



DBT-AAU CENTER FOR AGRICULTURAL BIOTECHNOLOGY  
ASSAM AGRICULTURAL UNIVERSITY  
JORHAT

**NOTICE INVITING QUOTATIONS**

Sealed quotations are invited from the reputed manufacturers/authorized dealers/suppliers for supply and installation of laboratory equipments / instruments etc. The quotation may be obtained w.e.f. 19.10.2017 from the office of the undersigned personally or by sending self-addressed stamped (Rs.25/-) envelope on payment of Rs.200/-(Rupees two hundred) only in the form of crossed IPO / DD drawn in favour of “The Comptroller, Assam Agricultural University, Jorhat-13”, and bid security amounting to 2% of the quoted price in the form of a Demand Draft/ Call Deposit in favour of “AAU-DBT Center, Assam Agricultural University, Jorhat-13”, separately for each item quoted, which will be received by the undersigned up to 2.00 PM on 10.11.2017 and will be opened on the same date and hour. The documents can also be downloaded from the classified section of University’s website [www.aau.ac.in](http://www.aau.ac.in).

Sd/- B K Sarmah  
Centre Director  
DBT- AAU Centre  
AAU, Jorhat-13

Memo No. DBT-AAU/AAU/02(3/83)-2017-18/ 814-26

DATED 18/10/2017

Copy for information to:

1. The PS to the Vice-Chancellor, AAU, Jorhat
2. The Comptroller, AAU, Jorhat
3. The Registrar/ All Directors/ Chief Librarian/ Director of Research. They are requested to display in the notice boards.
4. The Web Master, ARIS Cell, AAU, Jorhat. He is requested to upload the advertisement in AAU website.
5. The Adwell Advertising Agency, Jail Road, Jorhat. They are requested to publish the above quotation notice in the (i) The Dainik Janambhumi, (ii) The Assam Tribune and in minimum size and one issue urgently and submit the bill in quadruplet alongwith the paper-cutting for payment.
6. The Supervising Officer, Government of India book Depot, 8, KS. Roy Road, Kolkata : 700001. He is requested to publish the advertisement in the forthcoming issue of Indian Trade Journal and submit the bill in quadruplet alongwith the paper cutting for payment.
7. The Notice Boards of the Dean, FA and Department of Agril. Biotechnology, AAU
8. Instrumentation Engineer, DBT-AAU Centre, AAU.
9. The Accountant, DBT-AAU Centre, AAU.
10. Office Copy.

Centre Director  
DBT- AAU Centre  
AAU, Jorhat-13

## Terms and Conditions

1. The quotation fees of Rs.200/- (Rupees Two hundred only) in favour of “the Comptroller, Assam Agricultural University, Jorhat-13” is not refundable. Those who will submit the quotation by down loading the tender documents, they must have to submit the quotation fee in the form of DD along with the quotation without which quotation will be rejected.
2. The bidder shall enclose EMD 2% of the quoted price in the shape of DD drawn in favour of “AAU-DBT Centre, Assam Agricultural University, Jorhat-13”. The bids that are not accompanied by the aforesaid bid security will not be accepted. The details of bid security must be provided. The bid security of the unsuccessful bidders will be released after issuing supply to the successful bidder and the bid security of the successful bidder will be released after execution of the order.
3. Quoted Prices: To facilitate prompt evaluation, the bidder shall quote the price of the items separately along with all relevant papers for supporting the quoted price such as catalogue, dealership certificate, user list etc., failing which the bid may be treated as non-responsive, at the discretion of the purchaser. The quotation shall be sealed and superscripted at the top of the sealed cover “Quotation for Equipment, DBT EXTRA-MURAL PROJECTS”
4. The bid submitted to the bidder shall remain valid for a period of 90(ninety) days. Bid not conforming to this provision shall be treated as non-responsive.
5. To facilitate prompt evaluation, the bidder shall provide Technical Compliance Report (TCR) and price data for each item separately.
6. Quotation must also be submitted in a **soft copy in CD (to support in Microsoft words only) in the following format failing which the bid treated as non-responsive, at the discretions of the purchaser. In case of any optional items, pictures should be shown separately. Any discrepancies in the soft copy will be the responsibility of the quotationers.**

