte retrieval. It has a clean smooth heated surface ideal for any warming blocks and media flasks. Heated table top made up of Steel / HiMacs with minimum space 600x700mm with controllers for Tabletop and have plastic Wheels and steel legs.

Electric Outlet at the back for connecting devices such as Suction Pump directly to the Table

Easy to use, Easy to clean, Easy to move, Should have Ergonomic design

Should have convenient storage compartment under table. Temperature range - Amb to $+50^{\circ}$ C with Temperature resolution 0.1° C and Temperature difference $\pm 0.5^{\circ}$ C. Low power consumption.

Certification: CE conformity certified and provide certificate in original.

Bidders must submit the sole/exclusive distributor certificate issued by the manufacturer.

Warranty: 2 years.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: FOUR PART B

TECHNICAL SPECIFICATION OF BIO SAFETY CABINET CLASS II TYPE B:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Main body & working zone should be Made up of stainless steel 304 grade (heavy Gauge 14-16G). Working area 1200 mm width with adjustable front shutter opening. Air flow should be vertical down flow with 100% exhaust. Microprocessor based control system. Noise level should be below 52 dBA at operator level. Interlock should be in UV/ Fluorescentlights/ Door alarm should be there for door unsafe position. Motors/blowers should be double shaft, balanced, low vibration with double protection exhaust with HEPA & UV. HEPA filter rated for min. 99.97% efficiency at 0.3 micron particle size used for main and exhaust filters. Air flow pattern should be 100% re-circulated through HEPA. Air cleanliness in working area should be meets or exceeds international standards for use in IVF labs. Front door should be made up of polycarbonate /toughened glass (6mm), vertical sliding, adjustable as per requirement. Imported item of reputed international brand should be quoted. Fit to Indian electrical system(220V AC, 50/60 Hz). UV light provision.

The cabinet should be based on CE certification (Certificate to be provided). safety standards UL and certificate to be provided. Installation, validation/ performance demonstration should be carried out at site with ultra-modern facilities like velocity test, laser based particle test etc.

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: FIVE PART A:

TECHNICAL SPECIFICATION OF AIR PURIFICATION SYSTEM:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Air purifier system certified for use in IVF Lab that must be supported in in the manufacture website and brochure.

The size of the space that require purification system is 20 Feet X 20 Feet and height 11 Feet. It must be plasma technology base. It should be eliminate all Pathogens, moulds, bacteria, virus (airborne Infection), Particulate Matter Odors, & VOCs chemical air contaminants (CAC'S) present in the laboratory.

Must deactivate all pathogens, HEPA to remove all particulate matter and carbon filter will remove all VOCs. It should be portable with 2-wheeled base or movable platform. Filters: Preferably on pre filter, followed by mandatory One HEPA H13 filter, MGA Grade. (For Particulate Matter), One G4 carbon pleated filter. (For VOCs). Must purify the designated Lab room air at least 25 times per hour or equivalent air changes 25 per hour or more.

Noise Level: 47.9 – 75.1 dBA at unit and 38.5 – 62.9 dBA at 1m away from Unit

Suitable for Indian electric system. Power consumption 500 watt or less. Switched and fused with a grounded, molded power cord. Certification: CE conformity certified and provide certificate in original.

Bidders must submit the sole/exclusive distributor certificate issued by the manufacturer.

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: FIVE PART B:

TECHNICAL SPECIFICATION OF WATER PURIFICATION SYSTEM:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

- 1. The system should be designed handle hard water conditions having feed water Conductivity up to 2000 micro S/cm, Free chlorine- 2 3 ppm & Fouling Index upto 20 or better.
- 2. There should be separate Pre-filtration unit with 5 micron filter to remove the particulate matter with inbuilt Booster pump to maintain feed pressure of system from the same OEM should be provided.

Ist stage system for RO EDI Type 2 water laboratory applications & Feed to type 1 system

The unit should have the following purification stages:

- System should have pre-treatment with activated carbon, 0.5 micron filter and anti-scaling agent to enhance the life of downstream RO cartridge. Provide one extra RO cartridge.
- Reverse osmosis should be able to reject 95-99% of ions and organics with pre and post conductivity meter of RO cartridge.
- o RO should have technology to minimize the RO waste water by partial recirculation.
- Self-regenerating electro-deionization module (EDI) to eliminate the requirement of frequent replacement of DI cartridge and EDI must have carbon bead at cathode to eliminate the requirement of any softener cartridge.
- Water quality: Flow rate: 3 L/hr, Type 2 water (Ions organics removal up to 99%, Resistivity: > 5-15 Mohm.cm, TOC < 30 ppb)
- Type 2 water Reservoir minimum 50 Litres with auto cut-off Tank level sensor.
- System must have option of inbuilt free software to connect it through any PC/Laptop to download the History of 6
 months, to control the system Remotely through LAN cable, to see the complete schematic on single window of
 PC/Laptop.
- System must have option to see the total throughput of the cartridge online, the cartridge should not require ant tool to replace.
- Display: Water quality after every purification step (Feed water, RO feed water, RO product water, EDI Product water); Tank Level; Alarm and alert on water quality, No feed water alarm etc.

2nd stage system for Type 1 water analytical applications: -

- O Ultrapure water machine producing water of: -
 - Resistivity: 18.2 M Ω .cm at 25 °C, TOC < 5 ppb (μ g/L), Bacteria < 0.1 CFU/mL
- Automatic recirculation feature.
- The polishing cartridge should contain mixture of activated carbon and mixed ion exchange beads to reduce Ionic and organic level. One extra cartridge to be provided.
- O System must have inbuilt dual wavelength UV Lamp to minimize TOC & Macrobacteria.
- System must have accurate online Resistivity (temperature compensated and nor compensated) for the dispensing water on system display.
- System must have easy water delivery: Manual water delivery and Volumetric water delivery.
- o System should be delivered with a certified 0.22 micro m final filter.
- O To guarantee compliance with minimum laboratory safety requirements, and to ensure that the water purification system meets internationally-recognized safety norms, the Both the Type 1 & 2 water purification system shall be listed with Underwriters Laboratories (both UL and ULC), and will carry the CE mark, indicating compliance with EC Directives.
- Both the polishing cartridge and final filter must be supplied with Quality certificate from the OEM.
- One extra cartridge to be supplied of all cartridge.
- o The bidder must submit Performance Certificate from any organizations for provision of Services in time.

Warranty: 2 Years with minimum one visit per year for two years along with breakdown visits

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: SIX PART A:

TECHNICAL SPECIFICATION OF EMBRYO CUP FILTER WARMER:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Embryo cup/ Emcon OPU Tube Warmer that can provide ultra-precise temperature control warming of collection tube 50 ml and embryo cup filter (Emcon) during and after ovum pick up process. It should have active ultra-precision heating with temperature control range 20° C to 45° C and working at ambient Temperature range -0° C to 45° C . Microprocessor controlled heat pump with Temperature control resolution = 0.0625° C . Temperature LCD display resolution = 0.1° C . Provided with rechargeable battery with integrated power supply . Temperature holding duration 12+ hours. Supplied with suitable USB battery. Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected. Should install the system in the Indian electrical system.

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

SCHEDULE NO.: SIX PART B:

TECHNICAL SPECIFICATION OF SLIDE WARMER:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Slide warmer with ultra-precise temperature control of oocytes after the ovum pick up process and during the IVF embryo development process. The temperature can be adjusted at 0.1° C increments and the offset point can be adjusted at 0.01°C increments. Active ultra-precision heating.

