# TENDER FORM



Acharya N.G.Ranga Agricultural University REGIONAL AGRICULTURAL RESEARCH STATION TIRUPATI– 517502, CHITTOOR DT.

# **NOTICE INVITING TENDER (Online version)**

<u>S.No.</u>	<u>Item</u>	<u>Description</u>
1.	Department Name	Regional Agricultural Research Station, Tirupati
2.	FILE / NIT Number	File No. 625/Admn.III/2025/RARS-TPT
3.	Tender Subject	Purchase of <b>Equipment</b> , Regional Agricultural Research Station, Tirupati- 517502.
4.	Cost of Tender Document	Not applicable
5.	Tender Type	Open
6.	Tender Category	Products
7.	EMD Amount for provisions(INR)	2% of the Bid value
8.	EMD payable:	The Associate Director of Research, RARS, Tirupati payable at Tirupati on any nationalized bank only
9.	Bid Document Downloading Start Date	12.08.2025, 05.00 PM
10	Bid Document Downloading End Date	22.08.2025, 10.00AM
11.	Last Date & Time for Receipt of Bids online	22.08.2025, 01.00 PM
12.	Submission of all the uploaded documents (Hard Copies) at the Regional Agricultural Research Station, Tirupati on or before	25.08.2025, 10.00AM
13.	Technical Bid Opening Date and Time(Qualification and Eligibility Stage)	25.08.2025, 11.00AM
14.	Price Bid Opening Date and Time (Financial Bid Stage)	After finalization of technical bid

15.	Place of Tender	Regional Agricultural Research Station, Tirupati.
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16.	Tender Inviting /	Associate Director of Research, Regional Agricultural Research Station,
	Opening authority	Tirupati.
17.	Address/E-mail id	tmuralikrishna1968@gmail.com
18.	Contact	70130 53203
	Details/Telephone	
19	Procedure for Bid Submission	1. Bids shall be submitted online. 2. The participating bidders in the tender should register themselves free of cost on e-procurement platform in the website <a href="http://www.apeprocurement.gov.in">http://www.apeprocurement.gov.in</a> .  Note: After tendering, all Bidders should submit the attested copies of the uploaded certificates along with original EMD amount through
		DD Drawn in favour of Associate Director of Research, RARS, Tirupati to the Associate Director of Research, RARS, Tirupati on or before 25.08.2025, by 10.00 AM, failing which their tender will be summarily rejected.
		<b>Transaction fee on e-Procurement Platform(Corpus fund):</b> All the participating bidders shall pay a transaction fee (non-refundable) as mentioned in the NIT payable to M/s APTS, Vijayawada and through on line. (0.04% of estimate contract value + GST as applicable).It is mandatory for all the participant bidders from 20.08.2020 to pay a Non-refundable Transaction fee electronically to the M.D., A.P.T.S, Vijayawada by the service provider through "Payment Gateway Service on E-Procurement platform".
		The Bidder shall authenticate the bid with his digital certificate for submitting the bid electronically on e-Procurement Platform and the bids not authenticated by Digital certificate of the bidder will not be accepted on the e-Procurement platform
	General Terms and Conditions and specifications of the equipment/Items	AS PUBLISHED IN THE TENDER DOCUMENT

Sd/-V.SUMATHI Associate Director of Research Regional Agricultural Research Station TIRUPATI

# ACHARYA N.G.RANGA AGRICULTURAL UNIVERSITY REGIONAL AGRICULTURAL RESEARCH STATION, TIRUPATI



# **E-PROCUREMENT NOTICE**

# Tender NoticeNo. 625/Admn.III/ANGRAU/RARS-TPT/2025Date:12.08.2025

E- Procurement tenders are invited from the manufacturers or their authorized dealers or reputed firms for Supply of Purchase of **Scientific equipments** for Regional Agricultural Research Station, Tirupati- 517502"

#### Details are as follows:-

1)	Tender document online opening date	12.08.2025, 05.00 PM
2)	Tender document download online closing date	22.08.2025, 10.00AM
3)	Last date for Bid- Submission Online	22.08.2025, 01.00 PM
4)	Submission of all the uploaded documents (Hard Copies) at the Regional Agricultural Research Station, Tirupati on or before	25.08.2025, 10.00AM

- Bidders shall have GST Registration (for details log on to www.apts.gov.in)
- For details visit <u>www.apeprocurement.gov.in</u>

For any clarification, please contact:

CONTACT: 70130 53203

Sd/-V.SUMATHI Associate Director of Research Regional Agricultural Research Station TIRUPATI

## **GENERAL TERMS AND CONDITIONS**

- 1. Tenders will be accepted through on-line up to 22.08.2025 until 01.00 PM by the Associate Director of Research, Regional Agricultural Research Station, Tirupati for the supply of Purchase of Tractor for Regional Agricultural Research Station, Tirupati-517502 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 is given at https://tenders.apeprocurement.gov.in.
- 3. The tenders are invited by Associate Director of Research, ANGRAU, Tirupati for the supply Purchase of Tractor for Regional Agricultural Research Station, Tirupati- 517502

# **ELIGIBILITY TO PARTICIPATE IN TENDERS**

- 1. Manufacturers or their authorized Dealers or reputed firm sare eligible to quote in this Tender. Authorized Dealers should attach Letter of Authority from the Principal manufacturer to quote in this Tender.
- 2. The Dealers/Makers should be registered firms and should have authorization certificate from principals in case representation of the international firm.
- 3. The Tendered shall supply good quality items as per Standards.
- 4. The Associate Director of Research, Regional Agricultural Research Station, Tirupati reserves the right to reject the tender of blacklisted companies and those of companies whose past performance with the Regional Agricultural Research Station, Tirupati was unsatisfactory due to delayed / erratic supplies, frequent product failures etc.,

#### SUBMISSION OF THE ON-LINE TENDER FORMS

Tenders have to be submitted in two parts in ONLINE in the prescribed proforma i.e., Technical Bid (Part-I) and Financial Bid (Part-II).

