

### ACHARYA N.G. RANGA AGRICULTURAL UNIVERSITY

# AGRICULTURAL RESEARCH STATION, LAM, GUNTUR, ANDHRA PRADESH – 522 034.

#### **TENDER BID DOCUMENT**

Notice Inviting Tender No.1 ANGRAU ARS AMT 2025-26; Dated: 24-09-2025

NAME OF WORK: - Supply of Equipments to Microbiology Laboratory, Agricultural Research Station, Amaravathi, Palnadu Dt, Andhra Pradesh – 522 020

### **INDEX**

S. No	Details	Page No
	Notice inviting tender (NIT)	03
1	General terms and conditions	04
2	Eligibility to participate in tenders	04
3	Submission of the on-line tender forms	04
4	Documents to be electronically uploaded	05
5	Transaction fee	06
6	Earnest money deposit (EMD)	07
7	Security deposit	08
8	Forfeiture/refund of the earnest money deposit/secure deposit	08
9	GST Certificate	09
10	Manufacturing license	09
11	Opening of bids & award criteria	09
12	Terms and conditions for commercial agreement	10
13	Agreement	12
14	Demonstration of the item	13
15	Other contractual obligations	13
16	Inspection and packing	14
17	Supplies as per specifications	15
18	Consequence of non-supply and damages	16
19	Penalties	17
20	Settlement of disputes	19
21	Delivery and Installation period	20
22	Warranty:	20
23	Payment terms	20
24	Contract closure	20
25	Cancellation & stopping the tender/purchase process	20
	ANNEXURE-I (Technical specifications)	22
	Annexure-II (Declaration)	25
	Annexure-III (Check list)	26
	Form T	27

Date: 24-09-2025



### ACHARYA N.G. RANGA AGRICULTURAL UNIVERSITY

Agricultural Research Station, Amaravathi, Palnadu Dt, Andhra Pradesh-522 020.

Tender Notice No.01/ANGRAU/ARS/AMT/2025-26

**Tender ID: 847748** 

E- Procurement tenders are invited from the original manufacturers or their authorized dealers for supply and installation of equipment at Agricultural Research Station, Acharya N.G. Ranga Agricultural University, Amaravathi, Palnadu Dt, Andhra Pradesh – 522 020

#### Details are as follows: -

1)	Bid document online opening date	24.09.2025; 09.00 PM
2)	Bid document download end date & time	08.10.2025; 02.00 PM
3)	Bid document submission closing date & time	09.10.2025; 02:00 PM
4)	Technical bid online opening date at the Agricultural	
	Research Station, ANGRAU, Amaravathi, Andhra	10.10.2025; 02:00 PM
	Pradesh.	
5)	Financial bid online opening date at the Agricultural	
	Research Station, ANGRAU, Amaravathi, Andhra	11.10.2025, 2:00 PM
	Pradesh	

- Bidders shall have APTS Registration (for details log on to <a href="www.apts.gov.in">www.apts.gov.in</a>)
- For details visit www.apeprocurement.gov.in and www.angrau.ac.in

For any clarification, please contact:

CONTACT: +91 9030551865 ars.amaravati@angrau.ac.in

Principal Scientist & Head Agricultural Research Station, Amaravathi, Andhra Pradesh-522 020.

#### 1. GENERAL TERMS AND CONDITIONS:

- 1. Tenders will be accepted through on-line up to 03-10-2025 until 02:00 PM by the Principal Scientist & Head, Agricultural Research Station, Amaravathi 522 020, Andhra Pradesh, towards the supply of equipment as listed in Annexure-I.
- 2. All the interested bidders have to mandatorily log on to e-procurement web site through Secure mode only and submit their bids using digital certificates (signing certificate single key pair) obtained from Andhra Pradesh Technology Services Ltd. [APTS Sub CA] in-compliance to Chapter III of IT Act 2000. The details and procedure for obtaining digital certificates are given at <a href="https://tenders.apeprocurement.gov.in">https://tenders.apeprocurement.gov.in</a>.
- 3. The tenders are invited for the supply of equipment, mentioned in Annexure-I to Principal Scientist & Head, Agricultural Research Station, Amaravathi 522 020, Andhra Pradesh functioning under Acharya N. G. Ranga Agricultural University, Lam (ANGRAU), Guntur as per the specifications enclosed in Annexure-I.

#### 2. ELIGIBILITY TO PARTICIPATE IN TENDERS:

- ✓ Manufacturers or their authorized dealers are eligible to quote in this tender. Authorized dealers should attach letter of authority from the principal manufacturer to quote in this tender.
- ✓ The dealers/ manufacturers should be registered firms and should have authorization certificate from principals in case representation of the international firm.
- ✓ The tenderer shall supply good quality items as per standards
- ✓ The Principal Scientist & Head, Agricultural Research Station, Amaravathi, Andhra Pradesh, reserves the right to reject the tender of blacklisted companies and those of companies whose past performance with the ANGRAU was unsatisfactory due to delayed/erratic supplies, frequent product failures etc,.

#### 3. SUBMISSION OF THE ON-LINE TENDER FORMS:

<u>Tenders have to be submitted in two parts in on-line</u> in the prescribed proforma *i.e.*, Technical Bid (Part-I) and Financial Bid (Part-II).

Financial Bids of those tenderers who qualify in Technical Bid will only be considered for finalization of the tender.

- The tenderer may please note that all the columns in the Technical Bid are to be filled in meticulously with precision, with documentary evidence wherever necessary.
- All the required documents / enclosures / literature / technical catalogs etc., have to be uploaded & attached along with Technical Bid (Part-I of the tender) only. Technical catalogues for quoted item is essential and also the same technical bid hard copy with out enclosing financial bid copy should reach to the Principal Scientist & Head, Agricultural Research Station, Amaravathi-522020 on or before 08-10-2025. Tenders submitted without technical literature of the items will be summarily rejected. Eligibility for Financial Bid (Part-II of the Tender) will depend on the outcome of documents uploaded / electronically attached to technical bid.

#### The schedules for opening of tenders through online are:

10-10-2025; 02:00 PM	Opening of technical bids
11-10-2025, 02:00 PM	Financial Bid <i>i.e.</i> , opened after finalization of technical bid

- ➤ The last date scheduled for RECEIPT of tenders are fixed and will not be changed under any circumstances. However, the Principal Scientist & Head, Agricultural Research Station, Amaravathi 522 020, reserves the right of postponement of the date of opening of tenders or date of opening of Financial Bids in the event of any unforeseen reasons.
- ➤ If for any unforeseen reasons, the last date for submission of tenders and opening of tenders happens to be a holiday, the notified dates automatically get postponed to next working day only.
- The Principal Scientist & Head, Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh, is "not responsible" for non-receipt of tenders or late uploading of tenders online for any reason, what so ever.
- Failure to fill and sign the declaration and check slip shall make tender invalid.