Temperature control range 20° C to 45° C with Ambient Temperature range 0° C to 45° C Microprocessor controlled heat pump with temperature control resolution = 0.0625° C . Temperature LCD display resolution = 0.1° C Supplied with 110V - 240 V power supply. Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected. Should install the system in Indian electrical system.

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: SIX PART C:

TECHNICAL SPECIFICATION OF OOCYTE/EMBRYO SHIPPING INCUBATOR:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Imported Oocyte /Embryo incubator Ultra precision temperature controlled incubator with ultra-precise Microprocessor controlled heat pump for temperature control of oocytes and embryos during shipping, immature oocytes are matured in maturation media during overnight shipping at temperature control resolution of 0.0625° C at ambient conditions ranging from minus 35° C to +60° C. Must have provision of gas for immature oocytes to be matured during transportation.

It should have active ultra-precision simultaneous heating and cooling simultaneously. Temperature control range 30° C to 42° C with ambient Temperature range -35° C to 60° C .Temperature holding duration 96+ hours. The incubator should be tamper resistant key switch with vibration and shock resistant exterior.

The incubator should be be provided with manufacturer specific cover case for easy carrying from one place to another. Must provide rechargeable battery with integrated power supply and all other all wires and charging system of the Incubator.

Should install the system in the Indian electrical system.

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: SIX PART D:

TECHNICAL SPECIFICATION OF EMBRYO 0.25 ML STRAW SHIPPING INCUBATOR:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Embryo 0.25 Ml Straw Shipping Incubator Ultra precision temperature controlled incubator with ultra-precise Microprocessor controlled heat pump for temperature control of oocytes or embryos in 0.25 ml straws during shipping.

The shipping incubator must withstand extreme ambient temperatures during shipping by simultaneous heating and cooling feature. Able to carry more than 200 oocytes or embryo 0.25 ml straws at a time.

Temperature control range 20° C to 45° C with ambient Temperature range -20° C to 60° C Temperature control resolution = 0.0625° C . Temperature LCD display resolution = 0.1° C . Rechargeable battery with integrated power supply (One additional battery to be provided). Temperature holding duration 72+ hours.

Vibration and shock resistant exterior. The incubator should be be provided with manufacturer specific cover case for easy carrying from one place to another.

Should install the system in the Indian electrical system.

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: SEVEN PART A:

TECHNICAL SPECIFICATION OF ACCURATE TEMPERATURE MEASUREMENT PROBE:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Highly accurate temperature measurement with specially designed microprobe allows the user to accurately measure the temperature of CO2 incubators (Inside), heated stages and inside media droplets, incubators and refrigerators. The probe can be held in place or fitted to a holder for hands-free measurement. The probe should be insulated against heat from the user for truly accurate measurements. Installing the system in Indian electrical system.

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: SEVEN PART B:

TECHNICAL SPECIFICATION OF VOLATILE ORGANIC COMPOUNDS LEVEL MONITOR:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Volatile Organic Compounds Level Monitor (VOC) Meters are the most advanced, sensitive and reliable handheld VOC detectors on the market. As Volatile Organic Compounds (VOC) in the lab can have a negative effect on ART results, it is important to be able to monitor these levels.

The RI VOC Meters are capable of detecting contamination at 0.1 parts per million (ppm) levels. 0.1ppm is below an established threshold of embryo toxicity. The VOC Meter is available with or without data-logging. Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected. Should install the system in the Indian electrical system.

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: EIGHT:

TECHNICAL SPECIFICATION OF EMBRYO/ SEMEN STORAGE TYPE LIQUID NITROGEN VESSEL:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Imported Liquid Nitrogen embryo/ straws storage Tank should be with 47 L or more capacity. The static evaporation rate 0.40 L per day or less. It should be with an 11 week working duration under normal conditions. Can hold double goblets in the CAN vertically at a time. Number of canister -10, Number of 0.5 cc straw holding 3500. Neck opening of minimum 120, Height of container 670 mm so that it can hold the Embryo CANS easily which are kept with double goblet.

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Bidders must submit the sole/exclusive distributor certificate issued by the manufacturer

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: NINE:

TECHNICAL SPECIFICATION OF MEDIA AND CONSUMABLES ITEM REQUIRED FOR IN-VIVO EMBRYO PRODUCTION:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Part No.	Product	Details	Qty.
A	DPBS Flushing Media	Embryo flushing Enriched with amino acids to prevent amino acid depletion of oocytes and embryos Must be certified for Bovine use.	
В	Embryo Holding Media	Suitable for the <i>in vivo</i> handling of flushed embryos. Must be certified for Bovine use	200 ml.
С	Embryo Freezing Media	Ethylene glycol with sucrose based freezing media for bovines	200 ml.
D	15 ml Centrifuge Tube	Conical, sterile, made up of polypropylene, graduated, RNase/DNase free, Pyrogen/ Endotoxin/ Cytotoxic free, imported, NUNC make, Packing: 50 Tube per Pack	1000 No. (20 Pack)
Е	50 ml Centrifuge Tube	Conical, sterile, made up of polypropylene, graduated, RNase/ DNase free, Pyrogen/ Endotoxin/ Cytotoxic free, imported, NUNC make, Packing 25 Tube per Pack	1250 No. (50 Pack)
F	35 x 10 Petridish	IVF petridish, Dia 35mm, made by polystyrene, sterile, certified non embryo toxic, surface treated, CE-marked, FDA cleared, MEA-tested, imported, NUNC make, Packing 10 per Pack	1000 No. (100 Pack)
G	60 x 15 Petridish	IVF petridish, Dia 60mm, made by polystyrene, sterile, certified non embryo toxic, CE-marked, FDA cleared, MEA-tested, imported, NUNC/ Corning make, Packing 20 per Pack	500 No. (25 Pack)
Н	100 x 15 Petridish	IVF petridish, Dia 100 mm, made by polystyrene, sterile, certified non embryo toxic, surface treated, CE-marked, FDA cleared, MEA-tested, imported, Packing 10 per Pack	150 No. (15 Pack)
I	4-well Dishes	TC- treated 4-well IVF dish, made by polystyrene, sterile, certified non embryotoxic, nonpyrogenic, non cytotoxic, CE-marked to the medical device directive 93/42/EEC, FDA cleared, MEA-tested, imported, individually wrapped, NUNC make	2000 No.
J	Glass Slide with Cover Slip for Microscope	Standard, 75mm x 25mm with 1 mm thickness or better use for regular semen analysis work, Packing 50 per Pack Coverslip 22mm X 22 mm with 0.13-0.17 mm thickness Packing 100 per Pack	500 Slide (10 Pack) with 1000 Cover Slip (10 Pack)
K	2 ml centrifuge tube	Sterile with lid. Eppendorff Make	500 No.

Warranty: 2 years.

Must provide catalogue number of all parts.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: TEN:

TECHNICAL SPECIFICATION OF ARTIFICIAL COW:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Naturally shaped Life like Cow Model (Rear Half) for Artificial Insemination and Embryo Transfer Training Purpose.

Fiber Glass Body and Silicon Internal Parts to provide a realistic imitation of a cow's Reproductive Tract and Pelvic Cavity. Cow model must be Anatomically Correct including full Reproductive Tract and Rectum.

Reproductive Tract made of Silicon.

Inner Organs must be heated up to Natural Body Temperature.

Inflation of Rectum to simulate Pneumorectum..

Windows to allow internal views and to guide and assess the trainees procedure.

Removable Gynaecological parts like the cervix and uterus for guided training.