- 1. Financial Bids of those Tenderers who qualify in Technical Bid will only be considered for finalization of the tender.
- 2. 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.
- 3. 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. Tenders submitted without technical literature of the item 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:

25.08.2025 at 11.00 AM	Opening of Technical Bids i.e. Part-I
	Financial bid shall be opened after finalization of technical bid

- 1. The dates scheduled for RECEIPT and OPENING of tenders are fixed and will not be changed under any circumstances. However, the Associate Director of Research, Regional Agricultural Research Station, Tirupati 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.
- 2. 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.
- 3. The Associate Director of Research, Regional Agricultural Research Station, Tirupati is "Not Responsible" for non-receipt of tenders or late uploading of tenders on online for any reason, what so ever.
- 4. Failure to fill and sign the declaration and check slip shall make tender invalid.

# **DOCUMENTS TO BE ELECTRONICALLY ATTACHED:**

1. 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>.

Sl.No	Code No.	Name of the Document
1.	E-I	Declaration Form (Annexure-II)
2.	E- II	Manufacturing License / Authorization letter from the Manufacturing firm
3.	E- III	Earnest Money Deposit
4.	E- IV	VAT/Sales Tax/GST Clearance Certificate or 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.e. (2023-24 & 2024-25)duly certified by the Auditor
7.	E-VII	Copy of GST Registration Certificate
8.	E-VIII	Users list for the item/ equipment during past 4 years
9.	E- IX	BIS / ISO/ CE issued by the Competent Authority
10.	E-X	APSSIDC/NSIDC/MSME Certificate, if applicable
11.	E- XI	Government Ownership Certificate, If applicable
12.	E- XII	List of service centers with contact details for each of the equipment

- 2. The Tenderers are requested to submit the following for verification on or before 25.08.2025 until 10.00AM physically or by post. The Associate Director of Research, Regional Agricultural Research Station, Tirupati is not responsible for any postal delay.
  - a) Check slip of all the documents uploaded
  - b) Copies of all the documents, which were uploaded

Note: This is only for cross verification of the uploaded documents. Any required document failed to upload, the bid shall become invalid, even though documents are produced physically.

3. All the enclosed documents shall be in English or Hindi or Telugu, If Any Document is Produced in any Language Other than English or Hindi or Telugu, 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.

## **TRANSACTION FEE**

All the participating bidders shall pay a transaction fee (non-refundable) to M/s APTS, Hyderabad and through on line. (0.04% of estimate contract value + GST as applicable).It is mandatory for all the participant bidders from 20.08.2020 to pay a Non-refundable Transaction fee electronically to the M.D., A.P.T.S, Vijayawada by the service provider through "Payment Gateway Service on e-Procurement platform".

# **EARNEST MONEY DEPOSIT (EMD)**

1. Earnest Money Deposit as indicated below in the form of crossed demand draft / pay order drawn on any scheduled bank in favor of The Associate Director of Research, RARS, Tirupati and this E.M.D. The E.M.D. of unsuccessful tenderers will be returned after signing the agreement with the successful tenderers.

#### Particulars of EMDs : 2% of the Bid value.

- 2. All the bidders shall invariably upload the scanned copies of DD/pay order towards EMD along with the bid, in e-procurement platform and this will be the primary requirement to consider the bid responsive.
- 3. The DD/pay order should be deposited to this office while producing hard copies for verification.
- 4. Cheques, Cash deposits, Term Deposits or Fixed Deposits will not be accepted towards Earnest Money Deposit.
- 5. However the exemption of Earnest Money Deposit 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 order should be uploaded in the e-procurement platform in place of DD in case of any such claim.
- 6. 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, E.M.D. SHALL ACCOMPANY THE TENDER. Failure to enclose E.M.D. shall make such of those items not covered under S.S.I. Certificate invalid for consideration.

7. Earnest Money Deposit of other tenders deposited with this office during any period of time shall not be considered for this tender.

# **SECURITY DEPOSIT**

- 1. The successful Tenders(s) shall within 7 days, after the Associate Director of Research, Regional Agricultural Research Station, Tirupati written notice of acceptance of the Tender has been posted to him or them, deposit with the Associate Director of Research, Regional Agricultural Research Station, Tirupati a sum of rupees@ 2% of the cost of items inclusive of all taxes (or the authority may fix the amount according to the value of the tender) as a security for the fulfillment of the contract. Performance bond guarantee can also be considered, as security deposit in addition to the EMD. The Earnest Money Deposit/Security Deposit shall carry no interest. The Security Deposit to be deposited will be in addition to the Earnest Money deposit.
- 2. The Associate Director of Research, Regional Agricultural Research Station, Tirupati reserves the right to forfeit and confiscate Earnest Money Deposit, if the successful Tenderer(s) fail to pay the Security Deposit which is required under the Terms and conditions of this Tender.

# FORFEITURE / REFUND OF THE EARNEST MONEY DEPOST / SECURITY DEPOSIT

- 1. In case the selected Tender(s) does not supply the stores 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 Associate Director of Research, Regional Agricultural Research Station, Tirupati.
- 2. Earnest Money of the unsuccessful Tenderer(s) shall be refunded signing the agreement with the successful tenderers by the ANGRAU, Guntur. No interest is payable by The Associate Director of Research, Regional Agricultural Research Station, Tirupati on such deposits.
- 3. The Earnest Money and Security money deposited by successful Tenderer(s) shall be retained by The Associate Director of Research, Regional Agricultural Research Station, Tirupati till three months after the expiry of the contract period, i.e., 12 months from the date of acceptance of the tender o 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.
- 4. On due performance and satisfactory completion of the order in all respects during the contract period, the Earnest Money Deposit 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).

# VAT/SALES TAX/GST CLEARANCE CERTIFICATE

Attested Photo Copy of GST / VAT / Sales Tax Clearance Certificate and Sales Tax Payment particulars obtained from the competent sales tax authority of the area concerned for the years (2021-22 & 2022-23)shall be attached. Certificates older than that shall not be considered. Those not liable for GST/VAT/Sales Tax payment under relevant rules should produce a certificate to that effect from the competent authority.

## **MANUFACTURING LICENSE:**

- 1. Attested Photocopy of the Latest Manufacturing 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. Licenses issued for test and Analysis will not be considered. The product/item quoted by the tenderer shall be underlined with "Red Ink'. The License number and date should also be underlined with 'Red Ink'. The abstract of the product quoted should be enclosed. The Manufacturing License should clearly indicate a minimum of two years of manufacturing and marketing experience. Items without the proof of two years of Manufacturing and Market experience will summarily be rejected.
- 2. 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.
- 3. Tenderers should enclose documents to show that manufacturing Unit has been recognized with the ISO Certificate etc.
- 4. Tenderers should enclose documentary evidence of having manufactured and marketed the product for two years.