#### 4. DOCUMENTS TO BE ELECTRONICALLY UPLOADED:

• All the documents are arranged in the serial order (Serial numbers and page numbers should be indicated on the right side top of the corner) then uploaded to the e-procurement web site i.e., <a href="https://tenders.apeprocurement.gov.in">https://tenders.apeprocurement.gov.in</a>. The same documents in hard copy form should

also be sent to Principal Scientist & Head, Agricultural Research Station, Amaravathi – 522 020.

S. No	Code No.	Name of the Document
1	E-I	Declaration form (Annexure-II) with Signature & Stamp
2	E- II	Check list (Annexure-III) with Signature & Stamp
3	E- III	Manufacture license / Authorization letter from the manufacturing firm with self-attested
4	E- IV	GST clearance certificate, payment particulars for preceding two years along with supporting documents. (2023-24 & 2024-25).
5	E- V	Annual turnover assessment order for the preceding two years (2023-24 & 2024-25).certified by Commercial Tax Officer / Chartered Account.
6	E- VI	Copies of balance sheet, profit and loss account for last two years <i>i.e.</i> , (2023-24 & 2024-25).duly certified by the <b>auditor/ Chartered Account.</b>
7	E – VII	Latest non-conviction certificate (in original), if applicable.
8	E-VIII	Users list for the item during past 4 years from prominent educational institution for item no 03 and 04.
9	E- IX	APSSIDC /MSME / NSIDC certificate, if applicable.
10	E- X	Government ownership certificate, if applicable.
11	E- XI	PAN card with Owner Attested.
12	E-XII	GST registration certificate with self-attested
13	E-XIII	Broacher consisting detailed specifications of items (Hardware/Software) issued by OEM (original equipment manufacturer).
14	E-XIV	BIS / ISO/ CE issued by the competent authority

• All the enclosed documents shall be in English, *If any document is produced in any language other than English true translation copies of such documents in English shall be enclosed duly attested by a Gazetted Officer*. Failure to submit English translation of such documents shall make tender invalid. All originals are to be presented at the time of scrutiny for verification.

#### **5. TRANSACTION FEE:**

All the participating bidders shall pay a transaction fee (non-refundable) to M/s APTS, Hyderabad and through on line (0.03% of estimate contract value + GST as applicable). It is mandatory for all the participant bidders from 1<sup>st</sup> January 2006 to pay a non-refundable transaction fee electronically to the M.D., A.P.T.S, Hyderabad by the service provider through "Payment Gateway Service on e-Procurement platform".

#### **6. EARNEST MONEY DEPOSIT (EMD):**

- The EMD should be in the form of online payment only @ 2.5% of the bid value with a minimum of Rs. 5, 000/- (whichever is higher). Scanned copy of EMD document should be uploaded on e-Procurement website. The bids submitted with required EMD amount only be considered for further evaluation. EMD would be retained with the The Principal Scientist & Head, Agricultural Research Station, Amaravathi for a period of one year after completion of entire work, in the case of successful tenderer. The EMD of unsuccessful tenderers will be returned after signing the agreement with the successful tenderers.
- > The on-line payment receipt should be deposited to this office while producing hard copies for verification as the time schedule.
- ➤ Demand drafts, cheques, cash deposits, term deposits or fixed deposits will not be accepted towards EMD.
- ➤ However, the exemption of EMD will be given to small scale industrial units, registered with the Government of Andhra Pradesh and the National Small Scale Industries Development Corporation, New Delhi or the firms with specific exemption orders issued by competent authority of Government of Andhra Pradesh or Government of India. The copy of these orders should be uploaded in the e-procurement platform in place of online payment receipt in case of any such claim for exemption.
- ➤ The items permitted by S.S.I. registration authority will only be considered for manufacturing aspect only. IF ANY FIRM QUOTES ITEMS OTHER THAN THOSE COVERED UNDER S.S.I. REGISTRATION, EMD SHALL ACCOMPANY THE TENDER. Failure to enclose EMD shall make such of those items not covered under S.S.I. Certificate invalid for consideration.
- > The EMD of other tenders deposited with this department during any period of time shall not be considered for this tender

#### 7. SECURITY DEPOSIT:

- The successful tenderer(s) after receipt of information on the acceptance of the tender through post or by any means/mail/SMS/letter from the Principal Scientist & Head, Agricultural Research Station, Amaravathi, Andhra Pradesh, shall deposit within 10 days a sum of rupees @ 2% of the cost of the items inclusive of all taxes (or the authority may fix the amount according to the value of the tender) in the form of crossed demand draft in favor of Principal Scientist & Head, Agricultural Research Station, Amaravathi, payable at Amaravathi as a security for the fulfillment of the contract. The EMD/Security Deposit shall carry no interest. The security deposit to be deposited in addition to the EMD.
- The Principal Scientist & Head, ANGRAU, Agricultural Research Station, Amaravathi, Andhra Pradesh reserves the right to forfeit and confiscate EMD, if the successful tenderer(s) fail to pay the security deposit which is required under the terms and conditions of this tender.

#### 8. FORFEITURE/REFUND OF THE EMD/SECURITY DEPOSIT:

In case the selected tenderer(s) does not supply the hardware/software at the quoted rates within the period of contract and commits any breach of any one or more of these terms and conditions, the earnest money deposited by tenderer(s) will be forfeited by the Principal Scientist & Head, ANGRAU, Agricultural Research Station, Amaravathi, Andhra Pradesh

- The EMD of the unsuccessful tenderer(s) shall be refunded after signing the agreement with the successful tenderers by the ANGRAU, Guntur. No interest is payable by The Principal Scientist & Head, Agricultural Research Station, Amaravathi, Andhra Pradesh, on such deposits.
- The EMD and security money deposited by successful tenderer(s) shall be retained by ANGRAU, Lam, Guntur, Andhra Pradesh, till three months after the expiry of the contract period of 12 months from the date of acceptance of the tender or the date on which the supply which may arise in consequence of repeat orders placed during the 12 months for which the rates quoted are to remain valid.
- On due performance and satisfactory completion of the order in all respects during the contract period, the EMD and the security deposit will be refunded to the Contractor(s) without any interest within a period of 3 months with effect from the date of receipt of a request to this effect from the supplier(s).

#### 9. GST CERTIFICATE:

Attested photo copy of GST certificate and sales tax payment particulars obtained from the competent sales tax authority of the area concerned for the years (2023-24 and 2024-25) shall be attached. Certificates older than that shall not be considered. Those not liable for GST/Sales tax payment under relevant rules should produce a certificate to that effect from the competent authority.

#### 10. MANUFACTER LICENSE:

- Attested photocopy of the latest manufacture license, which is in vogue shall be enclosed. If the firm has applied for renewal of license, necessary authenticated proof from the concerned licensing authority shall be furnished. <u>Licenses issued for test and analysis will not be considered</u>. The abstract of the product quoted should be enclosed. The manufacture license should clearly indicate a minimum of two years of manufacture and marketing experience. Items without the proof of two years of manufacture and market experience will summarily be rejected.
- The tenders received without proper license, authenticated list of item covered by license and authorization letters from actual / original manufacturers are liable for rejection without any further notice.
- Tenderers should enclose documents to show that manufacturing unit has been recognized with the ISO certificate etc.
- Tenderers should enclose documentary evidence of having manufactured or marketed the product for the last two years at least.