Padded pelvis for realistic feeling of bone structure and pelvic fat.

Possible to exchange easy and difficult cervix.

Removable life like tail.

Possibility to train students for manual pregnancy check and ovarian diagnosis.

The cow model should have option to use it for pregnancy and palpation with exchange of body parts.

Pregnant cow uterus for training of manual pregnancy detection.

Pregnant horn fluid filled to imitate amniotic fluids.

Pregnant horn enlarged.

Pregnant horn must contain palpable embryo.

Two membranes in pregnant uterus to enable training of manual membrane slip for pregnancy diagnostics.

Intestine cushion for optimal palpation experience.

Interchangeable ovaries for ovarian palpation (small follicles, large follicles, corpus luteum, cyst etc.)

Detachable easy and difficult cervix, silicon uterus and vagina and rear part of cow including rear reproductive tract with detachable anatomically correct vulva and rectum.

Warranty: 2 Years.

Must provide catalogue number of all parts as above.

Bidders must submit the sole/exclusive distributor certificate issued by the manufacturer

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: ELEVEN PART A:

TECHNICAL SPECIFICATION OF INVERTED MICROSCOPE FOR MICROMANIPULATION WITH DIGITAL CAMERA & IMAGE ANALYSIS SOFTWARE:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Microscope stand	Large, Stable, bearing mounted Microscopy stand with provision to attach camera on Left Side port with 0:100 % light sharing with 18 mm or more FOV for Camera. Motorized Z focusing of up 10 nm or better step size with body mounted Course and Fine knobs with travel range 10 mm or more. Fluorescent inverted microscope with Bright field, NMC/IMC/ PlasDIC/ RC & Fluorescence contrast techniques.
Observation Tube	Course and fine focusing knobs in main frame. Dedicated port to attach camera with 0:100 % light sharing. Binocular tube with 22 and above FOV
Transmitted light	Transmitted light continuously variable luminance, adjustment of brightness, field diaphragm with circular
C	& rectangular diaphragm to match objective and camera for perfect image. Transmitted LED white light, with inbuilt fast shutter for synchronized imaging of BF/Phase Contrast/DIC with fluorescence, preferably LED for long lamp life of minimum 20000 hrs or higher.
Contrasting Methods	Microscope should be equipped for Bright field, NMC/IMC/ PlasDIC/ RC & Fluorescence contrast techniques.
Sample stage	XY stage with necessary sample holders for slides, Petri dishes and multi-well plates and suitable for micromanipulation of oocytes and embryos.
Objective nosepiece	Motorized Six positions nosepiece to accommodate maximum objective.
Condenser	NA 0.5. Universal condenser suitable for all microscopy techniques such as Bright field, NMC/IMC/PlasDIC/RC & Fluorescence contrast techniques with 6 or more slots.
Fluorescence	Multi-position fluorescence Motorized filter turret with 6 or more positions. Adjustable aperture and field diaphragms; Should control fluorescence light intensity automatically for efficient and fast working. LED light source with min. 20,000 hrs of life time and it should have fluorescence LED controlled by imaging software apart from control panel for changing the wavelength and controlling intensity. The wavelengths should be narrow band UV, Blue, Green and Red.
Fluorescence filters	Band pass fluorescence filters for DAPI, FITC and RHOD. Filters with no pixel shift.
Objectives	Objectives 4/5x - Plan Flour grade (.12 NA), 10x-Plan Fluor with long working distance (.3 NA PH), 20x - Plan Fluor with long working distance (.5 NA with NMC/IMC/ PlasDIC/ RC & Fluorescence) and 40x (0.6 NA NMC/IMCintegrated modulation/ PlasDIC/ Relief contrast & Fluorescence) with long working distance). All objectives with high NA. Should include accessories for bright field, phase contrast and Hoffman/integrated modulation contrast techniques for all magnifications.
Eyepiece pair	10x with 22 mm or more Field of View or more with dioptre adjustment for both eyes.
Camera	Dedicated high speed digital cooled dual mode - CCD /CMOS Camera with 5.0 MP or more pixel resolution for high quality fluorescence imaging. High speed image acquisition of minimum 30 fps at full resolution or better.
Software	Licensed imaging Software for camera control and image acquisition. Should include image analysis, intensity measurements, multichannel imaging, ratio measurements for fluorescence and segmentation.
Data Processing Unit	All in One (Monitor and CPU together) Branded PC with i7 processor, minimum 16 GB DDR4 RAM, NVIDIA graphics card with 2 GB RAM, 2TB SATA HDD or higher, Original Windows 10 OS, DVD RW,

	at least 24" monitor, Bluetooth keyboard and optical mouse, Wireless Internet
Others	Microscope, Camera and Control / Analysis software should be from same Manufacturer. Each component
	of the microscope should mentioned pat number in the quotation which should be in an accordance with the
	published document and website of the manufacturer. should have Warranty of 3 years

Warranty: 2 Years manufacturer warranty and after that 2 years of CMC.

Must provide catalogue number of all parts of equipment as above.

Bidders must submit the sole/exclusive distributor certificate issued by the manufacturer

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center,

Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center,

Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be

summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: ELEVEN PART B:

TECHNICAL SPECIFICATION OF UPRIGHT MICROSCOPE WITH CAMERA AND DEDICATED KARYOTYPING SOFTWARE FOR LIVESTOCK KARYOTYPING:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Imported Upright Microscope with illumination for Bright field application with camera and software for automated Karyotyping, Idiogram and Q and R Banding of chromosomes of the samples from Livestock species.

Microscopes stand with all wavelength corrected.

10 watt or better LED Transmitted light with life span of approx. 50,000 hrs with time delay illumination shut off facility.

Nose Piece: Sextuple revolving interchangeable DIC nosepiece.

Observation Tube: Should be trinocular wide field, three way light path distribution for simultaneous viewing and imaging of the specimens. 30 degree inclined tube with locking mechanism for eyepieces. Field of view 25 mm or above.

Upgradable to fluorescence attachment with or more position filter turret.

Mechanical Stage with ultra-hard ceramic stage plate and coaxial drive

Eyepiece 10x (x2), focusable with diopter adjustment facility with field of view of at least 22mm or higher

Condenser: Universal condenser suitable for bight field (BF), dark field and DIC having N.A. 0.9 or higher with at least 6 slots for optical elements with freely rotatable condenser head.

Objectives: The following objectives should be quoted:-

Higher NA and higher working distance

Florescence grade -Plan 5 X (N.A. 0.15 or more, BF,

Florescence grade 10X (N.A. 0.40 or more), BF

Florescence grade 20X N.A. 0.5 or more, BF, Fluorescence, DIC

Florescence grade 40X (N.A. 0.75 or more, W.D. 0.35 mm or higher), BF, Fluorescence, DIC

Florescence grade 100X Oil (N.A. 1.4 or more, W.D. 0.15 mm or higher), BF, Fluorescence and DIC

Focus knobs with Coarse $(1\mu m)$ and fine $(0.3\mu m)$.

Heating stage suitable for ambient temperature to 50°C, Tokai Hit or equivalent, Temperature accuracy +/- 0.3°C. Ten years warranty on glass. Suitable for 35/50/60mm dishes

Certification: CE or any other international certification. Certificate to be provided

Cool CCD Camera with pixel size $0.65\mu m$ square or better with 1.2 Megapixel or better with software for annotations and fluorescence intensity analysis and automated cell counting.

Interfaces: USB 3.0. Suitable for Automated Metaphase, Karyotyping and Banding of chromosomes.