## **BIS/ISO/CE** etc CERTIFICATES (whichever is applicable):

- 1. Tenderer should produce BIS / ISO/ CE etc. certificate (wherever applicable) issued by the concerned Licensing Authority.
- 2. Tenderers should enclose BIS / ISO Certificate for products wherever applicable.
- 3. The certificates whichever is applicable and claimed should be furnished with supportive documents.

#### TERMS AND CONDITIONS FOR COMMERCIAL AGREEMENT:

- 1. The details of the required items are shown in e-procurement Web Application. Rates should not vary with the quantum of orders or destination.
- 2. The rates quoted shall be in Indian Rupees only and must be expressed both in figures and words as well. The rate of each category of item should be quoted. The rates quoted should be inclusive of all the applicable taxes and "FOR destination" (destinations for the items are mentioned in Annexure-I). However, the applicable taxes and packaging costs if any etc. should be clearly indicated in the price bid.
- 3. 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.
- 4. No Insurance charges will be paid by the Department / Indenter.
- 5. 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.
- 6. All rates quoted by the bidder should be valid for a period of One year from the date of acceptance of the lowest Bid.
- 7. 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 RARS, Station come to the notice at any time, during the

- course of Rate Contract for the rest of the Rate Contract period, the Associate Director of Research, Regional Agricultural Research, Station, Tirupati reserves the right to initiate an appropriate disciplinary action against such firms including black listing them.
- 8. IF ARTIFICIALLY LOW RATES ARE QUOTED, the ASSOCIATE DIRECTOR OF RESEARCH, REGIONAL AGRICULTURAL RESEARCH STATION, TIRUPATI RESERVES THE RIGHT TO CROSS-VERIFY THEM AND IGNORE THEM FROM CONSIDERATION IN ORDER TO PREVENT UNETHICAL TRADE PRACTICES.
- 9. 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, ignoring the lowest rates.
- 10. 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 will face suitable legal action for such action at any time during the Rate Contract period.
- 11. Rates quoted should be marked clearly with main price and taken separately. Total price after taking all the actuals will be taken as financial quote for comparison.
- 12. No representation towards upward revision of rates once accepted will be considered. DSIR and other certificates for custom exemption will be provided by RARS, Tirupati.
- 13. The rate quoted and accepted will be binding on the tenderer for the stipulated period and on no account will any increase in the price be entertained till the completion of tender period.
- 14. No tenderer shall be allowed at any time on any ground what so ever to claim revisions 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 RECEIVE" 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 shall be summarily rejected.
- 15. No company / Firm which has been blacklisted either by the Regional Agricultural Research Station, Tirupati, A.P or ANGRAU 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 will not only be debarred / Black listed permanently and their security deposit /EMD whichever is available with the Department will be forfeited and any business / transactions will be stopped with their firms forthwith.
- 16. The indented stocks shall be delivered at respective institutes or research stations as indicated in Annexure-I at the cost of the supplier.
- 17. The rates should be quoted separately for each item.
- 18. The Associate Director of Research, Regional Agricultural Research Station, Tirupati reserves the right for cancellation of tender even after approval at commercial stage due various administrative and financial reasons.

#### **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 a minimum period of (3) year.

#### **DEMONSTRATION OF THE ITEMS:**

- 1. The Tenderer may have to arrange for demonstration of the functioning of the items as per specifications with the Associate Director of Research, Regional Agricultural Research Station, Tirupati, in case of necessity.
- 2. If the item is declared to be not of standard quality or not meeting the specified requirements, it will deem to be rejected. If any item 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 item will be recovered from the tenderer, if the payment had already been made, in addition to penalty. *The approved firms shall Re-Supply the item*.

# **OTHER CONTRACTUAL OBLIGATIONS**

- 1. The contract shall not be capable of being varied except by written consent by both the Associate Director of Research (purchaser) 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.
- 2. The supplier shall not sublet or delegate this contract or part thereof without the written consent of the Associate Director of Research, Regional Agricultural Research Station, Tirupati. Such consent shall not however be withheld unreasonably. But the Tenderer(s) may without the consent of The Associate Director of Research, Regional Agricultural Research Station, Tirupati purchase material as he/they does not normally manufacture.
- 3. The supplier shall keep confidential all matters concerning this contract and comply with all reasonable security requirements. All drawing, blocks, specifications, manuscripts, samples etc., supplied by the Associate Director of Research, Regional Agricultural Research Station, Tirupati and all copies thereof shall be returned to the Associate Director of Research when their use is terminated. In no event the supplier(s) shall permit publicity concerning this contract without the prior consent of the Associate Director of Research, Regional Agricultural Research Station.
- 4. Any undertaking or commitment given by or made by any Officer or the Associate Director of Research verbally or in writing does not have any validity unless it is signed again by the authority competent who concluded an agreement earlier.

# **INSPECTION AND PACKING**

1. At all reasonable time during production and prior to dispatch of material the supplier(s) shall afford and secure for the representative of the Associate Director of Research, Regional Agricultural Research Station, Tirupati 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 Associate Director of Research, Regional Agricultural

- Research Station, Tirupati 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 Associate Director of Research, Regional Agricultural Research Station shall sign or countersign a certificate of inspection.
- 2. a) The supplier(s) shall supply to the Associate Director of Research, Regional Agricultural Research Station, Tirupati 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.
  - b) The responsibility of procurement of transport facilities and dispatch of the stocks in good condition and as per specifications and in time/door delivery lies with the supplier(s) and they must keep up the delivery schedule at any rate.
  - c) The insurance should be done at the cost of supplier(s) as the rate quoted is all inclusive for door delivery at respective institutes or research stations as indicated in Annexure-I.
- 3. 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.
- 4. 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 respective institutes or research stations 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.

## SUPPLIES AS PER SPECIFICATIONS

- 1. 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 construed that the materials offered are not to our requirements. Any special features may also be clearly brought out.
- 2. The decision of The Associate Director of Research, Regional Agricultural Research Station, Tirupati 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.
- 3. If the Associate Director of Research, Regional Agricultural Research Station, Tirupati requires any changes in specifications the supplier(s) shall use his best endeavor to comply with The Associate Director of Research, Regional Agricultural Research Station, Tirupati's wishes subject to fair fixation of prices and delivery schedule where appropriate.
- 4. If at any time during the term of this contract, the plans of The Associate Director of Research, Regional Agricultural Research Station changes for any reasons The Associate Director of Research, Regional Agricultural Research Station 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, The Associate Director of Research, Regional Agricultural Research Station, Tirupati agrees to accept delivery thereof at the contract price and terms.