#### 11. OPENING OF BIDS AND AWARD CRITERIA:

Bids will be opened on the e-Procurement website at the scheduled time & date as specified. The Principal Scientist & Head nominee shall open the pre-qualification bid, after the bid closing time and list them for further evaluation. Bids would be evaluated item wise in each schedule. Opening of bids consist three stages.

Documentation furnished by the vendor as per Annexure-III shall be examined prima facie to see if the technical skill base and financial capacity and other vendor attributes claimed therein are consistent with the needs of this project. If necessary, the Principal Scientist & Head, ARS, Amaravathi may ask vendor(s) for additional information, visit to vendors site and/or arrange discussions with their professional, technical faculties to verify claims made in Pre-qualification

bid documentation. Those bidders who qualify in pre-qualification will be evaluated in technical bid.

After evaluation of pre-qualification bids, the technical bids of only those bidders who qualify in Pre-qualification will be opened to verify the following.

- 1. Deviation(s) to technical specifications, if any in Form T-1
- 2. Detailed technical documentation, reference to various industry standards to which the products/services included in vendor's offer confirm.
- 3. Other information, if any required in the bid document

The Principal Scientist & Head, Agricultural Research Station, Amaravathi will evaluate and compare the Technical & Pre-qualification Bids (Part-I), which have been determined to be substantially responsive. Bids of bidders who do not conform to the specified requirements will be rejected as deficient or nonresponsive bids. The financial bids of the technically qualified bidders are evaluated.

Final choice of firm to execute the project shall be made on the basis of conformity to technical specifications, appropriateness of the product offered, capability of bidder to execute and service the project and appropriateness of financial offer from the point of view of cost-effectiveness over the entire maintenance period for the product/services.

#### 12. TERMS AND CONDITIONS FOR COMMERCIAL AGREEMENT:

- The details of the required hardware/software are shown in e-procurement web application.

  Rates should not vary with the quantum of orders or destination.
- The rates quoted shall be in Indian Rupees only and must be expressed both in figures and words as well. The rate of each item of hardware/software should be quoted. The rates quoted should be inclusive of all the applicable taxes and "for destination" charges (freight, forwarding, loading and unloading etc.,) Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh".
- Tenderers who are supplying the items offered in this tender to other states shall enclose the
  copies of latest invoices to support of their claim that the rates quoted to ANGRAU are
  comparable.
- No insurance charges will be paid by the department/indenter and they are to be met by the supplier only.

- The rates quoted by the tenderer shall not exceed the controlled rates, if the government-controlled rates are in force on the date of submission of tenders. In the absence of controlled prices, the tenderer shall quote reasonable price applicable to bulk purchases.
- All rates quoted by the bidder should be valid for a period of one year from the date of acceptance of the lowest bid.
- The rates offered in the tender shall not exceed the M.R.P. as well as the lowest price at which the firm sells the product of identical description to any other department or organization or person anywhere in the State / neighboring states of A.P. If such incidences of quoting higher rates to this department come to the notice at any time, during the course of rate contract for the rest of the rate contract period, the Principal Scientist & Head, Agricultural Research Station, Amaravthi, Andhra Pradesh, reserves the right to initiate an appropriate action against such firms including black listing them.
- IF ARTIFICIALLY LOW/HIGH RATES ARE QUOTED, THE PRINCIPAL SCIENTIST & HEAD, AGRICULTURAL RESEARCH STATION, AMARAVATHI, ANDHRA PRADESH, RESERVES THE RIGHT TO CROSS-VERIFY THEM AND IGNORE THEM FROM CONSIDERATION IN ORDER TO PREVENT UNETHICAL TRADE PRACTICES.
- Ordinarily, the tendered items will be selected based on the lowest rates quoted by the firms
  in the financial bids. However, the tender committee reserves the right to select the product
  even with higher rates depending upon the reported performance / market reputation /
  efficacy of the item basing on the user reports / feedback given by the end users by ignoring
  the lowest rates.
- If tenderer quotes the rates at his will, overlooking the conditions in the previous paragraphs, the tender is liable for cancellation even after approval of tender and firms are liable suitable legal action for such action at any time during the rate contract period.
- Rates quoted should be marked clearly with main price and taken separately. Total price after taking all the actual (including all taxes, charges, fee etc.,) will be taken as financial quote for comparison.

- No representation towards upward revision of rates once accepted will be considered.
   Necessary DSIR and other certificates for customs exemption or GST will be provided by ANGRAU, Guntur.
- No tenderer shall be allowed at any time on any ground what so ever to claim for revision of or modifications in the rates quoted by him. Clerical error, typographical etc., committed by the tenderers in the tender forms shall not be considered after opening of the tenders. Conditions such as "SUBJECT TO AVAILABILITY" "SUPPLIES WILL BE MADE AS AND WHEN SUPPLIES ARE RECEIVED" etc., will not be considered under any circumstances and the tenders of those who have given such conditions shall be treated incomplete and for that reason the tenderer shall be summarily rejected.
- No company/firm, which has been blacklisted either by the ANGRAU, Lam, Guntur, Andhra Pradesh, or by any state government or central government organizations shall participate in the tender during the period of blacklisting. If any such firm participates and came to know at a later stage, and if any firm is black listed at a later date either by the Government of Andhra Pradesh or any other state / central government/ANGRAU will not only be debarred / black listed permanently and their security deposit /EMD whichever is available with the Principal Scientist & Head, Agricultural Research Station, ANGRAU, Amaravthi, Andhra Pradesh, A.P will be forfeited and any business / transactions will be stopped with their firms forthwith.
- The indented stocks shall be delivered at Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh, as indicated in Annexure-I at the cost of the supplier.
- The rates should be quoted for each item separately.

#### **13. AGREEMENT:**

- 1 Every successful tenderer on intimation by this office shall execute an agreement on Rs.100-00 (rupees one hundred only) non-judicial stamp paper in the prescribed form, which will be supplied along with the list of item tentatively approved. Agreement should be typed only on one side of stamp paper with due attestation on each page.
- 2 In the event of failure to execute agreement in proper form along with the security deposit by successful tenderer within 10 days, the EMD of such tenderer will be forfeited and such defaulters will forego the right to participate for future tenders for minimum period of (3) years.

#### 14. DEMONSTRATION OF THE EQUIPMENT:

- The Tenderer may have to arrange for demonstration of the functioning of the hardware/software and training on functioning and maintenance as per specifications at Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh, after installation/supply.
- If the equipment is declared to be not of standard quality or not meeting the specified requirements, it will deem to be rejected. If any equipment supplied by the tenderer is used after supply and is subsequently found to be not as per specifications, unsound, inferior in quality or description or are otherwise faulty or unfit for use, then the cost of such items will be recovered from the tenderer, if the payment had already been made, in addition to penalty. The approved firms shall replace the faulty item at their own cost with in a period of 30 days after intimation from the Agricultural Research Station, Amaravathi, Andhra Pradesh.