Software for Karyotyping: Must provide the software applicable to livestock species which must be in compliance with the Website and Brochure of the manufacturer. Automated Karyotyping of Livestock- Cattle, Buffalos, Sheep, Goat, Human and other animal and Plant species.

Interactive and automatic Chromosome separation and alignment of chrosomes. Interactive and automated back ground correction.

X,Y co ordinate allocation window in the main screen for easier reproducibility of the same field in case of manual/other microscopes.

Zoom in metaphase and karyotype view.

Classifiers for livestock, human, and plants.

Software should have provision for self train classifiers for Animals, Plant and Humans.

Interactive and automatic classification based on built-in classifiers for G-, Q- and R-banding.

Additional captures to encompass all chromosomes of widely spread metaphases in one karyotype.

Should be possible to incorporate 25 or more images in one karyotype to have one complete karyogram in case of polyploids.

Ideograms according to ISCN standard for 400, 550, and 850 bands and G, Q and R bands.

Unlimited log and undo options for processing steps. Annotation capabilities in metaphase and karyotype view

Flexible report form design, Image management and retrieval by gallery images

Image export into other applications in TIF, JPG and BMP format

Integrated patient/case database with search functions

Recording of step by step image processing and karyotyping to validate the result

Ability to compare a minimum of 6 karyotypes at a time

User defined automatic processing functions to simplify the image enhancement immediately after the capture.

Should provide demonstration by performing karyotyping for minimum of 20 samples.

All in One Desktop , Windows 10 Home , 8th Generation Intel® CoreTM i7 processor, 2 TB 7200 rpm SATA with HDD , RAM 16 GB with 2 GB graphic card. Cloud service, Display 23 inch , Ports -1 audio in, 1 audio out, 1 microphone , 3 USBHDMi port , Wireless keyboard and Mouse, Network , LAN and Wireless , Bluetooth combo, Antivirus Mcfree one year, HP Make

Warranty: 2 Years manufacturer warranty and after that 2 years of CMC.

Must provide catalogue number of all parts of equipment as above.

Bidders must submit the sole/exclusive distributor certificate issued by the manufacturer

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: ELEVEN PART C:

TECHNICAL SPECIFICATION OF MICROMANIPULATOR FOR OOCYTES AND EMBRYOS FOR ICSE , CELL INJECTION AND BIOPSY:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

System should be capable to perform pronuclear and fibroblast cells injections into animal embryos such as Cattle and Buffalos. System should be a fully electronic system. All X, Y, Z axis movements are controlled electronically. All three axis movements at all speed control should be controlled with one single integrated joystick. The system should have the coarse, fine, extra-fine movement selections using a single upright joystick.

System should have resolution of not more than 0.02 µm (20 nm) increments for fine and smooth movement.

System should have maximum travelling distance of 20 mm in all three axis i.e. 10 mm towards left and 10 mm towards right from center point andto cover the working area may be petty dish or slide format.

System should have a joystick for proportional and dynamic movement: the speed of the capillary is increased by the degree of joystick deflection.

The system should be capable of aligning the capillary at from 0 degrees up to 90 degrees for completely side-on injections.

The system should have a tool travel speed of at least 10,000 µm/s, for rapid work and penetration of tough material.

System should have to set both upper & Down programmable Z axis limits for effective injection.

System should have position save option, at least 3 positions which can act as a search plane for the easy searching of cells.

System should have an automated function for the capillary to move out of working radius and return to the precise same spot, called "home" (For easy capillary replacement) and "Clean" (To clean the debris) functions.

The system should have an option to connect to a piezo device and the piezo impulses can be supported by adjustable automated forward movements.

Should be user-friendly interface with larger LCD display and the control panel that shows coordinates of the motors and the functions being used.

System should be ergonomically designed where the user shall be able to rest his/her hand on the control board of the system for long period of handling to reduce strain of hands, arms and shoulders.

The system should be able to be updated from time to time with newer software versions using the USB port, without the need to purchase new devices.

The system should be able to adapt to all common inverted microscopes.

Specifications for Micro injector: (Holding side)

Gentle holding of cells in suspension (e.g., oocytes or blastocysts)

Aspiration and dispensing of small cells sperms and fibroblast, Stable, non-slip base plate

Manual pneumatic injector functioning with piston/cylinder system and with gears

Open system with an Universal capillary holder for mounting onto all common/ standard micromanipulators

Work point can be set easily via pressure-compensation valve. The system features single button aeration. This allows user to quickly equilibrate pressure differences between the cylinder and ambient pressure, thereby improving workflow efficiency. It is a pneumatic system (air-filled) with utmost reliability and ultra-fine sensitivity.

Coarse and fine drive controls for precise sample control with Improved rotary knob design for better handling and easier cleaning System has coarse and fine control option for variable transmission ratios(1:1 and 1:10) for applications that demand high resolution and sensitivity.

Piston position scale allows to set air volume and injection characteristics according to individual application requirements **Specifications for Micro injector: (Injection Side)**

Ideal for applications requiring Aspiration and dispensing of small cells specially bovine sperms and fibroblast cells for cloning and Removal of cells or polar body or Metaphase (e.g., for embryo biopsies). Large, ergonomic dials for enhanced control and ease of use,

Stable, non-slip base plate

Open system with an Universal capillary holder for mounting onto all common/ standard micromanipulators Manual hydraulic injector functioning with piston/cylinder system and with gears

Quick and easy filling of oil into the injector. A special self-closing (non-return) valve helps to prevent spilling of oil during the filling process directly into the piston chamber. This Improved system for simple and rapid oil filling with minimal interruption of the workflow

It is a hydraulic system (oil-filled) with utmost reliability and ultra-fine sensitivity.

System has "coarse" and "fine" control option for variable transmission ratios (1:1 and 1:10) for applications that demand high resolution and sensitivity.

Must supply Capillaries for Holding and Injection of sperm and biopsy along with micromanipulator. Twenty five Capillaries each for holding, Injection of sperms and Biopsy (in total 75), Holding 15 micrometer diameter and Injection for sperm -4 micrometer and Biopsy -19 micrometer diameter.

Provide training on sperm injection, fibroblast injection and biopsy of metaphase plate and polar body for at least 3 days in situ with minimum of 4 hours each day

Warranty: 3 Years.

Must provide catalogue number of all parts of equipment as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: TWELVE PART A:

TECHNICAL SPECIFICATION OF GRADIENT THERMAL CYCLER:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

- 1. Thermal Cycler with Peltier heating and cooling system, Gradient PCR machine for tubes, plates.
- 2. System should have silver/ Gold plated block to accommodate 96 x 0.2 mL PCR tubes, 96-well PCR plates (Standard & low profile)
- 3. Block ramp rate should be 5 Degree C for Heating and 3.5 Degree C for cooling.
- 4. Should have a temperature range of 0-100°C.
- 5. Should have a temperature accuracy of ± 0.2 °C.
- 6. Should have a temperature uniformity of ± 0.4 °C.
- 7. Gradient PCR, capable of testing 12 different temperatures simultaneously across a gradient range of 1 20° C
- 8. Steady Slope technology for identical ramp rates both during gradient optimization and normal run
- 9. Triple circuit technology to ensure precise temperature control across the block
- 10. Flex lid technology with Thermal Sample Protection
- 11. "Fast, Standard & Safe" temperature control modes
- 12. Pre-programmed PCR program templates for easy selection
- 13. Time or Temperature increment/decrement with cycles in PCR program.
- 14. Adjustable ramp rate from 0.1° C to 3.0° C to meet critical amplification conditions
- 15. Customized programming allows a maximum of 20 steps and 99 cycles
- 16. Should have possibility to expand with additional block of any one of the following formats, viz., gradient and/or non-gradient universal block, gradient and/or non-gradient fast block, flat block for in-situ PCR.
- 17. Auto Restart facility with user defined time interval when power fails and resumes.
- 18. Should have a graphical user interface for easy programming and quickly checking of run status, and have USB ports with an option of using the instrument through a PC.
- 19. Must provide sterilized 0.2 ml PCR tubes with lid 2000 numbers 0.5, 1.5, 2 ml sterilized centrifuge tubes with lid each 2000 numbers.
- 20. Should fit in the Indian electrical system.
- 21. Log book function for error messages and new calibration
- 22. E-mail Notification
- 23. European CE/ US FDA, ISO certified.