## CONSEQUENCE OF NON-SUPPLY AND DAMAGES

- 1. 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 Associate Director of Research, Regional Agricultural Research Station, Tirupati 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 respective research stations or institutes as indicated in the Annexure-I or for loss of damage of any kind to the material in transit.
- 2. Assuming that the supplier(s) fails to deliver any or all the materials covered by the contract, The Associate Director of Research, Regional Agricultural Research Station, Tirupati 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.
- 3. In the event of the supplier(s) failing to complete the supplies in time or according to the approved specifications, The Associate Director of Research, Regional Agricultural Research Station, Tirupati 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).
- 4. In case the goods are not supplied according to specifications, they will be summarily rejected.
- 5. 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, the Associate Director of Research, Regional Agricultural Research Station, Tirupati 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. The Associate Director of Research, Regional Agricultural Research Station, Tirupati 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/Earnest Money deposit 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 Associate Director of Research, Regional Agricultural Research Station, Tirupati.
- 6. All invoices shall be prepared in four copies and shall be signed by the supplier(s) or his/their authorized agent(s). Every invoice shall bear a certificate to the effect that the material covered by the invoice(s) 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 invoice has been rendered previously in respect of the articles charged in the particular invoice. The invoice in triplicate along with advance stamped receipt shall be raised in the name of heads of the respective research stations or institutes as indicated in Annexure-I.
- 7. The payment of the bills shall be made by the heads of the respective research stations or institutes as indicated in Annexure-I duly deducting the statutory deductions, if any.

## **PENALITIES**

- 1. 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 Earnest Money Deposit deposited by him along with his tender shall stand forfeited to the heads of the respective research stations or institutes as indicated in Annexure-I and he will also be liable for all damages sustained by the heads of the respective research stations or institutes as 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 heads of the respective research stations or institutes as indicated in Annexure-I, whose decision is final in the matter.
- 2. 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 made from alternative suppliers. Such firms may be black listed for three years beginning from the year following the one in 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.
- 4 In all the above conditions, the decision of the ASSOCIATE DIRECTOR OF RESEARCH, REGIONAL AGRICULTURAL RESEARCH STATION, TIRUPATI shall be final and binding.
- In the event of any dispute arising out of the tender such dispute would be subject to the Jurisdiction of the Civil courts within the city of Tirupati.

## **SETTLEMENT OF DISPUTES**

- 1. The Associate Director of Research, RARS, Tirupathi has exclusive and sole rights to cancel this bid at any stage without offering any remarks or reasons thereof.
- 2. 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 Associate Director of Research, Regional Agricultural Research Station, Tirupati 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.
- 3. 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.
- 4. The parties also do hereby agree that the contract envisaged by these terms and conditions shall be deemed to have been entered into at Tirupati alone will have jurisdiction to try and legal proceedings which may arise out of this contract. Neither party shall file any proceedings in any other court.

Sd/-V.SUMATHI
Associate Director of Research
Regional Agricultural Research Station
TIRUPATI

# **TECHNICAL SPECIFICATIONS FOR**

# ENTO\_NO.1: LC-MS/MS (LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY) 01 QUANTITY

S.No.	Feature	Specification
1.	LC-MSMS (Triple Quadrupole)	A Bench Top High Sensitive Triple/Tandem Quadrupole LC/MS/MS System for Pesticide analysis, environmental analysis in various matrix.
2.	Mass Range	5-2000amu or better
3.	Scan speed	Should have the scan speed of 20,000 amu/secor above in QQQ mode
		Mass drift <1.0 Da over a 24 hour period
4.	Mass stability	Need to submit the performance proof document proving instrument robustness on ESI positive mode with any known compound in complex matrix like Food or Plasma with Protein precipitated method. Minimum 2000 injections robustness % RSD should be less than ≤5 %.
5.	Interface	Dual/orthogonal or off axis source or any other equally efficient technology capable of avoiding interferences from solvents and other extraneous matter, handling large batches of complex sample matrix.
	Ionization source	Ionization source must be combined ESI/APCI facility of interchanging easily by the user, and auto-detection of installed probe by the instrument and software or if unable to supply combined source provide dedicated ESI and APCI source.
6.		The source should be easily removable from the system to facilitate user cleaning without venting the vacuum, with automatic shutdown of system while the source / probe is being removed.
		The source shall have a flow rate compatibility from 50 $\mu$ L/min to 2000 $\mu$ L/min, without flow splitting in both ESI and APCI modes
		Temperature/Desolvation for ESI/APCI sources should be 600° Celsius or better
		All source parameters to be adjustable through software.
7.	Source cleaning	Should be done without venting the system and facility to vacuum interlock
0	Infusion	Dual Infusion device must be integral to the instrument and must be controllable from the instrument software.
8.	Device	User changeable tuning and calibration solutions to be infused into the probe via the switching valve.
9.	Vacuum system	A robust high efficiency dry vacuum pump system with minimum maintenance and
		utility with low noise level and automatic vacuum lock system.
10.	Triple Quadrupole	Quadrupoles having high standards of mechanical tolerances and minimum coefficient of Thermal expansion to ensure highest mass stability with Prealigned, pre and post filters to ensure excellent focusing of Ions into all the Quadrupoles for high sensitivity and resolution in both Q1 and Q3.
11.	Mass Resolution	Must be automatically adjusted to desired resolution; (0.50 Da, 0.75 Da or 1.00 Da FWHM)