### Format

Name of Item	Brief Specification	Unit Price	GST/Freight Charge if any (FOR Jorhat)/	Total
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7. The rate shall be quoted for all duties, taxes and other levies payable by the bidder shall be included in the item rate. GST should be quoted separately (TIN No/GST No. must be furnished)
8. There should not be any overwriting. Corrections, if any, should be made with dated initial of bidder. Bidder shall submit quotation separately in each item.
9. Rates should be quoted clearly both in words and figures separately for each item without which the quotation shall stand rejected.
10. The price quoted shall be fixed and not subject to adjustment/variation during the performance of the contract.
11. The warranty of the items shall be as per the prevailing warranty policy/certificate of manufacturer (where necessary) for the items and warranty period shall not be less than **12** months from the date of commissioning of items at site.
12. The bidder shall furnish the warranty for all the items at the time of delivery and commissioning. The purchaser shall reject the items not enclosed by warranty certificate from their manufacturer. The warranty certificate should be duly signed and sealed.
13. Bidders must supply the items at their own cost. **All machineries/equipments are to be supplied FOR destination.** Delivery of goods shall have to be completed within 30 (thirty) days from the date of issuing supply order.
14. Installation and commissioning charges, if any, inclusive of expenses of foundation work etc. are to be mentioned separately against each machine. In case of no mention, the same will be considered as inclusive of installation cost whenever applicable.
15. The machineries are to be supplied ready to operate, complete with motor, starter and any necessary gadgets including catalogues, trouble shooting manual etc. without which the same will be considered as incomplete supply.

16. List of spare parts with current price to be required during operation of the machines and addresses of the source of spare parts availability including contact no., e-mail etc. are to be provided in a separate sheet.
17. Price of one set of critical wearable spares that would hamper the working of the machineries/equipments should be mentioned separately against each machine.
18. The supplier shall provide free maintenance services during the period of warranty. Any repair and maintenance including providing of spare parts (covered by manufacturer's warranty certificate) during the warranty period shall be bidder's responsibility.
19. Detailed specification with make, model, size, and code no., catalogue, and name of manufacturer should be furnished. ISO certificate must be furnished for the offer make where applicable.
20. Copies of S.S.I registration or such documents may be produced with quotation.
21. Attested copies of dealership certificate and Co's printed price list must be enclosed with the quotation.
22. Up-to-date sale Tax clearance certificate and Income Tax return of last two years duly attested must be submitted along with the quotation. PAN No. must be furnished.
23. For imported equipment, the following terms & condition will apply:
  - a. For each equipment sight draft/ Letter of Credit as per terms and conditions acceptable to Assam Agricultural University, **whichever is convenient as per existing Rule & Regulation of the Assam Agricultural University**. The foreign draft will be prepared in the currency of the Manufacturer and a photocopy of the same will be provided to the supplier. After supply & installation of the equipment the actual DD will be handed over.
  - b. The vendor must take responsibility of Customs clearing free of charge and arrange onward transportation to destination. The department will provide necessary documentation for the same within 10 (ten) days of receiving valid request from the vendor. The university will not bear any demurrage charges under any circumstances. The university will pay the concessional customs duty only at actual and provide the vendor with DSIR and CDEC certificates for the same, request for which has to be made well in advance.
24. Payment by A/C payee Cheque shall be made after receipt of the equipments in good condition (installation and testing, wherever necessary). In case of imported equipment payment shall be made by sight draft or opening L/C based on the proforma invoice and order acceptance letter from the principals as mentioned earlier. Quotations (for indigenous equipment) having any other conditions for payment, viz. advance payment/payment through bank shall not be entertained.
25. Where ever the laws and regulations require, deduction of taxes at source of payment, the purchaser shall effect such deduction from the payment due the supplier, the remittance of amounts so deducted and insurance certificate for such deduction shall be made by the purchaser as per the laws and regulation in force.
26. The quotation **will be opened on the day of last date of submission at 3 p.m.** in the office of the undersigned, AAU, Jorhat-13. The bidder or his authorized representative may attend the bid opening. Except price, no other details will be announced during the opening.
27. Every page of the bidding documents purchased from the purchaser are to be signed by the bidder including their acceptance of terms and conditions and returned with their quotation.
28. The undersigned reserves the right to accept or reject any quotation and to cancel the instant bidding process and reject all quotation at any time prior to award of contact, without thereby incurring any obligation to the affected bidders of grounds for the purchaser action.
29. All the accessories required for full and proper functioning of the equipment should be included with the unit price not as accessories such as Voltage stabilizer, Computer, software etc.
30. All the equipments are kept in the ambient temperature, if the equipment requires any specific environment that should be mention in the technical specification part.