Warranty: 2 Years manufacturer warranty and after that 2 years of CMC.

Must provide catalogue number of all parts of equipment as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

TECHNICAL SPECIFICATION OF GEL DOCUMENTATION SYSTEM:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Digital imaging system for fluorescent and colorimetric imaging for DNA, RNA and Protein gels

- o Dual-Wavelength trans-illuminator with High and low intensity settings to view the DNA/RNA gels
- o The trans-illuminator must have provision to slide in and out of cabinet as required
- o White light source for colorimetric applications such as Coomassie gels other colorimetric assays
- o Imaging area of at least 20 x 25 cm or better.
- Minimum 7 position filters . Should support fluorescent and colorimetric detection methods based on dyes such as Ethidium bromide, Coomassie Blue, Silver Stain,
- Software must include quick accessible imaging protocols and 3D Dynamic scan, quantification of the band intensity, in addition to facility to create user-defined imaging protocols
- o Should have metallic darkroom hood for fluorescence imaging.
- High resolution 16-bit CCD Scientific camera with motorized zoom lens with 10 megapixels native and 20 megapixels extended resolution with 65,536 grey levels.
- o Instrument must have USB 3.0 interface for real-time faster image transfer)
- The System should create Dark and Biased Master files to compensate for the noise coming from the CCD Camera during Image Acquisition.
- o Should be capable of automatically correcting imaging artefacts
- o Should provide real-time imaging and analysis within seconds
- o Should have automatic lighting, focus and exposure.
- o Should be an open platform to accept standard image file types (i.e., TIFF, JPEG, PNG, GIF, BMP files).
- Should have auto focus technology with pre-calibrated focus for any zoom setting or sample height so that images are in focus at all times, regardless of zoom level or sample position
- o Should have software for image acquisition, documentation, and analysis including features like densitometry, automated quantitative analysis of samples etc.

Instrument must be supplied with multi-user licence software

- All in One computer (desktop PC with a latest processor all together), i7 processor, 8th Generation, Windows Home, TFT monitor at least 19" size, 8 GB RAM and 2TB hard disk, DVD writer and preloaded with latest original operating system software along with laser coloured printer and scanner. Wireless Keyboard and Mouse. Network connection with wireless modem, Bluetooth.
- o Compatible UPS with at least 30 minutes backup
- Original catalogue must be provided

Warranty: 2 Years

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE: THIRTEEN PART A:

TECHNICAL SPECIFICATION OF LAMINAR AIR FLOW 4 X 2 FEET CLASS II (PROTECTION OF SAMPLE AND USER):

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

All stainless steel made (No wood work). Vertical Laminar Air Flow . It should be class II (Protection of Sample and User Both), at least 4 feet with working space for 1 operator

Noise level should be below 52dBA at operator level. Provide UV .HEPA type H14 (99,97% efficiency for 0.3 μ m particles) with a minimum thickness of 10cm or more for longer life.

The Laminar should have at least 2 or more universal electrical outlets complinesd with Indian electrical system.

It should be imported and must comply to ISO, EC, safety standards like UL.

Warranty: 2 Years

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

TECHNICAL SPECIFICATION OF CLASS II LAMINAR AIR FLOW 6 X 2 FEET:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

All stainless steel made (No wood work). Vertical Laminar Air Flow . It should be class II (Protection of Sample and User Both), at least 6 feet with working space for 1 operator

Noise level should be below 52dBA at operator level. Provide UV . HEPA type H14 (99,97% efficiency for 0.3 μ m particles) with a minimum thickness of 10cm or more for longer life.

The Laminar should have at least 2 or more universal electrical outlets complies with Indian electrical system.

It should be imported and must comply to ISO, EC, safety standards like UL.

Warrantee: 2 Years

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: THIRTEEN PART C:

TECHNICAL SPECIFICATION OF BENCH TOP REFRIGERATED CENTRIFUGE:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Refrigerated type, Rotor for 5ml with 6 positions or more and 1.5 /2ml with 24 positions with rpm minimum 12000 or more for both the rotors with suitable bio containment lids for both rotors . IEC 61010 ,IVD and European CE Certified (Certificate to be provided). Control and Display: For RPM /RCF, Time. LCD Display. Should install the system in the Indian electrical system. To be provided with 3 KAV or suitable Servo or equivalent Stabilizer.

Warranty: 2 Years

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: THIRTEEN PART D:

TECHNICAL SPECIFICATION OF AUTOMATIC AUTOCLAVE:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Imported and Fully automated Vertical autoclave

Whole body inner and outer by stainless steel, 50 L capacity

Digital display of working status, touch of key

working pressure- 0.22MPa, Max working pressure0.23 Mp

Working temperature 134 degree C

Auto-letting off the cool air, and steam discharging automatically after sterilization

Over temperature over pressure auto-protection

Safe protection of water lacking

Automatically shut off with beep reminding after sterilization

With two stainless steel sterilizing baskets.

Power - 3 Kw

CE certified

Warranty: 2 Years

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

TECHNICAL SPECIFICATION OF CO2 INCUBATOR WITH OXYGEN CONTROL:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid. Imported CO2 incubator with approx. 140 to 160 liters capacity system.

- The interior should have rounded corners. The chamber is made up from a single sheet of stainless steel.
- It should have perforated 4 stainless steel shelves and one perforated copper or copper alloy shelves. Should have double door with inner 4 Split inner doors, subdivided inner glass door with 4 small doors with sealed glass doors.
- Lockable front door tightly sealed inner glass doors. (High quality door gasket maintains a leak-free seal).
- Must have **Temperature control and display.** The chamber should have heating system with duel temperature sensor. Temperature range from 5°C above ambient to 50° with temperature variation not more or less than .3 degree Celsius and temperature stability at 37°C of not more than 0.1 °C variations
- Must have **Humidity control** (**Active humidification**) **with display and its sensor** with provision or water reservoir container . One additional Humidity sensor to be proided.

Water Pan Copper made or copper mix alloy made to create humidity. • One additional Copper or Copper Alloy water pan to be provided.

Oxygen control for hypoxia: oxygen levels to 1% to 19% or lower with accuracy with in $\pm 0.25\%$ through the use of a Zirconia Ceramic O2 Sensor.

Must have **CO2 control and display**. CO2 Range with minimum of 0.2 - 20% with ±0.5 % accuracy. Infra-Red sensor or Duel beam IR sensor for specific and accurate control of CO2 levels. Should be provided with additional port for CO2 Sampling. One extra CO2 sensor to be provided.

- The CO2 incubator must be supplied with CO2 in line gas purification filters 6 Numbers to be provided.
- Below 5 minutes recovery time of CO2 and Temperature and humidity inside the chamber.

Must provide port for gas analyzer and temperature probe.