		MRM ESI +ve 1 pg on column reserpine should give chromatographic S /N greater than 6,00,000:1 and MRM ESI-ve 1 pg on column chloramphenicol should give chromatographic S/N greater than 2,00,000:1 (OR)
12.	Sensitivity	Instrument IDL limits: < 2.5 fg detection by loading 10 fg on column of Reserpine and Chloramphenicol.
		From above both or either one specification should meet the acceptance criteria.
		Proof of performance documents should be submitted with minimum ten injections.
13.	Collision cell	T wave collision cell technology to allow use of very low Dwell times(1 milliseconds) without sacrificing sensitivity and eliminate Cross-Talk to enable Multiple MRM Transition Studies within a single run.
14.	MRM Acquisition	At least <b>500 MRMs or better</b> in a single time period, with no loss in sensitivity for co-eluting components at any one point of time. Minimum inter channel delay is 1ms or better.
14.	rate	(Need to submit the performance proof document proving MRM acquisition rate up to 500 MRM's with any known molecules. The % area difference between 50 MRM's and 500 MRM's should be within 20 %).
15.	Polarity Switching	+ve / -ve polarity switching time between alternate MRM scans should be 15 milliseconds or better.
		Tandem mass spectrometry should have following scan options
		a. Full scan
	Operating Modes	b. Selected ion monitoring/recording (SIM/SIR)
		c. Product ion scanning
16.		d. Precursor ion scanning
10.		e. Neutral loss/gain scanning
		f. Multiple reaction monitoring
		g. Simultaneous full scan and MRM along with matrix monitoring to be
		performed in a single run or equivalent
		h. Automatic and manual tuning.
		At least 6 orders of magnitude or better.
17.	Dynamic range	Submit the Performance proof documents proving 6 orders linearity with
177		Lidocaine or any known compound with concentration levels plotting on column 1fg to 1ng range with injection volume 10 uL.
18.	Detector	Long life highly efficient photomultiplier detector or equivalent with better performance up to lifetime(Minimum 7 years) of the instrument.
		Suitable Branded Computer workstation with required software.
19.	Computer platform	Advanced processor: Intel's i7 or better with 32 GB RAM, 10 TB SATA HDD or better.
		Monitor: 23" or better LCD/LED Monitor, Mouse, Keyboard.
		Operating System: Latest OS windows, Latest MS Office with lifetime

		license (or which is compatible with the instrument's database software)
		Printer: Laser Printer with Scanner.
		Separate computer system with software should be provided for offline data processing of instrument's data.
		Highly reputed N <sub>2</sub> gas generator, N <sub>2</sub> gas at 35 L/min or more
20.	Nitrogen Generator	It should be noise free, must have inbuilt compressor
		It should be able to supply high purity (99.5% or better),
21.	Gas cylinders	Any other gases which required to Install LC-MS/MS system should be provided by the vendor with all accessories such as cylinders, regulatorfor Installation
	Uninterrupted	Branded UPS of 10 KVA capacity or above better suitable with power
22.	Power Supply	factor correction and harmonic. Single phase for the smooth running of LC-
	(UPS)	MS/MS with battery back-up of minimum 1 hr with 80 % load capacity.
		Software must be Multitasking type. It must acquire and process the data
	Quantification /Software system	simultaneously.Application manager must be compatible with data of full scan, SIM / SIR or MRMDataAcquisition,Peak Integration, Calibration, Quantification and QC calculations must be fully automated.
		Application manager must allow to monitor of the molecular ion plus up to 4 confirmatory ions or better.
		Contaminant Data base: Should contain name of the compound, CV, Parent ion, CE, Two transitions, Retention Time (RT)Must be capable of performing the following functions and should be upgradable:
		Workstation must be able to control the MS, acquire, store, process and reproduce the data by the same computer.
		Workstation must be able to control LC, Detector and auto sampler.
23.		It must be able to regulate the gas pressure and flow during the data acquisition and append to the relevant data file.
		Software must have automated calibration and Quantitative optimization.
		Hardware should contain option of column tracking with number of injections performed in system.
		Automated MS to MS/MS switching during a single run with user selectable criteria
		Perform alternating positive/negative scans in one run.
		Automated Quantitation and reporting of acquired samples.
		Data may be processed as it is being acquired
		Provision for offline data analysis in the additional desktop system.

		The system should be capable of 21 CFR Part 11 and food safety compliance.
24.	IQ/OQ/PQ	Should perform IQ, OQ & PQ tests with documents during/ after the installation
25.	Training of personnel	Basic training for a period of not less than one week after installation of the equipment to technical personnel and further for method development whenever required during warranty period should be provided, free of cost.  Application support for method development for antibiotics, pesticides, mycotoxins analysis should be provided during warranty period, whenever required free of cost. And support anyone molecule validation during warranty period.  Trouble shooting training as and when required free of cost.
26.	Warranty	One-year onsite warranty to be provided for instrument and all accessories like PC, printer & UPS supplied from the date of commissioning.
27.	Experience	The supplier shall have at least three or more years of experience in the supply and installation of the equipment to Government testing organizations in India.
28.	Others	All specifications/ claims should be printed & highlighted on product specification sheet/ brochure/Performance proof and published on the company's webpage.  Regional user list along with minimum 3 performance certificate must be provided along with the contact details for the quoted model.  The supplier must demonstrate that it has a proven appropriate set-up and capability to provide after-sales service efficiently and effectively.

ENTO\_NO.2: <u>TECHNICAL SPECIFICATIONS FOR</u> LC-MS/MS ACCESSORIES for attaching to the LC-MS/MS unit

Item No. 2	Feature	Specification
	UHPLC/UPLC: Pump	Complete LC system and MS should be controlled by single software.  Should have Quaternary Pump capable of switching between four
1		solvents
1		Vacuum degassing capability
		Operating Flow Rate Range to be 0.010 to 2.000 mL/min, in $1\mu L$ increments with Gradient profiles.
		Maximum Operating Pressure 15,000 psi or better

		Effective System/Gradient Delay Volume ≤ 300µL, independent of system backpressure (with standard mixer)
		Plunger Seal Wash Integral, active, programmable
		Composition Accuracy +/- 0.5% or better
		Composition Precision 0.15% RSD or better
		Flow Precision 0.075%, 6 replicates, based on RT (0.500 – 2.000 mL/min),
		Flow Accuracy +/- 1.0% or better
		Number of sample plates: Two; Vial plate 1.5/2 mL vials
		Number of sample injection:1-90 or better
	Auto sampler	Injection volume range:0.5-50µl in 0.1 µL increments with partial or full loop mode
		Sample delivery precision:< 0.3% RSD or better
2		Injector linearity: r2>0.999 or better
		Sample Temperature 4 - 40 deg. C
		Sample Carryover < 0.002% or better with Caffeine.
		Total system (including pump & Autosampler) should be capable of operation at 15000 psi or better.
		Column Temperature Control 5 deg. C above ambient to 90°C.
3	Column oven	Column oven to accommodate at least one column of 15 cm or more.
		Light Source: Deuterium and Tungsten – Halogen Lamp. Long Life Deuterium lamp with 2000 hrs operation.
	Detectors: Photo  Diode Array (PDA)& RI detectors	Number of Photo diodes Elements: Minimum 512
4		Wavelength range: 190-800 nm, Increment of 1 nm
		Wavelength accuracy: ± 1 nm
		Wavelength Precision: ± 0.1 nm
		Signal Noise: 1 x 10 -5 AU or Less at 250 nm
		Digital resolution: 1.2 nm/pixel