Centre Director  
DBT- AAU Centre  
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## Annexure-I

### Format for EMD details

(EMD to be provided separately for each item)

Sl No	Sl No of the item (as per bid document)	Name of the project	Name of the item quoted	Basic Price of the item (excluding taxes & transportation charges)	Price in Indian Rupee (for imported items at prevailing rate of exchange)	Amount of EMD (2% of Basic price)	Details of EMD submitted including amount and validity
1							
2							
3							

## Annexure II

(To be provided separately for each item)

### FORMAT FOR Technical Compliance Report & Price data

1. **Sl No of the item (as per bid document):**
2. **Name of the item:**
3. **Manufacturer:**
4. **Make & Model:**

Sl. No.	Specification asked for (strictly as mentioned in bid document)	Specification offered (Corresponding to specification in bid document)	Technical Compliance (Yes/No)	Variation if any	Details of Technical literature supporting the technical compliance (Suitably tagged)

### Price data:

1. Price\*:
2. Taxes and levies (GST for indigenous equipment and applicable rate of Customs duty against DSIR certificate for imported items)
3. Installation:
4. Transportation:
5. Warranty:
6. Any other terms & condition

Signature & Seal of the bidder

\* F.O.R.AAU Jorhat for indigenous equipments.

## SPECIFICATIONS OF INSTRUMENTS:

SL NO	Name of the Project	ITEM	SPECIFICATION
1	<b>Genetic studies to understand mitochondrial electron transport chain dysfunction using <i>Caenorhabditis elegans</i>.</b>	<b>High resolution automated state of the art fluorescence microscope with both stereo and mono (macro) mode and imaging facility with scientific digital camera.</b>	<ol style="list-style-type: none"> <li>Automated fluorescence microscope having stereo and mono mode and zoom range 10:1 or better.</li> <li>Motorized zoom and focus with course and fine adjustment.</li> <li>Magnification 7.8x-160 or better with 1.0x objective &amp; 10x eyepiece.</li> <li>Resolution 525 lp/mm with 1.0x objective.</li> <li>1.0x Plan Apo objective with numerical aperture 0.175 or more.</li> <li>High Resolution Plan Apo 5x/0.50 HR micro objective.</li> <li>Optical path should give maximum resolution &amp; maximum depth to get best of observation.</li> <li>Observation tube trinocular with 100/0%-0/100% light path.</li> <li>Transmitted illumination with bright filed, dark filed and oblique illumination.</li> <li>Motorized fluorescence attachments with Mercury/Metal Halide light source. Excitation filters DAPI, GFP, RFP, FITC and Rhodamine</li> <li>Scientific digital camera for fluorescence and normal bright field imaging.</li> <li>Computer system with Software for multi channel and z stack.</li> <li>Bidders must provide the respective web links (of the manufacturer's website) for the quoted microscope, camera and software for confirmation of compliance to the specifications.</li> </ol>
2	<b>Genetic studies to understand mitochondrial electron transport chain dysfunction using <i>Caenorhabditis elegans</i>.</b>	<b>Media dispenser (Peristaltic pumps)</b>	<ol style="list-style-type: none"> <li>Large display and clear user guidance with navigational keys for fast setup and use.</li> <li>Dose volume 0.1 ml – 9,999 ml.</li> <li>Flow rate 0.6 ml/min–2.5 L/min (5 L/min with 2<sup>nd</sup> Pump Head).</li> <li>Compact, lightweight and portable design.</li> <li>Wide range of tubing sizes (1mm~8mm ID) with aspiration/ dispensing stainless steel tube for precise dosing of millilitres to litres.</li> <li>Jagged, V-shaped tubing clamps on both sides of the pump head to guarantee that the tubing does not slip when the rotor turns.</li> <li>Memory for 20 dosing protocols for conveniently switching between different applications.</li> <li>CUSTOMIZE mode for easy and efficient creation of personalized liquid handling protocols without the use of PC.</li> <li>Can program with 7 different step types, Repetitions between 1 – 999 or, Cycles between 1 – 999 &amp; Wait time between 1 sec – 10 hours.</li> <li>Rotor turning direction can be changed between CW &amp; ACW.</li> <li>In-built program for coating of Petri dishes, density gradient tubes, serial dilutions.</li> <li>Pump mode to continuously pump a liquid instead of dispensing.</li> <li>Comes with Pipette-tubing adapter which allows connection of different serological pipettes, Pasteur pipettes or tips to silicone tubing.</li> <li>Easy steps for Calibration.</li> <li>CE certified.</li> <li>RS-232 interface for connection with printer to document the dispensing and pumping performed.</li> <li>Can be connected a PC through the RS-232 (2) port, to generate an electronic text file to document the dispensing and pumping performed.</li> <li>AUX connection for controlling a second unit.</li> <li>1 year warranty.</li> <li>Optional Retort rod with filling arm.</li> <li>Optional 2<sup>nd</sup> Pump Head to achieve the maximum flow-rate of 5L/min.</li> </ol>