#### 15. OTHER CONTRACTUAL OBLIGATIONS:

- The contract shall not be capable of being varied except by written consent by both the
  Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra
  Pradesh and the supplier shall not in the absence of the specific written acceptance be bound
  by any provisions of the supplier's quotations, offers etc., which purport to impose conditions
  at variance with this contract.
- The supplier shall not sublet or delegate this contract or part thereof without the written consent of the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh. Such consent shall not however be withheld unreasonably. But the tenderer(s) may without the consent of the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, purchase material as he/they does not normally manufacture.
- The supplier shall keep confidential all matters concerning this contract and comply with all reasonable security requirements. All drawings, blocks, specifications, manuscripts, samples etc., supplied by the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, and all copies thereof shall be returned to the Principal Scientist & Head when their use is terminated. In no event the supplier(s) shall permit publicity concerning this contract without the prior consent of the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh.

 Any undertaking or commitment given by or made by any Officer or Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, verbally or in writing does not have any validity unless it is signed again by the authority competent who concluded an agreement earlier.

#### 16. INSPECTION AND PACKING:

- At all reasonable time during production and prior to dispatch of material the supplier(s) shall afford and secure for the representative of the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, every reasonable access and facility at his plant or premises for its inspection and making of usual tests on behalf of the institute. The supplier(s) shall advise the scheme at least 7 days prior to the time when any material is ready for final inspection. The Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, will then make the inspection and subject to the material being in all respects as specified and being of sound quality and workmanship the representative of the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, shall sign or countersign a certificate of inspection.
- The supplier(s) shall supply to the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, on request a report from time to time as to the progress of supplies. Any delay or anticipated delay will be reported at once together with the full reasons there for.
- The transport responsibility of procurement and dispatch of the stocks in good condition and as per specifications and in time/door delivery.
- The insurance should be done at the cost of supplier(s) as the rate quoted is all inclusive for door delivery at The Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh – 522 020, as indicated in Annexure-I.
- Should the progress in supplies be delayed due to any cause beyond the reasonable control of the supplier(s) and whether such delay or impediment occurs before or after the time for dispatch, reasonable extension of time might be granted by agreement between the parties. Such extension of time and agreement should be accepted by the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh.
- The supplier(s) shall insert in each case 3 copies of packing list, fully item wised to show case number, contents and full description of the contents. The concerned In-charge of the stores

of the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, as indicated in Annexure-I at the receiving point will retain one copy with him and return the other two copies, duly signed to the supplier(s) who will append one copy of this packing list with invoices when sent to the concerned for payment.

#### 17. SUPPLIES AS PER SPECIFICATIONS:

- All supplies shall be to the description and to the specifications laid down and in strict
  accordance with the approved samples. Deviations, if any should be clearly brought out
  failing which it will be normally considered that the materials offered are not to our
  requirements. Any special features may also be clearly brought out.
- The decision of the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, however shall be final as to the quality of supplies received and binding upon the supplier(s) in case, the supplier(s) supplies any other article than what is ordered such article supplied, not being approved, shall be liable to be rejected.
- If the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, requires any changes in specifications the supplier(s) shall use his best endeavor to comply with Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, wishes subject to fair fixation of prices and delivery schedule where appropriate.
- If at any time during the term of this contract, the plans of the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, changes for any reasons the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, shall have the right to terminate or alter this contract by sending fifteen days notice to the supplier(s) by registered letter. In respect of such of the material as it complete and ready for dispatch within thirty days of such notice, Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, agrees to accept delivery thereof at the contract price and terms.

#### 18. CONSEQUENCE OF NON-SUPPLY AND DAMAGES:

All risks of loss, damage or depreciation to goods shall be upon the supplier(s) until the
material is delivered at the addresses specified and in accordance with the provisions of the
contract. Till the material received at the respective destination indicated by the Principal
Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, the

property continues to be at the risk of the supplier(s). The mere fact that the material is delivered to transporter is no defense to the supplier(s) and the supplier(s) will be squarely held responsible for any delayed receipt of the material by the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh as indicated in the Annexure-I or for loss of damage of any kind to the material in transit.

- Assuming that the supplier(s) fails to deliver any or all the materials covered by the contract, the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, reserves the right in addition to other legal remedies, to cancel the contract or any portion thereof and hold the supplier(s) liable for all damages sustained by virtue of the supplier(s) failing to perform the contract and consequent cancellation of the contract.
- In the event of the supplier(s) failing to complete the supplies in time or according to the approved specifications, the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, reserves the right to make such arrangements as it may think fit for the completion of the supplies on account of and the sole risk of the supplier(s).
- In case the goods are not supplied according to specifications, they will be summarily rejected.
- The time allowed for delivery of goods shall be deemed to be the essence of contract. In case the goods are not delivered to the respective addresses as indicated in the Annexure-I within the stipulated period, Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, reserves the right to recover the liquidated damages a sum equal to 2 % of the contract price of the undelivered material per week subject to a maximum of 5 % of the value of undelivered material. Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh, also reserves the right to cancel the purchase order in case supplies are delayed beyond the scheduled date of delivery and to make such arrangements as he may think fit for the completion of supplies on account and at the risk of the supplier(s). The additional expenses thus incurred together with the consequential losses and also the liquidated damages shall be recovered from the supplier(s) out of his/their security deposit/EMD and any other amount due to him/them. The balance still if any payable by the supplier(s) shall be paid by him/them within 7 days of notice by the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh.
- All bills shall be prepared in four copies and shall be signed by the supplier(s) or his/their authorized agent(s) along with advance stamp receipt. Every bill shall bear a certificate to the effect that the material covered by the bill has been inspected by the supplier(s) before delivery and confirm in every way to the contract specifications and is packed in accordance

with the contract requirements and further that the invoice is correct in every particular and no other bill has been rendered previously in respect of the articles charged in the particular invoice. The bill in triplicate along with advance stamped receipt shall be raised in the name of the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh as indicated in Annexure-I.