		Linear Dangar Not more than 5 0/ deviation at 2.0 All
		Linear Range: Not more than 5 % deviation at 2.0 AU
		Signal Drift: 1.0 x 10– 3 au/ hr
		Sampling Rate: Up to 80 points
		Flow Cell: Need flow cell of 500 nanolitre.
		The conductivity detector must have a measuring range from 0 to 10,000µS/cm without range switching The conductivity detector's drift must be less than 0.5%/hour  The conductivity detector must have a noise specification of less than
		or equal to 0.005 $\mu$ S/cm. The conductivity detector must have cell temperature control from 20°C-50°C in steps of 5°C with the option to turn the cell temperature 'Off'. The cell temperature must maintain $\pm$ 0.1°C stability
5	Conductivity Detector	Theconductivitydetectormustbeableto acquiredata atten (10)points persecond
		Theconductivitydetector's electrodes mustbering-shaped and made from stainless steel
		Theconductivitydetectormusthavea
		flowcellwithaninternalvolumeof0.8µL orless
		Theconductivitydetectormusthavea flowcellthatcanhandleuptoa pressure limitof725psi
5	Computer platform and software	Suitable desktop computer with analysis software

# ENTO\_NO.3: <u>TECHNICAL SPECIFICATIONS FOR HOMOGENIZER</u>

Item No.	Equipment Name	Specifications	Qty.
ENTO_	<b>HOMOGENIZER</b>	Frequency Range: 30Hz - 70Hz	
NO.3:		Feed Size: 50 ml Falcon tubes	
		Final Fineness: ~5μm	
		Grinding Beads Size: 0.1 - 30mm	
		Noise Level: Under 55dB	

Grinding Method: Wet, Dry, Cold (no refrigeration) Bead Material: Alloy steel, Chrome steel, Zirconia, Tungsten carbide, Quartz sand Motor: Strong motor with reinforced shaft Frequency Control: Adjustable, programmable frequency Acceleration Time: Within 2 seconds Deceleration Time: Within 2 seconds Holder Materials: PTFE, Alloy steel, Aluminium alloy Safety Guard: Emergency stop button Voltage: AC100-120V / AC200-240V, 50/60Hz Capacity: 32×2ml, 24×2ml, 48×2ml, 64×2ml, 96×2ml, 24×5ml, 8×15ml, 4×25ml, 2×50ml Dimensions: 460 x 410 x 520 mm Weight: 52 kg Power: 450W	01
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# ENTO\_NO.4: <u>TECHNICAL SPECIFICATIONS FOR MUFFLE FURNACE</u>

ITEM NO.4	Equipment Name	Specifications	Qty.
ENTO_ NO.4:	MUFFLE FURNACE	Muffle furnaces for temperature 1100 °C	01
		<ul> <li>Tmax 1100 °C</li> <li>Heating from two sides from heating elements protected in quartz glass tubes</li> <li>Fast heating times (see table)</li> <li>Maintenance-friendly replacement of heating elements and insulation</li> <li>Housing coated in RAL</li> </ul>	

<ul> <li>Flap door which can also be used as a work platform Exhaust air outlet in rear wall</li> <li>Compact dimensions and light weight</li> <li>Controller mounted under the door to save space</li> </ul> Controller Digital PID-temperature control <ul> <li>1 program can be stored</li> <li>2 freely adjustable segments</li> <li>Program entry in steps Input of 1°C and/or 1min</li> <li>Switch-over 1°C/1°F as optional</li> <li>Additional equipment at extra cost</li> <li>Chimney, chimney with fan or catalytic converter</li> </ul>
<ul> <li>Technical Specifications</li> <li>Tmax Deg. C: 110</li> <li>Inner Dimension in mm ( w x d x h ): 170 x 200 x 170 Volume: 6 Ltr</li> <li>Outer Dimension in mm ( w x d x h ): 390 x 440 x 470</li> <li>Temperature uniformity of +/- 5k in the empty workspace ( w x d x h ): 120 x 150 x 120</li> <li>Connected load kW: 2.0</li> <li>Electrical Connection: Single phase</li> <li>Weight in kg: 27</li> <li>Heating time in Minute: 30</li> </ul>

# ${\tt ENTO\_NO.5:}\ \underline{\textit{TECHNICAL SPECIFICATIONS FOR}\ \textbf{FUME HOOD}}$

	Equipment Name	Specifications	Qty.
ENTO_ NO.5	FUME HOOD	<ul> <li>Features:         <ul> <li>19mm epoxy resin worktop with 25mm water proof edge which is chemical and temperature resistance.</li> <li>LCD digital controller is for your selection which can show the face velocity and make alarm when meeting with unproper airflow</li> <li>Remote gas fitting is with safety function to avoid leakage.</li> <li>The cabinet is with 304 stainless steel hydraulic hinge</li> <li>Double layer structure: 1.2mm Steel sheet outside, 5mm compact panel inside.</li> </ul> </li> </ul>	01

<ul> <li>Intelligent automatic delay protection function to exhaust residual corrosion air completely and prolong the service time of fume cupboard.</li> <li>Electrical Leakage protection device</li> <li>Window is made of 5mm toughened safety glass.</li> <li>Window height can be adjustable.</li> <li>Installed Fluorescent Lamp to view clearly</li> <li>4 sets of multi-functional water proof sockets.</li> <li>Specifications:</li> <li>External Size (WxDxH): 1200x850x2350mm</li> <li>Internal Size (WxDxH): 1200x850x2350mm</li> <li>Exterior Body: 1.2mm cold rolled steel plate coated with AkzoNobel anti-corrosion epoxy resin powder after acid washing and phosphorization etc.</li> <li>Interior Body: 5mm compact panel which 15 chemical resistant and easy to be dissembled.</li> <li>Work Top: 19mm solid epoxy resin worktop with 25mm water proof edge/ Z Black Granite.</li> <li>Window: 5mm toughened safety glass, height can be adjustable.</li> <li>Max Opening: 770 mm</li> <li>Power Supply: 220/380V, 50Hz</li> <li>Noise: ≤ 6odB</li> <li>Air Velocity: 0.3~0.8 m/s</li> <li>Fluorescent lamp: 30W</li> <li>Diameter of exhaust outlet: 250mm</li> <li>Standard accessories: Fluorescent lamp, LCD Controller, Remote water valve and tap, Remote safety gas valve and tap, Water cup sink, 4 sets of multi-functional water proof sockets</li> <li>Weight (Approx.): 270 Kgs</li> </ul>	
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# ${\tt ENTO\_NO.6:} \ \underline{\textit{TECHNICAL SPECIFICATIONS FOR}} \ {\tt SOXHLET\ APPARATUS}$