Heat sterilization or decontamination at 90 to 100 degree as well as 130 to 150 degree C.

- Must have fittings in between the tubing for inline filters so that inline filters can be placed between the tube. The tubing must be fit to be used for embryo culture.
- ICD/ LED display with touch screen controls. & data logging of temperature, humidity, CO2, door openings, The system to be supplied with all necessary tubing, ports and nozzles.

Provide one Fyrite kit with solution 10 packets.

Alarm system for different parameters. Must give wiring for alarm from port in Incubator to the room 10 meters from the lab site

- Wet heat/Humidified decontamination at 90 to 95 °C and/or High Temperature dry heat above 120°C.
- It should have optical and acoustic alarm if set point deviation or sensor defect occurs with Door monitoring and Remote alarm. System to be fitted with on board data entry and logging facility and company specific Interface for communication with USB port and external instrument logging along with Software so that the system can be connected to PC. Must provide data cable.
- Suitable platform to keep CO2 incubator over it with its leg labeler facility 2.5 feet height all stainless steel made with Granite top suitable to keep the above incubator on it.- 02 platforms to be provided.
- CO2 Cylinders- 10 Numbers from Sigma gases with minimum of 3 meters of high pressure flexible tale pipe of 3 meter length suitable for working pressure of 140 Bar attachment from cylinder to incubator with fitting with Gas control panel & incubator (Each cylinder should be approximately 40 liters capacity or more filled with medical grade CO2, at the time of supply certificate to be provided).

CO2 Capacity 3 Liters capacity- Two numbers of filled Cylinder with Two Stage Regulator and Piping so that Needle can be fit at the end of Tubing.

- Imported Two stage CO2 regulator with stainless steel diaphragm 03 Number capable to withhold the pressure gauge: 0-250 kg/Sq CM, Outlet pressure Gauge -0-16 Kg/Sq CM with working range of 0-10 kg/Sq CM.
- Incubator must be provided with calibration certificate after the installment. Each year calibration to be done for three years.
- Quote for Only One Model in accordance to the specification desired. Technical Bid with Multiple Option shall be summarily rejected.
- Fit to Indian electrical system such as plugs and frequency. European CE certified. Certificated to be provided, IEC 61010 complained. Certificated to be provided. Must provide breakdown visit within one week from the date of complaint. Must visit technical visit every 6 months for two years. Warranty two years from the date of supply.

Warranty: 3 Years manufacturer warranty and after that 2 years of CMC.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

SCHEDULE NO.: FOURTEEN PART B:

TECHNICAL SPECIFICATION OF BENCH TOP CO2 INCUBATOR:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Imported Benchtop top incubator that run with pre mix gas composition as well as separately CO2 and Nitrogen cylinders with all provision and control for mixing of gases of desired concentration. Touch screen control abd display.

Minimum of Ten individual incubation chambers. Must provide 20 numbers of sterilized humidification bottles.

Must have grooves to hold 35 mm round dish, 60 mm round dish and 4 well square IVF NUNC dish.

Dedicated heating plates with grooves ensure direct heat transfer to the dish in all chambers.

Provide extra worming blocks two each of - 4 well NUNC, 5 Well culture dish, 35 mmX10 mm round dish, 60 round dish Must have humidity control and display.

Temperature control and display.

Independent external monitoring of key parameters including temperature and gas concentration

VOC filter to remove organic compounds. Tracking, Data logging and alerts with digital display and internet monitoring.

Provide filled 5 cylinders of Pure CO2 and Pure N2 IVF grade

Provide imported two stage regulator for CO2 and N2 with one extra set of each regulator which can hold high pressure.

Tubing and piping minimum 3 meter length with extra push buttons.

One extra set of all tunings required for working of incubator.

Provide In line CO2 and N2 filter in between both N2 and CO2 Cylinders and Incubators. Provide 2 extra inline filters.

Provide instillation and demonstration.

Provide 3 feet height and 4 feet X3 feet stainless antivibration table to keep the bench top incubator.

CE marked. Certificate to be provided.

Warranty: 3 Years manufacturer warranty and after that 2 years of CMC.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE NO.: FOURTEEN PART C:

TECHNICAL SPECIFICATION OF CO2 INCUBATOR:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid. Imported CO2 incubator with approx. 140 to 160 liters capacity system. Water Jacketed

- The interior should have rounded corners. The chamber is made up from a single sheet of stainless steel.
- It should have perforated 4 stainless steel shelves and one perforated copper or copper alloy shelves. Should have double door with inner 4 Split inner doors, subdivided inner glass door with 4 small doors with sealed glass doors.
- Lockable front door tightly sealed inner glass doors. (High quality door gasket maintains a leak-free seal).
- Must have **Temperature control and display.** The chamber should have heating system with duel temperature sensor. Temperature range from 5°C above ambient to 50° with temperature variation not more or less than .3 degree Celsius and temperature stability at 37°C of not more than 0.1 °C variations
- Must have **Humidity control** (**Active humidification**) **with display and its sensor** with provision or water reservoir container . One additional Humidity sensor to be proided.

Water Pan Copper made or copper mix alloy made to create humidity. • One additional Copper or Copper Alloy water pan to be provided.

Must have CO2 control and display. CO2 Range with minimum of 0.2 - 20% with ±0.5 % accuracy. Infra-Red sensor or Duel beam IR sensor for specific and accurate control of CO2 levels. Should be provided with additional port for CO2 Sampling. One extra CO2 sensor to be provided.

- The CO2 incubator must be supplied with CO2 in line gas purification filters 6 Numbers to be provided.
- Below 5 minutes recovery time of CO2 and Temperature and humidity inside the chamber.

Must provide port for gas analyzer and temperature probe.

Heat sterilization or decontamination at 90 to 100 degree as well as 130 to 150 degree C.

- Must have fittings of inline filters in-between the regulator and the incubator . The tubing must be fit to be used for embryo culture.
- ICD/ LED display with touch screen controls. & data logging of temperature, humidity, CO2, door openings, The system to be supplied with all necessary tubing, ports and nozzles.

Alarm system for different parameters. Must give wiring for alarm from port in Incubator to the room 10 meters from the lab site

- Wet heat/Humidified decontamination at 90 to 95 °C and/or High Temperature dry heat above 120°C.
- It should have optical and acoustic alarm if set point deviation or sensor defect occurs with Door monitoring and Remote alarm. System to be fitted with on board data entry and logging facility and company specific Interface for communication with USB port and external instrument logging along with Software so that the system can be connected to PC. Must provide data cable.

- Suitable platform to keep CO2 incubator over it with its leg labeler facility 2.5 feet height all stainless steel made with Granite top suitable to keep the above incubator on it.- 02 platforms to be provided.
- Incubator must be supplied with filled CO2 Cylinders- 10 Numbers from Sigma gases with minimum of 3 meters of high pressure flexible tale pipe of 3 meter length suitable for working pressure of 140 Bar attachment from cylinder to incubator with fitting with Gas control panel & incubator (Each cylinder should be approximately 40 liters capacity or more filled with medical grade CO2, at the time of supply certificate to be provided)
- Imported Two stage CO2 regulator with stainless steel diaphragm 03 Number capable to withhold the pressure gauge: 0-250 kg/Sq CM, Outlet pressure Gauge -0-16 Kg/Sq CM with working range of 0-10 kg/Sq CM.
- Incubator must be provided with calibration certificate after the installment. Each year calibration to be done for three years.
- Quote for Only One Model in accordance to the specification desired. Technical Bid with Multiple Option shall be summarily rejected.
- Fit to Indian electrical system such as plugs and frequency. European CE certified. Certificated to be provided, IEC 61010 complained. Certificated to be provided. Must provide breakdown visit within one week from the date of complaint. Must visit technical visit every 6 months for two years. Warranty two years from the date of supply.