3	<p><b>Understanding the Molecular Mechanism of anaerobic germination in hypoxia tolerant rice germplasms of Assam through functional genomics study</b></p>	<p><b>Nanodrop UV spectrophotometer</b></p>	<p>Microvolume UV-VIS Spectrophotometer with following specifications:-</p> <ul style="list-style-type: none"> <li>• The instrument should have the technology of <b>sample retention</b> that allows a sample to be pipetted directly onto an optical measurement surface. The system should use inherent surface tension to hold micro-volume sample in place during the measurement cycle.</li> <li>• Wavelength Range: 190-850 nm or better</li> <li>• <b>Minimum Sample Size: 1.0 µL</b></li> <li>• Pathlength: 0.030 to 1.0 mm auto-ranging</li> <li>• Light Source: Xenon flash lamp</li> <li>• Detector Type: 2048-element linear silicon CCD array</li> <li>• Wavelength Accuracy: ±1 nm</li> <li>• Spectral Resolution: &lt;1.8 nm (FWHM @Hg 2 53.7 nm)</li> <li>• <b>Dynamic range: : 2.0 - 27,500 (ng / µL dsDNA)</b></li> <li>• <b>Maximum Concentration: 27,500 ng/µL (dsDNA)</b></li> <li>• Measurement Time: 8 seconds</li> <li>• <b>The system should have the feature of contamination identification &amp; bubble detection to ensure measurement integrity.</b></li> <li>• <b>There must internal storage system of the spectrophotometer.</b></li> <li>• The system should have high resolution integrated touch screen</li> <li>• System should be offered with two years warranty</li> </ul>
4	<p><b>Understanding the Molecular Mechanism of anaerobic germination in hypoxia tolerant rice germplasms of Assam through functional genomics study</b></p>	<p><b>Quantitative Real-time PCR</b></p>	<ul style="list-style-type: none"> <li>• Real time PCR with block of 96 x 0.2 ml tubes or plate to Run typical 0.2ml tubes, strips, and plates. Should have fixed top-loading block.</li> <li>• The base thermal cycler should be able to be used for standard PCR without switching on the optical module / LED to have a increased life time of the optical device.</li> <li>• System should be <b>Gradient enabled</b>. With 8 different temperature zones.</li> <li>• Minimum six excitation and six emission channels each filter should correspond to one dye that ensures smooth differentiation of dyes having high degree of spectral overlap.</li> <li>• 21 or more colors in the emission range.</li> <li>• <b>Detection of 5 or more</b> different fluorescent reporters in the same tube.</li> <li>• Should be capable of Detecting Cy5, FAM/Sybr Green, VIC/JOE, TAMRA/Cy3, Texas Red, Quasar705</li> <li>• System should be able to collect data for all filters for all wells regardless of place setup.</li> <li>• Maximum Ramping speed : 5 °C per sec with sample</li> <li>• Peltier Cooling &amp; Heating for uniform temp control</li> <li>• Should have a channel dedicated for FRET experiments</li> <li>• Excitation –Emission range: 450- 730nm or broader.</li> <li>• No internal reference dye should be required. True 5 Color Multiplexing with use of 5 different flourophores without the need of addition of any internal reference dye,</li> <li>• LED excitation source with Photodiode</li> <li>• Dynamic range of 10 orders.</li> <li>• Open system capable of running various chemistries so that Different chemistries using TaqMan, Molecular Beacon, SYBR green etc all can be performed.</li> <li>• Temperature range 0– 100 °C with accuracy of ±0.2 °C and uniformity of ±0.4 °C within 10 sec of arrival at 90 °C</li> <li>• The system should be able to detect 1 copy of template for a single reaction.</li> <li>• Minimum sample vol : 1µl &amp; Max Sample volume 50 µl</li> </ul>