#### 19. PENALTIES:

- If the successful tenderer fails to execute the agreement and / or deposit the required security deposit within the time specified or withdraws his tender after the intimation of the acceptance of his tender has been sent to him or owing to any other reasons, he is unable to undertake the contract, his contract will be cancelled and the EMD deposited by him along with his tender shall stand forfeited to the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh and he will also be liable for all damages sustained by the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh against the specifications indicated in Annexure I by reasons of breach, such as failure to supply, including the liability to pay any difference between the prices accepted by him and those ultimately paid for the procurement of the articles concerned. Such damages shall be assessed by the Principal Scientist & Head (purchaser), Agricultural Research Station, Amaravathi, Andhra Pradesh /committee constituted, whose decision is final in the matter.
- Non-performance of contract provisions will disqualify a firm to participate in the tender for the next three years.
- In the event of tendered supplies failing quality test, contract with the tenderer will be suspended and purchases will be made from alternative suppliers. Such firms will be black listed for three years which defective supplies were detected. The tenderer shall also be liable for action under criminal law and the matter shall be notified to the concerned licensing authority.
- All risks of loss, damage of depreciation to goods shall be upon the supplier until the material is delivered at the address specified and in accordance with the provisions of the contract. Till the material is received at the respective destination indicated by the Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh 522 020, the property continues to be at the risk of the supplier(s). The mere fact the material is delivered to transporter is no defence to the supplier and the supplier will be squarely held responsible for any delayed receipt of the material by the Principal Scientist & Head

- (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh 522 020 or for loss or damage of any kind to the material in transit.
- If the supplier fails to deliver any or all the material covered by the contract, the Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh 522 020 reserves the right in addition to other legal remedies, to cancel the contract or any portion thereof and hold the supplier liable for all damages sustained by the Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh 522 020 by virtue of the supplier failing to perform the contract and consequent cancellation of the contract.
- In the event of the supplier failing to complete the supply in time or according to the approved specifications, the Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh 522 020 reserves the right to make such arrangements as it may think fit for the completion of supplies on account of and not at the sole risk of the supplier.
- The time allowed for delivery of goods shall be deemed to be the essence of contract. In case the goods are not delivered within the stipulated period, the Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh – 522 020 reserves the right to recover the liquidated damages @ a sum equal to 2% of the contract price of the undelivered material per week subject to the maximum of 5% of the value of undelivered material. The Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh - 522 020 also reserves the right to cancel the purchase order in case supplies are delayed beyond the scheduled date of delivery and to make such arrangements as it may think fit for the completion of supplies on account and at the risk of the supplier(s). The additional expenses thus incurred together with the consequential losses and also the liquidated damages shall be recovered from the supplier out of his/their security deposit/ earnest money deposit and any other amount due to him/them. The balance still, if any, payable by the supplier shall be paid by him/them within 7 days of notice by the Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh – 522 020. All invoices shall be prepared in four copies and shall be signed by the supplier or his/their authorized agent. Every invoice shall bear a certificate to the effect that "the delivery and confirm in every way to the contract specifications and is packed in accordance with contract requirements and further that the invoice is correct in every respect and no other invoice has been rendered previously in respect of the articles charged in the

particular invoice." The invoices in triplicate shall be sent with L.R/R.R. by registered post Acknowledgement and due direct to the Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh – 522 020 payments will be made against submission of the complete documents such as bills, packing, invoices, challans, respect of goods in good conditions and satisfactory performance at the destinations indicated by the Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh – 522 020 duly deducting the statutory deductions if any.

• In all the above conditions, the decision of the PRINCIPAL SCIENTIST & HEAD (PURCHASER), AGRICULTURAL RESEARCH STATION, ANGRAU, AMARAVATHI, ANDHRA PRADESH, shall be final and binding.

#### **20. SETTLEMENT OF DISPUTES:**

- Any difference or dispute arising out of or in connection with this tender or acceptance thereof or the contract that may be entered in consequence thereof, shall be decided by arbitration. The Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh 522 020, or his nominee shall be the sole arbitrator and the arbitrator's decision shall be final and binding on the parties. The tenderer(s) will have no objection to such appointment on any ground whatsoever including that such nominee, in his official capacity dealt with this matter at any stage.
- The parties hereby agree that in the event of any dispute no cause of action shall arise in their favour to approach any court unless they have resorted to and exhausted the remedy of arbitration as envisaged above.
- The parties also do hereby agree that the contract envisaged by these terms and conditions shall be deemed to have been entered into at Guntur.
- In the event of any dispute arising out of the tender such dispute would be subjected to the Jurisdiction of the civil courts within the city of Guntur only.

#### 21. DELIVERY AND INSTALLATION PERIOD:

- Successful bidder shall deliver the goods/services, install and commission the same within one
  month from the date of receipt of the purchase order.
- Successful bidder has to supply the hardware/software at Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh.

For any delays in delivery beyond delivery period mentioned in the purchase order, the vendor
will be liable for penalties as to be decided by the Principal Scientist & Head (purchaser),
Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh.

#### 22. WARRANTY:

Warranty period is for 3 years on site (including Spares-Parts, Service, SPOC, On-site) from the date of installation of items. During warranty period the successful bidder should conduct preventive annual maintenance besides attending the calls.

#### 23. PAYMENT TERMS:

- The successful bidder request(s) for payment shall be made to the Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh in writing, accompanied by the bill describing, as appropriate, the hardware/software.
- The currency of payment will be Indian rupees only.
- Payment will be made through cheque in favour of the respective firms only.

#### **24. CONTRACT CLOSURE:**

The contract with the successful bidder will be closed after completion of all the terms and formalities like 100% supply and installation, warranty/maintenance period, payment, PBG return etc.

#### 25. CANCELLATION AND STOPPING THE TENDER/PURCHASE PROCESS:

The Principal Scientist & Head (purchaser), Agricultural Research Station, ANGRAU, Amaravathi, Andhra Pradesh – 522 020 reserves all the rights and power to stop or cancel the total/part of the process of these tenders and this purchase process at any stage without assigning any reason/reasons.

Sd/-

Dr. M. Raveendra Reddy Senior Scientist & Head Agricultural Research Station Amaravathi, A.P-522 020

#### ANNEXURE-I

## (Technical Specifications) AGRICULTURAL RESEARCH STATION, AMARAVATHI **SPECIFICATIONS FOR THE EQUIPMENT**

Item Code	Name of the item	Specifications and parameters	Quantity
01.	Glass house	<ul> <li>Structural features</li> <li>Tunnel type Polycarbonate (The structure should design to resist good wind velocity)</li> <li>Size of Poly House - 546 Sq. ft. (26 x 21 ft)</li> <li>Center Height - 16.5 ft Side Height - 13 ft</li> <li>Anti-room 84 ½ Sq. ft. (6 ½ x 13 ft)</li> <li>Fan &amp; Pad Automation System for 546 sq ft</li> <li>Should have fogging system for tunnel Polyhouse</li> <li>Should have brick work for Fan, Pads &amp; for wall on 4 Sides of glass house (wall Height - 4 feet, Width - 9 inch)</li> <li>Should have Water pipeline system</li> <li>Should have multi-span structure.</li> <li>It should have have sub-type anchoring foundation with total galvanized nut bolted structure.</li> <li>Polycarbonate should have multiwall 6 mm thick UV treated sheet (for new polyhouse)</li> <li>Aero Dynamic shape along all peripheries.</li> <li>Aluminum profile to fix polythene.</li> <li>Should have basal foundation work for for polyhouse</li> <li>Should have fabrication of structure material.</li> <li>Erection of the complete polycarbonate poly house structure.</li> <li>Fixing cladding material (polycarbonate sheet, shade net)</li> <li>Fixing doors and curtains (manually operated – on top).</li> <li>Complete brick wall work for fixing fan &amp; pad.</li> <li>Fixing cooling pads &amp; fans.</li> <li>Setting up fan &amp; pad automation and completing internal wiring for the system.</li> <li>Complete fencing work around the polycarbonate poly house</li> </ul>	One No.