ITEM	Equipment	Specifications	Qty.
NO.	Name		
ENTO_NO.6	SOXHLET APPARATUS	Heating mantle: 250ml, 500 ml & 1000 ml  Flask capacity: Powder coated MS cabinet Vertical & horizontal rods, Screws & clamps  Structure: Nichrome heating element  Heating element: Individual energy regulator  Temperature controller: Individual energy regulator  Heating surface: Fiber glass net	01

Power supply: 220 Volts 50Hz	
Optional: PID temperature controller	
Glass parts	

# ENTO\_NO.7: TECHNICAL SPECIFICATIONS FOR HIGH SENSITIVE MICRO BALANCE

Equipment Name   Specifications   Qty.		T T	BALANCE	
MICRO BALANCE  Micro BALANCE  Min. mg: 0.1  Repeatability  (standard deviation):≤ ±mg 0.003   0.004   0.005   0.003   0.004   0.005   0.004   0.00  Repeatability  (standard deviation), typical:≤ ±mg 0.0025   0.003   0.004   0.00  Linearity deviation ≤ ±mg 0.01  Sensitivity drift between: ± ppm/K 1  +10 to +30 °C  Tarcequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218		<b>Equipment Name</b>	Specifications	Qty.
NO.7  MICRO BALANCE  Scale interval d mg: 0.001   0.002   0.005   0.01  Verification scale interval e mg: 1  Min. mg: 0.1  Repeatability  (standard deviation):≤±mg 0.003   0.004   0.005   0.03  Repeatability  (standard deviation), typical:≤±mg 0.0025   0.003   0.004   0.02  Linearity deviation ≤±mg 0.01  Sensitivity drift between: ± ppm/K 1  +10 to +30 °C  Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218	NO.			
Verification scale interval e mg: 1  Min. mg: 0.1  Repeatability (standard deviation):≤±mg 0.003   0.004   0.005   0.03  Repeatability (standard deviation), typical:≤±mg 0.0025   0.003   0.004   0.02  Linearity deviation ≤±mg 0.01  Sensitivity drift between: ± ppm/K 1  +10 to +30 °C  Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218	ENTO_	HIGH SENSITIVE	Max. capacity g: 1.1   2.1   3.1   21	01
Min. mg: 0.1  Repeatability  (standard deviation):≤ ±mg 0.003   0.004   0.005   0.03  Repeatability  (standard deviation), typical:≤ ±mg 0.0025   0.003   0.004   0.02  Linearity deviation ≤ ±mg 0.01  Sensitivity drift between: ± ppm/K 1  +10 to +30 °C  Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218	NO.7	MICRO BALANCE	Scale interval d mg: 0.001   0.002   0.005   0.01	
Repeatability  (standard deviation):≤±mg 0.003   0.004   0.005   0.03  Repeatability  (standard deviation), typical:≤±mg 0.0025   0.003   0.004   0.02  Linearity deviation ≤±mg 0.01  Sensitivity drift between: ± ppm/K 1  +10 to +30 °C  Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			Verification scale interval e mg: 1	
(standard deviation):≤ ±mg 0.003   0.004   0.005   0.03  Repeatability  (standard deviation), typical:≤ ±mg 0.0025   0.003   0.004   0.02  Linearity deviation ≤ ±mg 0.01  Sensitivity drift between: ± ppm/K 1  +10 to +30 °C  Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: ∅ 50  Weighing chamber height* mm: 218			Min. mg: 0.1	
Repeatability  (standard deviation), typical:≤±mg 0.0025   0.003   0.004   0.02  Linearity deviation ≤±mg 0.01  Sensitivity drift between: ± ppm/K 1  +10 to +30 °C  Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			Repeatability	
(standard deviation), typical:≤±mg 0.0025   0.003   0.004   0.02  Linearity deviation ≤ ±mg 0.01  Sensitivity drift between: ± ppm/K 1  +10 to +30 °C  Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			, -	
Linearity deviation ≤ ±mg 0.01  Sensitivity drift between: ± ppm/K 1  +10 to +30 °C  Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			Repeatability	
Sensitivity drift between: ± ppm/K 1  +10 to +30 °C  Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			·	
+10 to +30 °C  Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			Linearity deviation ≤ ±mg 0.01	
Tareequalization range (subtractive): < 100 from max. weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			Sensitivity drift between: ± ppm/K 1	
weighing capacity  Typical stabilization time ≤ s: 6   6   5   5  Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			+10 to +30 °C	
Isocal K:1.5  Temperature Change h:4  Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218				
Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			Typical stabilization time $\leq$ s: 6   6   5   5	
Time Interval:  Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			Isocal K:1.5	
Display result  (depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			Temperature Change h:4	
(depending on the set filter level) s: 0.2 - 0.4  Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			Time Interval:	
Weighing pan size mm: Ø 50  Weighing chamber height* mm: 218			Display result	
Weighing chamber height* mm: 218			(depending on the set filter level) s: 0.2 - 0.4	
			Weighing pan size mm: ∅ 50	
Net weight, approx. kg: 8.0			Weighing chamber height* mm: 218	
			Net weight, approx. kg: 8.0	

# ENTO\_NO.8: TECHNICAL SPECIFICATIONS FOR SAMPLE CONCENTRATOR

ITEM	<b>Equipment Name</b>	Specifications	Qty.
NO.			
ENTO	CAMDI E	Tamagatura Paras (159C 1009C)	01
ENTO_	SAMPLE	Temperature Range $(+5^{\circ}\text{C} \sim 100^{\circ}\text{C})$	01
NO.9	CONCENTRATOR	Heating Time ≤ 12min (from 40°C to 100°C)	
		Temperature Accuracy (40~100°C) ±0.5°C	
		Blocks Quantity 1 block	
		Nitrogen Flow Rate 0-10L/min	
		Nitrogen Pressure <0.1MPa	
		Power Input DC 24V	
		Max Power/ Avg Power 60/15 W	