		<ul style="list-style-type: none"> <li>• Should detect <math>\leq 10</math> fmol of fluorescein</li> <li>• Should have multiple scan modes with a FAST scan option for reading all wells in 3 seconds</li> <li>• Automatic allelic discrimination by end point fluorescence or threshold cycle.</li> <li>• Gene expression analysis by relative quantity (<math>\Delta Ct</math>) or normalized expression (<math>\Delta\Delta Ct</math>).</li> <li>• End point analysis for upto 5 fluorophores</li> <li>• Should have mode for Melt curve analysis</li> <li>• Should be capable to perform dye binding thermal shift assays for protein unfolding analysis.</li> <li>• Comparison of upto 5000 Ct values from different data files should be possible</li> <li>• The amplification traces should be viewed on the LCD screen in real time while a run is in progress with touch screen facility.</li> <li>• Software should have express load feature which allows entry of data after experiment.</li> <li>• Should be licensed for Research &amp; IVD applications.</li> <li>• System should be compliant with the MIQE Guidelines</li> <li>• Should have a dedicated FRET Channel</li> <li>• System should provide the option of software which is RDML compliant</li> <li>• Software should be license free or else 15 license copies of the same should be quoted.</li> <li>• Software should be capable to import and analyze data from any real time PCR platform.</li> <li>• Additional QBase Plus software should be quoted along with the system.</li> <li>• System should come with start up consumables ( 200 rxn SYBR Green , 50 Nos of Hard Shell PCR Plates , 100 nos of Sealers )</li> <li>• Should be provided with a suitable Computer for analysis.</li> <li>• Should be provided with 2 KVA Online UPS.</li> <li>• Should be supplied with a Gradient PCR of below configuration : <ul style="list-style-type: none"> <li>• Should have a sample capacity of 96x0.2ml tubes, 0.2ml tube strips or universal or standard 1x96-well plate of 8x12 format with six or more Peltier heating and cooling.</li> <li>• System which are not capable of taking plates will not be considered.</li> <li>• Should have true gradient capability with Dynamic ramping technology, other technologies apart from gradient will not be considered.</li> <li>• Should have the feature of dynamic ramping with identical hold times for all the 8 rows of gradient.</li> <li>• Should have a temperature differential range of 1-25degC across the rows.</li> <li>• Should have intuitive 5.7" (14.5 cm) touch screen interface which can displays graphics in high resolution for easy programming.</li> <li>• The touch screen should be responsive for both gloved and ungloved fingers.</li> <li>• Should be capable of running reaction volumes from 1-100ul.</li> <li>• Should have a maximum ramp rate of 4 degC/second.</li> <li>• Should have a temperature range of 4-100 deg C</li> <li>• Should have a gradient range of 30-100 deg C</li> <li>• Should have a temperature accuracy and uniformity of <math>\pm 0.5</math> deg C</li> <li>• Should have a memory of &gt;500 programs with further expansion through a USB Flash drive for transfer of files.</li> <li>• Should have block and calculated temperature control modes.</li> <li>• The software should be capable of exporting Run logs and system error logs</li> <li>• Should have quick boot up time of not more than 1 min.</li> </ul> </li> </ul>
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			<ul style="list-style-type: none"> <li>• Should be quiet in operation.</li> <li>• System should have built in library of standard protocols for long PCR, fast PCR, reverse transcription PCR etc.</li> <li>• Should have the feature of “Instant Incubation” to keep samples at constant temp for ligation and restriction digests.</li> <li>• Should have power save mode.</li> <li>• Should be compatible with all kind of plastic consumables and reagents specially reusable sealing Mats.</li> </ul>
5	<p><b>Understanding the Molecular Mechanism of anaerobic germination in hypoxia tolerant rice germplasm of Assam through functional genomics study</b></p>	<p><b>-86°C Ultra low Freezer</b></p>	<ul style="list-style-type: none"> <li>* Vertical Freezer should have Microprocessor-controlled temperature facility and alarms with non-volatile memory.</li> <li>* Capacity should have 400 Liters or above. Sample storage capacity should have minimum 24,000.00 (in 2” box)</li> <li>* Freezer should have 5 compartments and 4 adjustable-height shelves, with 5 insulated inner doors.</li> <li>* Freezer should have Vent Plunger to prevent vacuum formation, Keyed lock, polished 304L stainless steel interior, exterior : 18 gauge steel, 1.2 mm thick, powder coated, scratch and rust resistant</li> <li>* Freezer should have programmable temperature range from – 50°C to -86°C, in 1°C increments, even at 32°C ambient temperature.</li> <li>* Minimum Power Consumption</li> <li>* Freezer should have the facility for Automatic Reset, Automatic Restart with Non-Volatile memory, programmed Restart.</li> <li>* Freezer should have Hermetically-sealed two-stage cascade refrigeration system with CFC, HCFC free refrigerants.</li> <li>* Internal Volume 410L</li> <li>* Freezer should have Unique Password to prevent unauthorized changes.</li> <li>* System should be supplied 6KVA UPS with 1 hour backup.</li> <li>* Freezer should have CE Certified and UL Certified</li> <li>* Rack and Box should be supplied free of cost.</li> </ul>
6	<p><b>Understanding the Molecular Mechanism of anaerobic germination in hypoxia tolerant rice germplasm of Assam through functional genomics study</b></p>	<p><b>Micropipette set (2 sets)</b></p>	<p><b><u>Micropipette</u></b></p> <ul style="list-style-type: none"> <li>• Adjustable volume of Micropipette with fully autoclavable</li> <li>• Micropipette should be Spring Loaded Tip Cone for connecting tips very tightly</li> <li>• Should have adjustment opening for adjusting pipettes to a specific liquid and volume.</li> <li>• Should have control Button with very low operating force, Color indication for pipette volume.</li> <li>• Tip ejector with very low operating force, positioned for perfect ergonomics.</li> <li>• Volume Display: 4 Digits with magnifier.</li> <li>• To provide thermal, mechanical and chemical stability piston should be manufactured from Fortron material</li> <li>• Very easy removable lower part for cleaning pipette</li> <li>• Volume 0.5-10 µL, 2-20 µL, 10-100 µL, 20-200 µL, 100-1000 µL, 0.5-5 mL including pipette stand</li> </ul> <p><b><u>Repeatman</u></b></p> <ul style="list-style-type: none"> <li>&gt; Pipette should have automatic Combitip recognition eliminates time-consuming volume calculations</li> <li>&gt; Repetitive dispensing modes decrease the number of movements by allowing the user to fill the tip once and dispense up to 100 times without a refill</li> <li>&gt; Wide dispensing range of 1 µL to 10 mL</li> <li>&gt; Step counter: Dispensing procedures can be continued error-free after an interruption or distraction</li> </ul>