02.	Walk in Plant	<b>Technical Specifications</b>	One No.
	growth chamber	Should have Doubled walled with minimum 80	
		mm PUF insulated modular panels which	
		should be easily assembled at site	
		<ul> <li>Capacity of the chamber should be minimum of 7500 litres.</li> </ul>	
		• Interior construction material should be SS 304	
		& Exterior construction material should also be made of SS 304	
		<ul> <li>Stainless steel trays should be provided for complete chamber capacity.</li> </ul>	
		Should have Observation window of minimum	
		300mm x 300mm	
		<ul> <li>Humidity range should be 40%Rh to 90%Rh when Lights On/Off</li> </ul>	
		• Temperature Range should be minimum 10°C	
		to 35°C when Lights On, minimum 5°C - 35°C when Lights Off	
		Interlocked insulated panels should be	
		provided.	
		Non-volatile memory, allowing the automatic	
		restart of previously defined power failure,	
		without losing data	
		Should have proper LED lights illumination.	
		Should provide Day/night programmable cycle     Light Letterite Prove (LLIX) along the cycle	
		• Light Intensity Range (LUX) should be upto 20,000 LUX	
		Should have U shaped SS tubular heater	
		<ul> <li>Flooring should be of linoleum carpet</li> </ul>	
		Forced air circulation should be provided for	
		Uniform temperature	
		Steam Based Humidification system with automatic water level control should be	
		provided	
		Should provide CFC free cooling system	
		consists of hermetically sealed compressor	
		coupled with evaporation coil and condenser.	
		System should be made up of Condenser unit	
		in well-ventilated area to avoid throw of hot air	
		in the room	
		Complete operation driven through PLC with	
		data logging capacity of up to 1000 readings	
		Should have Printer interface facility  Should mayide minimum 7" calon touch garage.	
		• Should provide minimum 7" color touch screen display	
		Should provide high quality European make	
		split type temperature & humidity combo	
		sensor with 4-20mA output	

	<ul> <li>Audio/visual alarms for deviations should be provided for temperature and humidity deviations</li> <li>Should have Independent thermostats for maximum and minimum temperature limits</li> <li>Should have Automatic cut-off function, in case of excessive heating or cooling</li> <li>Should have configurable maximum and minimum temperature and humidity limits.</li> <li>Standby humidification system should be provided.</li> <li>Should provide available certifications, list of users with performance certificate.</li> </ul>	
03. Autoclave (Horizontal an Rectangular)	<ul> <li>Technical Specifications:</li> <li>Double door with flush mounting on sterile side - Standard model Internal size: 600 mm W x 600 mm H x 1500 mm Depth Capacity: 550 Litres; Power: 36 kw Parameters:</li> <li>Operating pressure: 1.2 to 1.5 kg/cm²</li> <li>Operating temperature: 121°C to 125° C</li> <li>Partial Vacuum: 10" hg</li> <li>Full Vacuum: 26" hg – through vacuum pump only</li> <li>Hydro test: Jacket :2.6 kgf /cm2g; Chamber: 1.9 kgf /cm2g</li> <li>Specifications:</li> <li>Fully stainless steel except stand, jacket, panel boiler cover, door lock &amp; hinge – Standard model</li> <li>Digital temperature indicator cum controller cum timer &amp; alarm</li> <li>Manually operated hinge type door with radial arms</li> <li>Low water level cut off system In built steam generator</li> <li>Main operating chamber: S.S. 316 L quality, 6 mm. thick. End-ring: S.S. 316 L quality, 10 mm thick.</li> <li>Main Operating Chamber:</li> <li>Chamber: S.S. 316 quality, 10 mm thick</li> <li>End-ring: S.S. 316 quality, 10 mm thick</li> <li>Jacket: Boiler quality – 10 mm thick</li> <li>Back Plate: S.S. 304 quality, 8 mm thick.</li> <li>Door plate: S.S. 304 quality, 12 mm thick.</li> </ul>	One No.

- Insulation: Rock wool. (50 mm. thick)
- Outer cover: S.S.304, 20 G. sheet mirror polished Pipe lines: S.S.316 quality seamless.
- Fittings / Connections: S.S. 316 quality, B.S.P. threading. Lock/radial arm/hinge: C.I. & EN-8 quality
- Gasket: Silicone rubber, joint-less hollow type
- Stand: M.S. duly painted

#### **Detailed control & Fittings:**

- Control Valves to carry out all functions of sterilization cycle *i.e.* steam to jacket, steam to chamber fast/slow exhaust & vacuum / drying, fresh air etc.
- Doors should be hinge type (Single / Double door) shall be fitted with horizontal type opening & automatic pressure locking device so that the door cannot be opened till the steam is fully exhausted from the chamber.
- Quick vacuum drying Apparatus
- Accidental vacuum breaker/jacket air valve
- Should have safety valve device against excess pressure in jacket / steam generator
- Dial type thermometer and temperature gauge for indicating sterilization temperature.
- Plug screen to prevent large particles from entering chamber drain line.
- Compound Gauge to indicates chamber pressure/vacuum
- Pressure Gauge to indicate jacket / boiler pressure.
- Steam trap: FT 14 float type
- Non Return Valve: Swing type.
- G.M. Ejector: For fast drying
- Valves: S.S. 304 quality ball valve
- Chamber condensate line fitted with a thermostatic steam trap and check valve for thorough evacuation of air and condensate from the chamber to achieve optimum temperature.
- Drain line: S.S. 2" manifold
- Steam Generator (Boiler) shall be attached to underneath the jacket & fitted with heater
- Heater: Water immersion type industrial, ISI mark
- Water level switch: Magnetic switch to protect heater from low water level.
- Glass tube to indicate water level in boiler.

		Valves for water inlet & outlet.	
04.	BOD Incubator	Technical Specifications:  Should have Capacity 450L / 16 Cu. Ft Chamber Dimensions should be approximately: 60 x 60 x 125 cm (WxDxH)  Should have Shelves: 4-5 nos of complete SS 304 grade mesh shelve Power: 4000 W Required Temperature Range: 5.0 °c to 60.0°c. with Accuracy ± 0.5 °c. and Uniformity ± 1.0 °c Heating system: U shaped Nichrome wire heater in SS Sheathing. Cooling system: Hermetically sealed CFC free Emerson compressor with R 134a refrigerant. Air circulation: Flange Motor with Impeller and blower. Interior Illumination for working Area. Construction: Double walled with PUF Insulation. With Inner Stainless steel Mirror polished chamber and Outer heavy gauge Powder coated CRC exterior. Double door: Inner full Viewing door and outer door insulated with lock and key arrangement. Somm Validation Port with silicon rubber seal to insert sensor for validation purpose. 3" Thick CFC Free Puff Insulation. Stainless steel Trays. Adjustable Tray Height adjustment. Unit Mounted on castor wheels with front lock arrangement. Control Panel: Microprocessor based PID temp. controller with auto tune facility for precise control of temperature and humidity. Temp. Sensor: PT - 100, RH sensor: direct capacitance type. Alarm: Audio visual alarm if temperature deviates from the preset temperature Safety Features: Over heat temperature cut off with alarm. Low temperature alarm. Electrical short circuit breaker.	One No.
05.	PCR Machine	Technical Specifications:	One No.