Warranty: 3 Years manufacturer warranty and after that 2 years of CMC.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration

SCHEDULE NO.: FIFTEEN PART A:

TECHNICAL SPECIFICATION OF MULTI MODE MICROPLATE READER:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Automated multi-mode plate reader, Detection, Modes: UV VIS absorbance, Fluorescence intensity, Luminescence (glow and flash), TRF, Alpha screen/Alpha LISA, FRET assay detection with capability to read nano volume samples specially concentration of DNA/RNA.

Microplate-6- to 384-well plates, Petri and cell culture dishes plate to read nano sample (minimum 2 ul 10 samples)

Absorbance 230 - 999 nm, monochromator based with 1 nm increment.

Monochromator wavelength-±0.2 nm, Monochromator wavelength accuracy -±0.2 nm

Read method endpoint, kinetic, spectral scanning, well area scanning.

Data Analysis Software for complete data analysis and curve fitting ,single click export of data to excel

OD range 0-4 OD with resolution 0.0001 OD

Fluorescence intensity 300-700 nm(filter based with 4 excitation and 4 emission filters)

Dynamic range >6 decades

Sensitivity -Quad Monochromator: Fluorescein 2.5 pM (0.25 fmol/well, 384-well plate) - top Fluorescein 4 pM (0.4 fmol/well,

384-well plate) - bottom

Reading method: both top probe and bottom probes are required

Luminescence 300-700 nm

Dynamic range >6 decades

Sensitivity >35 amolatp

Alpha detection

Light source tungeston halogen

Wavelength selection Filters

Separate optics, light source and detector for fluorescence and absorbance.

Light source for fluorescence (tungsten halogen)

Detector for fluorescence PMT

Light source for absorbance xenon flash lamp

Detector for absorbance photo diode

Shaking modes linear and orbital

Temperature control: incubation to 50 degree with condensation control.

Plate compatibility: 6-384 well plate

Attachment to read more then 10-12 (2ul sample simultaneously)

Suitable branded pc and laser printer need to quote

100 microplate each for absorbance ,fluorescence and luminescence

3 qty quartz cuvette/ vessal

CE and TUV marked. RoHS Compliant. Models for In Vitro Diagnostic use are available.

Warranty: 3 Years manufacturer warranty and after that 2 years of CMC.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SCHEDULE: FIFTEEN PART B:

TECHNICAL SPECIFICATION OF ELECTRO FUSION MACHINE:

[N.B. Equipment under this schedule should conform to BIS/ ISO Certification Standards, a proof of which shall have to be submitted along with the Technical Bid]

Technical Literature, brochures and all other relevant information supporting the bid must accompany the Technical Bid.

Electro fusion machine for production of cloned embryos in bovines. Should have basic unit, Generator, fusion chambers (Micro slides, Fusion Chamber, Flat Electrode) as well as safety stand and cuvettes 1 mm (10 Nos) for electroporation. Provide 0.5mm gap Microslides (30 nos). One vibration free table of suitable size for accommodating the electrofusion machine. Monitor and track electrical data used in Electro-fusion and USB storage. One pair of additional cable for attachment of chamber with machine. System should have footswitch option for hands free operation (n=1). Compliance with all national and international regulators regarding emission electrostatic discharge, electromagnetic field safety etc. Parameters are -

AC Parameters (Alignment)

Frequency 1 MHz, fixed Voltage 0-75 V Duration 0-60 sec or >

Post fusion AC amplitude 1/10 of pre-fusion amplitude

Post fusion AC duration 0-9 sec
Pause between AC / DC 50 µsec

DC Pulse Parameters (Fusion/Electroporation)

High Voltage Mode (HV mode)

Voltage 100-3000 V Pulse Length 1-99 μsec

Low Voltage Mode (LV mode)

Voltage 10-500 V
Pulse Mode 0.01-0.99 msec 1-99 msec

Number of Pulses 0-9

Warranty Three years from installation date

Must Install and provide full demonstration the machine within one month of supply

Warranty: 3 Years manufacturer warranty and after that 2 years of CMC.

Must provide catalogue number of all parts as above.

Address of Consignee: Deputy Manager (EBRTC)/ In-Charge, IVF, Embryo Bio Technology Research and Training Center, Animal Breeding Farm, Kalsi, Dehradun, Uttarakhand

Deliver Schedule: Within Two month from the date of Order.

Quote for only one model in accordance to the specification desired, technical bid with multiple options shall be summarily rejected.

Note: Quoted Rates will be valid for One Year Duration.

SECTION VI-A: QUALIFICATION CRITERIA

SCHEDULE NO. ONE: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. TWO: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. THREE: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. FOUR: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. FIVE: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. SIX: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. SEVEN: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. EIGHT: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. NINE: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. TEN: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. ELEVEN: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. TWELVE: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. THIRTEEN: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. FOURTEEN: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SCHEDULE NO. FIFTEEN: The bidder should have previous experience of supplying items of similar specification. The bidders are therefore required to submit necessary documents in support of having the above mentioned experience including all other documents (as per checklist) in the Technical Bid.

SECTION VII

DECLARATION

Bid Reference No.: 2150/ULDB/PROC./Vol.XVI ETT/2019-20	Dated: 23 rd October 2019
To: Chief Executive Officer Uttarakhand Livestock Development Board Pashudhan Bhawan, Ist Floor, P.O. Mothrowala, Dehardun – 248001, Uttarakhand, India Sir, I Having examined the Bidding Document Bid Reference No.: 2150/ULD October 2019 including Addenda Nos	which is hereby duly acknowledged, we the lding document and offer to supply and
We undertake, if our bid is accepted, to deliver the goods in accordance with document.	the delivery schedule specified in the bidding
If our bid is accepted, we will submit DD/ FDR/ Banker's Cheque / Banker equivalent to percent of the total Contract Price for the due performance of the Purchaser.	
We agree to abide by this bid for the Bid validity period specified in ITB Claumay be accepted at any time before the expiration of that period.	ise 14 and it shall remain binding upon us and
Until a formal contract is prepared and executed, this bid, together with notification of award, shall constitute a binding Contract between us.	your written acceptance thereof and your
We undertake that, in competing for (and, if the award is made to us, in exobserve the laws against fraud and corruption in force in India.	secuting) the above contract, we will strictly
We understand that you are not bound to accept the lowest or any bid you may	receive.
We clarify/confirm that we comply with the eligibility requirements as per the	bidding document.
We, as an authorized representative(s) of company/ Firm, declare that our Co is not declared ineligible for corrupt & fraudulent practices, is not blacklisted either is nor has had work withdrawn, by any State/ Central Government/ PSU.	
Dated this day of20	
Name & Seal of Signing Authority	
(signature)	(in the capacity of)
Duly authorized to sign Bid for and on behalf of	

