



ICAR-National Research Centre for Banana



Indian Council of Agricultural Research
Tiruchirappalli, Tamil Nadu, India.

Thogamalai Road, Thayanur P.O.

Tiruchirappalli – 620 102, Tamil Nadu, India

Phone : 0431-2618125 (30lines)

An ISO 9001:2015 CERTIFIED

Email : director.nrcb@icar.gov.in; directornrcb@gmail.com; hoa.nrcb@icar.gov.in

F.No :25(1)/2020-2021/SP

Date : 11.03.2021

NOTICE INVITING e-TENDERS

(NATIONAL COMPETITIVE BIDDING)

Online bids are invited on single stage two bid systems for the “Supply and Installation of Dietary Fibre Estimation System (1 unit)” with the technical specifications mentioned in the Annexure III.

Tender documents may be downloaded from ICAR – NRCB web site www.nrcb.res.in(for reference only) and CPPP site <https://eprocure.gov.in/eprocure/app> as per the schedule as given in CRITICAL DATE SHEET as under.

CRITICAL DATE SHEET :

Published Date	11.03.2021 (01.00 P.M)
Bid Document Download / Sale Start Date	11.03.2021 (01.00 P.M)
Bid Clarification Start Date	11.03.2021 (01.00 P.M)
Bid Clarification End Date	16.03.2021 (01.00 P.M)
Bid Submission Start Date	11.03.2021 (01.00 P.M)
Bid Submission End Date	16.03.2021 (01.00 P.M)
Bid Opening Date	17.03.2021 (01.00 P.M)

Installation Site: ICAR – National Research Centre for Banana

(Indian Council of Agricultural Research), Phone: 0431-2618125

E-mail: director.nrcb@icar.gov.in / hoa.nrcb@icar.gov.in

Bids shall be submitted online only at CPPP website: <https://eprocure.gov.in/eprocure/app>. **Manual bids are strictly not accepted under any circumstances.** E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid. The bidder are requested to quote only for reputed make, latest model, best quality products to avoid rejection during technical evaluation.

Terms and Conditions

1. The Tender Inviting Authority has all the rights to retender or cancel the tender at any stage without mentioning the reasons.
2. Tenderer / Contractor are advised to follow the instructions c a r e f u l l y provided in **Instructions to Bidders (ITB) and General Condition of Contract (GCC)**, without fail, which are uploaded in our website at www.nrcb.res.in under “TENDER”, before submission of your bid. For clarification please send mail to hoa.nrcb@icar.org.in / director.nrcb@icar.org.in.
3. Care has been taken to avoid contradiction between stipulation in the ITB, GCC and those in the other sections of the bidding documents. But wherever contradiction arises, if any, stipulations contained in the Schedule of Requirements shall prevail.
4. **Tenderer / Contractor are also advised to follow the instructions provided in the ‘Instructions to the Contractors/ Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e-Procurement at ‘<https://eprocure.gov.in/eprocure/app>’**
5. Not more than one tender shall be submitted by one contactor or contractors having business relationship. Under no circumstance will father and his son(s) or other close relations who have business relationship with one another (i.e. when one or more partner(s) are common) be allowed to tender for the same contract as separate competitors. A breach of this condition will render the tenders of both parties liable to rejection.
6. Tenderer who has downloaded the tender from the NRCB website www.nrcb.res.in and Central Public Procurement Portal (CPPP) website <https://eprocure.gov.in/eprocure/app> , <https://eprocure.gov.in/epublish/app> **shall not tamper/modify the tender form including downloaded price bid template in any manner**. In case if the same is found to be tampered / modified in any manner, tender will be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with NRCB.
7. Before the deadline for submission of the online bid, NRCB Trichy reserves the right to modify the tender document terms and conditions. Such amendment / modification will be notified on website against said tender ID. Intending tenderers are advised to visit again NRCB website www.nrcb.res.in and CPPP website <https://eprocure.gov.in/eprocure/app> at least 3 days prior to closing date of submission of tender for any corrigendum / addendum/ amendment.

8. EMD Payment:

Bid Security	Rs.0/-	For MSME / NSIC Registered Vendors
EMD	Rs. 0 /-	For MSME / NSIC Non-Registered vendors

Earnest Money Deposit is to be paid only through online to the account of **ICAR Unit, NRCB** as per the bank details given below,

Account Name : ICAR UNIT-NRCB
Account Number : 10848468903
Account type : Current Account
Bank Name : State Bank of India
Branch : Main Branch, Cantonment,
Tiruchirappalli – 620 001.
IFSC : SBIN0000930
PAN : AAHFN5656Q

Bidders are required to submit the details of EMD Payment at the time of Bid preparation. All applicable bank charges shall be borne by the applicant and he shall not have any claim what so ever on this account on Government. The details of EMD payment also enclosed in the Tender document.