<ul> <li>System should support PCR reaction volume between 5-100µl in all the formats</li> <li>Temperature control of block ranging from 4° C to 99° C</li> <li>Gradient setup for PCR optimization should offer 12 different temperatures in columns across a gradient range of 1 - 30° C</li> <li>Advanced operating technology ensure ramp rates are identical in both gradient and normal operation</li> <li>User level temperature verification of the system is a must</li> <li>Adjustable user management capabilities – from flexible to strict user level controls</li> <li>Temperature Control Mode: Fast ≤ 10 μl, Intermediate (10-20 μl), Standard (20-50 μl) and Safe (≥50 μl)</li> <li>Block Temperature Accuracy: ± 0.15°C</li> <li>Block Homogeneity: 20° C to 72° C: ≤ ±0.2° C, 95° C: ≤ ±0.3° C</li> <li>System should have Heating ramp rate of 3.3 °C/s and Cooling ramp rate of 1.5 °C/s</li> <li>System should have adjustable ramp rate both for heating &amp; cooling from 0.1° C to meet critical amplification conditions for emerging new applications</li> <li>Lid descent and closing pressure should be through safe Lid technology</li> <li>Time or Temperature increment with cycles in PCR program</li> <li>Customized programming allows a maximum of 40 steps and 99 cycles</li> <li>Flexibility to transfer programs with constant parameters from other cycler models using Program Migration feature</li> <li>The system should weigh less than 7.5 kg with width less than 25 cm</li> <li>Storage of instrument specific and device specific event logs</li> <li>Data export possible with USB and additional cloud-based software.</li> <li>One No</li> </ul>
Centrifuge • Technical Specifications:

- Compact ref. centrifuge with 17,500 rpm & 30,130xg rcf
- Temp range 11oC to 40oC
- It should be possible to store 50 programs with 5 quick access program keys
- Machine should have "Fast temp program which allows programming of pre setting via date and time to have the centrifuge refrigerated and ready for use at the pre selected time and date"
- ECO shut off engages after 8 hours of non use to reduce energy consumption and extended compressor life
- Up gradable to swing out rotor for MTP, PCR & deep well plate. Rotor should be available with manufacturer and it should be offered in optional
- Noise level <54dB(A)
- At Set Rpm Function for maximum reproducibility
- Instrument should have an in-built condensate drain to prevent water accumulation
- Acceleration time 14s
- Breaking time 15s
- SOFT brake function
- Speed setting should be possible in both rpm and rcf
- It should be possible to program fast cooling with preset date and time.
- Instrument should have automatic rotor recognition facility to automatically recognize and set maximum speeds upon rotor change
- Option to save 50 programs with program names
- Rotor lids should have a Quick Lock-system for secure lid closing and opening and the lids should be made of metal.
- Automatic rotor imbalance detection
- Machine should maintain 4deg.c at max speed with all rotors
- Rotors:
- Aerosol tight high speed Fixed angel (45deg) rotor with: 30x1.5/2ml with 14,000rpm & 20,800xg
- 6x15/50ml tube rotor, 7,830rpm & 7,197xg with 12 positions, 6 small and 6 large holes to accommodate appropriate "small" or "large" adapter and adapters for 15/50ml falcon tubes.

•

07.	Media tank for	Technical Specifications	One No.
	fermenters	• Capacity: 300 Liters	3113 1 (3)
		• Power: 2 HP	
		• Storage Tank made of Stainless steel with Jacket	
		for Steam Sterilization from existing Steam	
		Generator.	
		<ul> <li>Provided with stand, pressure gauge, safety valve,</li> </ul>	
		Inlet and outlet valve.	
		Connected with SS pipelines and S.S.316 pump	
		to transfer the culture from Fermenter to Storage	
		Tank.	
08.	Autoclave	Technical Specifications:	One No.
	(Vertical; 180 lit)	Should have Capacity: 175 - 180L	
		• Chamber Size approx. 560×762mm (Dia x	
		Height)	
		Heater capacity 4.0+1.0 KW	
		Gasket Made of Joint less Silicon Rubber	
		• Inner & outer wall both made of fully SS 304 with	
		mirror polish Stainless Steel (GMP Model)	
		• Should have Unique Pedel free design, no foot	
		operation to ease the working with rotating wheel	
		feature	
		Controller Digital temperature Indicator-cum-	
		Controller	
		• Display Digital LED with Set Value (SV) and	
		Process Value (PV)	
		• Timer (Auto Time Control): Fitted with semi-	
		automatic digital controller with auto time control	
		system. After the set temperature attained the	
		timer the timer should start automatically and on	
		completion of set count down / up time the supply	
		to heaters is cut -off and the system sounds a	
		buzzer alerting user that the cycle is completed.	
		Buzzer Alarm for cycle end     MOC (Processor Vessel): Stainless Start (SS 204)	
		MOC (Pressure Vessel): Stainless Steel (SS-304)     MOC (Factorical Well) Stainless Steel (SS-304)	
		MOC (External Wall) Stainless Steel (SS-304)  MOC (Tr. Lill) Stainless Steel (SS-304)	
		MOC (Top Lid) Stainless Steel     Product Stainless Steel (SS 204)	
		Basket Stainless Steel (SS-304)     Stavilinia Program Hada 20 ari	
		• Sterilizing Pressure Up to 20psi	
		• Should have water level indicator / cut off feature	
		• Operating Pressure From 15 to 22psi (adjustable)	
		Pressure Gauge 0-2.1 kgf/cm² (30 psi)      Fisheret Syngly Megually through a cycle and yellog.	
		• Exhaust Supply Manually through a exhaust valve	
00	Antoplays (40 lth)	• Power Supply 220/230V AC, 50/60Hz	One No.
09.	Autoclave (40 lit)	• Should have Capacity: 40-50 L	One No.
		• Chamber Size: 300×500mm (Dia x Height)	
		Heater capacity 2.0 KW	