SECTION - VIII

 $\underline{\text{BID SECURITY FORM}}$ (Proforma of Bid Security to be submitted in $\ref{100.00}$ Non judicial stamp paper)

			submitted its bid dated
(name or bound successor	of country unto	assigns by these presents. Sealed with the Common Seal of the said Ba	reinafter called "the Bank"), are Purchaser") in the sum of haser, the Bank binds itself, its
THE CO	ONDITIC	ONS of this obligation are:	
1.	If the B	idder	
	(a) (b)	withdraws its Bid during the period of bid validity specified by the Bidd does not accept the correction of errors in accordance with the ITB; or	er on the Declaration ; or
2.	If the E	Bidder, having been notified of the acceptance of its bid by the Purch	naser during the period of bio
	(a)	fails or refuses to execute the Contract Form if required; or	
	(b)	fails or refuses to furnish the performance security, in accordance with the	he Instruction to Bidders;
having t	to substa	pay the Purchaser up to the above amount upon receipt of its first written ntiate its demand, provided that in its demand the Purchaser will note the occurrence of one or both of the two conditions, specifying the occur	nat the amount claimed by it is
		vill remain in force up to and including Ninety Days (90) days after the espect thereof should reach the Bank not later than the above date.	period of the bid validity, and
			(Signature of the Bank)
1			
Name of	f Bidder		

SECTION -IX

CONTRACT FORM

(Proforma of Agreement to be signed in ₹100.00 Non judicial stamp paper between Uttarakhand Livestock Development Board and the successful bidder)

THIS		EMENT	made	the							Between Purchaser") of
the one	part and	l			(Name of	Suppli					d Country of
				us that certain by the Suppl			-		(Br	ief Descrip	tion of Goods
NOW T 1.	In this A		words an				meaning	s as are re	spectively	y assigned t	to them in the
2.		owing docu the Purcha the Schedu the Techni the Genera	uments shaser's Not ule of Re ical Spec al Condit	nall be deeme tification of A quirement;	Award; ract and	nd be r	ead and c	construed a	as part of	this Agreer	nent, viz.:
3.	Supplier in conformation The Purand the	hereby co rmity in all chaser here remedying	venants respects by cover of defec	with the Purc with the pro- nants to pay	chaser to privisions of the Supplier the Contract	ovide t he Con r in cor Price o	the goods tract. nsideration or such o	s and servi on of the puther sum a	ces and to rovision of as may be	o remedy d	nentioned, the defects therein s and services able under the
		here of the year first a			aused this A	greem	ent to be	executed i	n accorda	ance with th	eir respective
Signed, For and		f of Purcha	ser (one j	part)		<u> </u>	Supplier ((other part)	<u>)</u>		
in the p	resence (of			1.						
2.					2.						
on beh	alf of on	e part			O	n behal	lf of othe	er part			

SECTION - X

PERFORMANCE SECURITY FORM FOR BANK GUARANTEE

To:			(N	ame of P	urchaser)				
WHEREAS							(Name of S	Supplier))
hereinafter	called				undertaken,				
			20						
(De	escription o	of Goods an	d Services) her	einafter	called "the Contra	ct".			
	a recogniz	ed bank for	the sum specif		aid Contract that in as security for			•	
ofpay you, upon argument, an	RE WE hern your first y sum or	eby affirm to the control of the con	(Ar mand declaring n the limit of	nrantors a nount of the Sup	uarantee: and responsible to the Guarantee in oplier to be in defa(Amount mand or the sum s	n Words ault unde t of Gua	and Figures) a er the Contract a rantee) as afor	nd we u and with	ndertake to out cavil or
This guarante	e is valid u	nit the	day o	f	20				
					Signa	ature and	Seal of Guaran	tors	
							20		
					Addr				
						•••••	• • • • • • • • • • • • • • • • • • • •	•••••	

SECTION XI

PERFORMANCE STATEMENT Proforma for Performance Statement (for a period of last two to three year)

of Opening	Technical Bid	Date of opening of T	ctober 2019	Dated: 23 rd O	Bid Reference No.: 2150/ULDB/PROC./Vol.XVI ETT/2019-20			
Name of the Firm								
the equipment/	Remarks indicating	Value of order Date of completion of delivery			No. and Description and	Order No. and	Order placed by	
been satisfactorily oning? (Attach a ficate from the aser/Consignee)	reasons for late delivery, if any	Actual	As per contract		quantity of order	date	(full address of Purchaser)	
been sat oning? (ficate fr	reasons for late	•		Value of order				

Signature and seal of the Bidder

SECTION - XII

MANUFACTURERS' AUTHORIZATION FORM

	Letter No	dated
To		
Dear Sir:		
Bio	d Reference No.: 2150/ULDB/PROC./Vol.X	VI ETT/2019-20 Dated: 23 rd October 2019
manufacturer having fa (address of	factory) do hereby authorize M/s ddress of Agent) to submit a bid, and sign the	who are established and reputable
		are oods manufactured/ produced by us, against this specific IFB.
We	hereby extend our full guarantee and warrar	aty as Clause 15 of the General Conditions of Contract and
Clause 10 of this IFB.	the Special Conditions of Contract for the go	ods and services offered for supply by the above firm against
		Yours faithfully,
		(Signature) (Name of manufacturers)
Note:		e letterhead of the manufacturer and should be signed by a r of attorney to legally bind the manufacture. It should be

SECTION XIII

$\frac{PROFORMA\ FOR\ EQUIPMENT\ AND\ QUALITY\ CONTROL\ EMPLOYED\ BY\ THE\ MANUFACTURER/}{PRODUCER}$

	Bid 1	Reference No.: 2150/ULDB/PROC./Vol.XVI ETT/2019-20 Dated: 23 rd October 2019
Date of	of Openin	g
Name	of Bidder	r:
(Note:	: All detai	ls should relate to the manufacturer for the items offered for supply)
1.	Name	& full address of the manufacturer
2.	(a) (b) (c)	Telephone & Fax No Telex No. Office/Factory/Works Telegraphic address: Office/Factory/Works
3.	Location	on of the manufacturing/ production factory
4.	Details	s of Industrial License, wherever required as per statutory regulations.
5.		s of important Plant & Machinery functioning in each dept. (Monographs & description pamphlets be ed if available).
6.	Details	s of the process of manufacture in the factory.
7.	Details	s & stocks of raw materials held.
8.	Produc	ction capacity of item(s) quoted for, with the existing Plant & Machinery
	8.1 8.2	Normal Maximum
9.	Details	s of arrangement for quality control of products such as laboratory, testing equipment etc.
10.	Details	s of staff
	10.1	Details of technical supervisory staff in charge of production & quality control.
	10.2	Skilled labour employed
	10.3	Unskilled labour employed
	10.4	Maximum No. of workers (skilled & unskilled) employed on any day during the 18 months preceding the date of Tender.
11.		her goods are tested to any standard specification? If so, copies of original test certificates should be ted in triplicate.

Are you registered with the Directorate General of Supplies and Disposals, New Delhi, India?

If so, furnish full particulars of registration, period of currency etc. with a copy of the certificate of registration.

12.

(Signature)
(Name of manufacturers/ producer)

SECTION XIV

CHECKLIST FOR TECHNICAL BID SUBMISSION

S. No.	Particulars	Scanned Copy of Document Attached (Yes/No)
1	Proof of Cost of Bid Document	
2	Proof of Bid Security	
3	Proof of Declaration	
4	Bidder's Profile along with proof of certification having details of	
	registration; PAN No; GSTIN No. etc.	
5	Latest GST Return Filing Statement	
6	Summary of Latest Audited Balance Sheet	
7	Documentary proof of BIS &/or ISO certification or any other	
	relevant document	
8	Technical Details of the items conforming to the bid along with	
	Catalogues/ Brochures etc.	
9	Experience of the bidder conforming to the qualification criteria as	
	specified in Section VI A of bid document & other relevant	
	documents establishing bidders eligibility & qualification	