ENTO\_NO.09. Technical specification for Calibration for 5 years

ITEM	<b>Equipment Name</b>	Calibration	Qty.
NO.			
ENTO_	GC-MS/MS (make M/s.	Technical back up and instrument	01
NO.10.	Shimadzu)	Calibration as per the ISO/IEC 17025	
	Ultra HPLC (make M/s. Shimadzu)	Technical back up and instrument Calibration as per the ISO/IEC 17025	01
	GC-ECD (make M/s. Shimadzu)	Technical back up and instrument Calibration as per the ISO/IEC 17025	01
	GC-FPD (make M/s. Shimadzu)	Technical back up and instrument Calibration as per the ISO/IEC 17025	01
	GC-NPD (make M/s. Shimadzu)	Technical back up and instrument Calibration as per the ISO/IEC 17025	01
	Onsight high sensitive micro balance	Technical back up and instrument Calibration as per the ISO/IEC 17025	2
	Rapid Mini EC system	Technical back up and instrument Calibration as per the ISO/IEC 17025	1
	Micropipette ( 0.1 to 10,	Technical back up and instrument	10 No

,	Calibration as per the ISO/IEC 17025	
μΙ		
Rotavap	Technical back up and instrument	1 No
	Calibration as per the ISO/IEC 17025	
Glassware standard flasks	Technical back up and instrument	Each 50
(5ml, 10ml, 25ml)	Calibration as per the ISO/IEC 17025	(150 flasks)

# ENTO\_NO.10: <u>TECHNICAL SPECIFICATIONS FOR Head Space Sampler for</u> Upgradation of existing Shimadzu Triple Quad GCMS/MS-TQ8040NX

ITEM NO	<b>Equipment Name</b>	Specifications	Qty.
ENTO NO.8:	Head Space Sampler for  Up gradation of existing Shimadzu Triple Quad GCMS/MS- TQ8040NX with accessories	HS20 NX Headspace Sampler (Loop) Power Cord AFC-2030 attachment kit for HS-20 AFC-2030,SPL APC(AUX-1Ch)-2030 APC installation kit 3 LabSol ADD HS20 EN 20ml HS-20pressure release crimp clear Vial kit (100pcs) Heat-Resistant Septum300°C(100 pcs) Heat-Resistant Steel Cap 300°C(100 pcs) 20mm Crimper 20mm Decapper Joint Split G0.5/.08 Nut HS Graphite ferrules 0.510/pkt Graphite ferrules 0.510/pkt 1-Butanol Aqueous Solution 50ppm HS-20 Automatic Switchover Cable FILTER FOR SPLIT PM KIT FOR GC-MS/NX PM KIT FOR GC-2030 FILAMENT D ASSY Deactivated Insert with wool for Splitless (5pc) MICROLITERSYRINGEGC-17A GCMS solution Trade in Kit for GCMS-QP PM KIT FOR NEXERA UHPLC FOUR DIV.HEATER ASSY 230V Pulse Motor Consumables: Syringe filters 0.2 μm, septa, liners,	01
	Spares to Shimadzu GC (ECD/FPD/NPD)	ECD 2010 Plus Exceed Cell 200V- 01 Quantity  Column oven coil / flap motor - 01 Quantity  Auto sampler for GC-NPD- 01 Quantity	

# ENTO\_NO.11: TECHNICAL SPECIFICATIONS FOR ICPAES

ITEM NO.	Equipment Name	Specifications	Qty.
ENTO_ NO.11		The equipment must come from a reputable brand in the market with direct manufacturer or through their authorized distributor support engineer, application and logistics locally.	01
		The Inductively Coupled Plasma Atomic Emission Spectrometer (ICPAES) system must have the capability to perform true simultaneous elemental analysis.	
		ICPAES hardware shall include, liquid sample introduction system, RF generator, dual view spectrometer (axial and radial) and solid state detector.	
		4. ICPAES system shall be software controlled through PC system. Software should be provided as standard part of the new system. Software shall display for equipment status, able to control plasma on/off, automatic plasma off after analysis, economy running mode and auto sampler (if provided).	

Sd/-V.SUMATHI Associate Director of Research Regional Agricultural Research Station TIRUPATI

**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 by them 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	demand	draft no.	dated	issued	by
					for Rs	towards the EMD.		

Signature of Tenderer Date Address

#### **ANNEXURE-III**

#### **Check List**

Sl.No	Code No.	Name of the Document
1.	E-I	Declaration Form (Annexure-II)
2.	E- II	Manufacturing License / Authorization letter from the Manufacturing firm
3.	E- III	Earnest Money Deposit
4.	E- IV	VAT/Sales Tax/GST Clearance Certificate or 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 Auditor
7.	E – VII	Copy of GST Registration Certificate
8.	E-VIII	Users list for the item/ equipment during past 4 years
9.	E- IX	BIS / ISO/ CE issued by the Competent Authority
10.	E-X	APSSIDC/NSIDC/MSME Certificate, if applicable
11.	E- XI	Government Ownership Certificate, If applicable
12.	E- XII	List of service centers with contact details for each of

Sl.No	Code No.	Name of the Document
		the equipment

# $\underline{ANNEXURE-IV}$

# **FINANCIAL BID**

I/We quote the rates FOR LC-MS/MS Regional Agricultural Research Station, Tirupati Inclusive of all taxes, duties, transportation, insurance, installation etc., as below.

Sl. No.	Name of the item	No. of Units	Price per Unit (Rs.)	Total amount (Rs.)

The art	icles will be ready for	or delivery within	days from the da	ate of receipt of firm	m orders.	
					Yours faitl	nfully,
	(Signature and	stamp of the 2	Tenderer state tered firm, Comp	~	whether	prop.
<u>Encl</u> :	Information brochure	enclosed				
	EMD – DD No. Dt.	For Rs.				

**Note:** 1. Attach additional sheets giving full particulars such as name and address of the proprietor or list of partners and their addresses or particulars of registered firm or of the company and the specifications of the items furnished.

1. Rates quoted should be marked clearly with main price and taken separately. Total price after taking all the actuals will be taken as financial quote for comparison.