		<ul> <li>Gasket Made of Jointless Silicon Rubber</li> <li>Controller Digital temperature Indicator-cum-Controller</li> <li>Inner &amp; outer wall both made of fully SS 304 with mirror polish Stainless Steel (GMP Model)</li> <li>Should have Unique Pedel free design, no foot operation to ease the working with rotating wheel feature</li> <li>Display Digital LED with Set Value (SV) and Process Value (PV)</li> <li>Timer (Auto Time Control): Fitted with semi-automatic digital controller with auto-time control system. After the set temperature attained the timer should start automatically and on completion of set count down / up time the supply to heaters is cut -off and the system sounds a buzzer alerting user that the cycle is completed.</li> <li>Buzzer Alarm for cycle end</li> <li>MOC (Pressure Vessel): Stainless Steel (SS-304)</li> <li>MOC (External Wall) Stainless Steel (SS-304)</li> <li>MOC (Top Lid) Stainless Steel</li> <li>Basket Stainless Steel (SS-304)</li> <li>Sterilizing Pressure Upto 20psi</li> <li>Should have water level indicator / cutoff feature</li> <li>Operating Pressure From 15 to 22psi (adjustable)</li> <li>Pressure Gauge 0-2.1 kgf/cm² (30 psi)</li> <li>Exhaust Supply Manually through a exhaust valve</li> <li>Power Supply 220/230V AC, 50/60Hz</li> </ul>	
10.	Gel	Technical Specifications	One Set.
	documentation system	<ul> <li>Gel documentation system for imaging DNA and RNA gels with in-built high contrast medical grade touch screen computer display with magnesium reinforced glass for robustness</li> <li>Should have motorized zoom lens with automatic control of the camera, lens and lighting for an unrivalled ease of use.</li> <li>Dark room with full slide out UV transilluminator on pull-out rails for comfortable work</li> <li>UV safety shutoff with widely accessible door to handling gels while placing or moving gels on transilluminator table</li> <li>Transilluminator should have Superbright technology so as to have publication quality gel image with no UV tube background noise</li> <li>Scientific grade, zero defect CX5 camera is must with native image resolution of 2600 (H) x 1950</li> </ul>	

	<ul> <li>(V) yielding image resolution of 5 megapixels extendable to 7.6 megapixels</li> <li>System should be capable of producing images of 16-bit – 65,536 grey levels</li> <li>USB 3.0 interface for faster image transfer</li> <li>Maximum field of view must be at least 26 x 21 cms</li> <li>System should have 4-position filter wheel with F-590 emission filter for ethidium bromide, SYBR Green, SYBR Gold, Gel Red, Gel Green, Lumitein, SYPRO Ruby, etc.</li> <li>System should have option for future upgrade for colorimetric gel imaging</li> <li>System should be supplied with multi user licensed analysis software for image enhancement, image analysis includes molecular weight calculation, band quantification, distance calculation.</li> <li>Software should have Apps Studio, a complete library of applications to ensure reproducibility and ease of use.</li> <li>3D Dynamic Scan feature to understand saturation and to rule out artifacts is a must</li> </ul>	
Nano spectrophotometer	<ul> <li>Technical Specifications</li> <li>The system should be a compact benchtop microvolume spectrophotometer for accurate quantitation of nucleic acids, proteins</li> <li>Should have sample pedestal based absorbance measurement capabilities</li> <li>Wavelength range should be 190-850 nm</li> <li>Minimum sample volume should be 1 μL with one sample analysis at a time onto a sample pedestal</li> <li>Pathlength: 0.03-1 mm auto ranging (for pedestal)</li> <li>Should have xenon flash lamp as the illumination source and 2048 element CMOS linear image sensor as detector</li> <li>Wavelength accuracy should be ± 1 nm</li> <li>Absorbance range (1 cm equivalent): 0-550 A for pedestal mode</li> <li>Measurement repeatability: 0.002 A (1.0 mm path) or 1% CV, whichever is greater</li> <li>Limit of detection (pedestal): 1-27,000 ng/μL (dsDNA), 0.05-800 mg/mL (BSA) or better</li> <li>Measurement time: &lt; 10 sec</li> </ul>	

- The sample pesestal material should be SS 303 and quartz fiber
- It should have standalone operation with a large 10 in or above touch screen display
- Instrument on-board software should enable quantitative applications like nucleic acid A260, A260/A280, A260/A230, fluorescent labelled nucleic acids, Protein A280 and Peptide A205, Protein Pierce 660, Protein Bradford, Protein BCA, Protein Lowry, fluorescent labelled Proteins, OD 600, UV-Vis, Custom Methods etc.
- The software should have feature to identify the contaminants in the sample and report a corrected sample concentration. It should also detect the bubbles and other anomalies in the sample column. It should provide instant feedback about sample quality with on-demand technical support for guided troubleshooting
- It should also be compatible with a PC based control software
- Should have  $\geq$  60 GB internal memory
- Connectivity: USB, Ethernet, WiFi
- It should be a CE certified model

<u>Note</u>: The items should be shipped to **Agricultural Research Station**, **Amaravathi -522 020**, **Palnadu District**, **Andhra Pradesh** and the bill should be in the name of The Principal Scientist & Head, Agricultural Research Station, Amaravathi – 522 020.

#### **ANNEXURE-II**

#### **Declaration**

- 1. I/We have not been black listed in any department due to any reasons during last 3 years
- 2. I/We have not been demoted to lower category in any department for not filing the tenders after buying the tender schedules in a whole year and their registration had not been cancelled for a similar default in two consecutive years.
- 3. I/We will agree to get disqualified my (our) selves for any wrong declaration in respect of the above and get my/our tender summarily rejected.
- 4. The soft copies uploaded are genuine and not forged. Any incorrectness / deviation noticed can be viewed seriously and apart from cancelling the work duly forfeiting the bid security, criminal action can be initiated including suspension of business and/ or black listing.

5. I/We submitting a online payment receip		dated	_ issued by
	for Rs	towards the EMD.	

Signature of Tenderer Date Address

#### **ANNEXURE-III**

### **Check List**

Sl. No	Name of the Document
1.	Declaration Form (Annexure II) with Self Attested .
2.	Check List (Annexure III) with Self Attested
3.	Manufacturing License / Authorization letter from the Manufacturing firm
4.	GST clearance certificate, payment particulars for preceding two years along with supporting Documents. (2023-24 & 2024-25)
5.	Annual Turnover Assessment order for the preceding two years (2023-24 & 2024-25) certified by Commercial Tax Officer / Chartered Accountant
6.	Copies of balance Sheet, Profit and loss Account for last two years <i>i.e.</i> (2023-24 & 2024-25) duly certified by the Auditor / Chartered Accountant
7.	Latest Non-Conviction Certificate (In Original) If applicable
8.	User certificates (Minimum three) from prominent educational institutions during the last four years for items 03 & 04.
9.	APSSIDC/MSME/NSIDC Certificate, if applicable with Signature
10.	Government Ownership Certificate, If applicable with Signature
11.	PAN Card of the Firm / Bidder with Self Attested of Owner
12.	GST registration certificate with Self Attested
13.	Broacher consisting detailed specifications of items (Hardware/Software) issued by OEM (original equipment manufacturer) with Self Attested
14.	Earnest Money Deposit with self attested
15.	BIS / ISO/ CE issued by the competent authority

#### FORM T-1

Item wise technical compliance statement as per technical specifications of this document (taking in to consideration all the amendments issued to this document, if any) is to be submitted in the following format:

Item Code: Item Name:

S. No.	Parameter/ Feature	Specifications called for	Specification of proposed item along with part code, qty. & description if any (Part code details must be provided)	Reference for proof of compliance (Required docs to be uploaded along with technical bid)

Note: (Detailed reference such as doc name, para no. page no. etc. should be provided)