			<p>&gt; Central Combitip ejector: Fully emptied Combitip can be easily ejected with one hand using the operating lever</p> <p>&gt; Perfect for viscous or foaming solutions and liquids with high vapor pressure through direct displacement principle</p> <p>&gt; Safe handling of toxic, radioactive or infectious material</p> <p><b><u>Pipette Controller</u></b></p> <p>&gt; Intuitive and convenient speed adjustment with just the tip of your fingers</p> <p>&gt; Lightweight, well-balanced and ergonomic design that allows for fatigue-free pipetting</p> <p>&gt; Improved operating time and optical feedback of remaining battery life</p> <p>&gt; Should be supplied with power supply, wall holder, removable shelf rack and 2 membrane filters 0.45 µm</p>
7	<p><b>Understanding the Molecular Mechanism of anaerobic germination in hypoxia tolerant rice germplasms of Assam through functional genomics study</b></p>	<p><b>Hypoxia Incubation Chamber</b></p>	<p><b>Technical Specifications:</b></p> <p><b>Hypoxia Chamber for Tissue culture work with the following features and specification:</b></p> <p><b>Features: Should have facility of Automatically controlling Oxygen levels, temperature levels &amp; Carbon dioxide levels for high accuracy.</b></p> <p>O2 Sensor and CO2 sensor  Platinum RTD with sealing gland  N2, CO2, and O2 gas hook-up  Inert gas hook-up  Ethernet port connection for data logging  Thermoelectric Assembly (Peltier device)  Password protected to protect datas  configurable control  One touch, on screen data logging  Air circulation Fan  Configurable for up to six individually controlled sampling chambers.</p> <p><b>Specifications:</b></p> <p><b>Inside Dimensions:</b> should be not less than 450 lit.  <b>Oxygen (O2) range:</b> 0-25%  <b>Oxygen sensor accuracy:</b> ± 0.25%  <b>Carbon Dioxide (CO2) range:</b> ± 0-20% C  <b>Carbon Dioxide sensor accuracy:</b> ± 0.2%  <b>Temperature range:</b> ambient to 40° C  <b>Temperature accuracy:</b> ± 0.3° C @ 0° C (class “B” accuracy)  <b>Parameter control:</b> ±1% or degree of set point  <b>Power Requirements:</b> 230V 5 Amps/50 Hz  Should be provided with requisite gas cylinders.  With a <b>SHELF</b> Suspended sliding Shelf for single operator unit, Plate capacity is about 340. The entire assembly should be suspended from the chamber top to keep the floor area uncluttered. Plate Holding Capacity of dish size is 100 x 15 mm.  Top tier capacity (5 plates high). = 60 dishes  Tiers 2&amp;3 capacity 12 plates high x 12=144 x 2 shelves =288 dishes  Total shelf capacity=348 dishes</p>

8	<p>Screening of indigenous rice germplasms of Assam for tolerance to anaerobic condition during germination and marker assisted introgression of trait into elite rice HYV</p>	<p>Gel Electrophoresis system with power supply</p>	<p><b>Specifications:</b>  Maxi Gel Unit  <b>100 Wells Multichannel Compatible Horizontal Gel Box</b>  Multichannel pipette compatible.  Gel electrophoresis system to run the gel size of at least 25 x 15cm, and should be supplied with 25 x 15 Tray along with the Gel tank, safety lid, Tape free casting module, Comb and Comb holder. The supplied gel trays should be UV proof and the trays can be directly kept on the UV transilluminator.  Includes: buffer chamber Assembly, Running tray w/Silicone gasket, Safety lid, 1mm thick, 3 combs each with not less than 33 teeth</p> <p><b>Power Supply</b></p> <ul style="list-style-type: none"> <li>• Constant Voltage or Constant Current Mode</li> <li>• 10-300V,4-500mA,90W</li> <li>• 2 sets of 4mm output jacks</li> <li>• Continuous Runs or 999 Minute Timer</li> <li>• Certified to EN/UL 61010-1 and CSA 22.2 1010.1 Standards.</li> </ul>
9	<p>Screening of indigenous rice germplasms of Assam for tolerance to anaerobic condition during germination and marker assisted introgression of trait into elite rice HYV</p>	<p>Lux Meter</p>	<p><b>Features &amp; Specifications:</b></p> <ul style="list-style-type: none"> <li>• Display: Liquid crystal display (number of 7 digits); maximum effective display:999; (0 or 0's to indicate the number of digits)</li> <li>• -Range: 0.0 to 99.9/999/9,990/ 99,900/999,000lx</li> <li>• Function: Response switching, Range Hold, Timer Hold, Deviation display, Auto power off, Color correction factor setting,Average illuminance computation, Ripple measurement, Light source luminous intensity measurement, Measurement of totalized intensity of illumination.</li> <li>• DC 1V ±5% (fixed range); load resistance: 100kΩ or more</li> </ul>