9. Bids will be opened as per date/time as mentioned in the **Tender Critical Date Sheet**.

10. In case of the supplier/firm not supplying the item/equipment after awarding the Contract within the stipulated time period, the **EMD will be forfeited** and the order stands cancelled.

11. **Performance Security Deposit** (3% of the equipment/item/service value) will be collected from the supplier before releasing supply/purchase order. The security deposit would be returned only after expiry of the warranty period and sixty days. In the event of selected firm refusing or failing to supply the equipment, the security deposit would be forfeited. And it is also informed that the **Performance Security deposit has to be claimed within three years after completion of warranty period, otherwise it would be forfeited. Submission of Performance Security is not necessary for equipment value upto Rupees 1 (One) lakh.**

12. **Price** should be quoted in net per unit (after breakup) and must include all packing and delivery charges to various Departments/Centers/Institutions. The offer /bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of tax & duties should be clearly indicated. The price should be quoted without custom duty and excise duty, since NRCB, Trichy is exempted from payment of excise duty, and the custom duty, which will be paid at concessional rate against duty exemption certificates.

13. **In case of import supply, the price should be quoted in FOB. Computers, Laptops, UPS/Stabilizers and other local supplies should be quoted separately in INR. In case of import supply, the supply order will be issued only after obtaining the Proforma Invoice from the Principals.**
14. **Taxes:** ICAR - NRCB, Trichy is a public funded research organization under the administrative control of ICAR, Ministry of Agriculture and Farmers welfare, Government of India and we are eligible for concessional Integrated Tax as per notification No.45/2017 Central Tax-(Rate), dated:14-11-2017/ Notification No.47/2017 Integrated Tax – (Rate), dated:14-11-2017 on submission of concessional certificate.. Hence tax should be charged at concessional rates as applicable to educational and research institutions run without profit motives, for which necessary certificate will be issued on demand at the time of retirement of documents/payment, wherever applicable.
15. **Agency commission**, if any, will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in the case of ‘Nil’ commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. The foreign principal should indicate about the percentage of payment and it should be included in the originally quoted basic price, if any.
16. **Risk Purchase Clause:** In the event of failure of supply of the item/equipment within the stipulated delivery schedule, purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.
17. **Payment: The payment will be made only after successful delivery/installation of the item/equipment at our specified site and no advance payment will be made under any circumstances.**

Submission of Tender

1. The tender shall be submitted online in two parts, viz., technical and price bid.
 2. All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.
 3. The bids submitted through Post/Telegram/Fax/email shall not be considered and will be summarily rejected.
 4. No correspondence will be entertained in this matter.
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Technical Bid:

The following documents are to be furnished by the Bidder / Supplier / Contractor along with the Technical Bid as per the tender document in the following order, **failing which the competent authority reserves the right to reject the bid summarily at the bid opening stage itself without entertaining for further process:**

i) Signed and scanned copy of :

1. Tender Acceptance Letter (Annexure-I) **(To be given on Company Letter Head).**
2. Price Bid Undertaking (Annexure-II) **(To be given on Company Letter Head).**
3. Technical Compliance Sheet(Annexure-IV)
4. Earnest Money Deposit is to be paid only through online to the account of **ICAR Unit, NRCB.**
5. Valid MSME/NSIC Certificate if claiming EMD exemption.
6. PAN card.
7. GST Certificate.
8. Valid Registration Certificate.
9. Affidavit of partnership / proprietary firm.
10. Manufacturer / Authorized Dealer/ Authorization letter from the Manufacturer
11. List of the equipment supplied and its end-users.
12. Catalogue/ Original pamphlets/ references clearly mentioning the make and model of all systems, sub systems and additional items with the complete technical details in the form of Brochures and write-ups.
13. **The catalogue should substantiate the technical specification of the equipment/item quoted by the supplier so as to enable the indenter/committee to evaluate the technical bids without any ambiguity.**
14. Last three years Income-tax returns.
15. Audited Balance sheet of last three years.
16. Check list mentioning all the above documents.

ii) **The supplier will be required to install the equipment and software at the specified installation site vis-à-vis the tender specifications.**

iii) Training will also be required to be given to the users on the operation based on the required application at the time of installation.

iv) **Don't mention about the Commercial / financial/ Price details of the tender anywhere in the technical bid,** it has to be specifically mentioned in the BoQ, which is provided with this tender.

Price Bid:

- (a) Price bid undertaking, which is provided in the Annexure – II, has to be duly signed and uploaded by the tenderer along with the technical bid in the order mentioned above.
- (b) Schedule of the model price bid in the form of BOQ_XXXX.xls in given below for reference.
- (c) There should not be any deviations from the Price bid template that has been uploaded with this e-tender; otherwise the bid will be summarily rejected.

Schedule of price bid in the form of BOQ_XXXX.xls:

The below mentioned Financial Proposal/Commercial/Price bid format is a model format. Similar BoQ is provided along with this tender document at <https://eprocure.gov.in/eprocure/app>. Bidders are advised to download the BoQ_XXXX.xls as it is and quote their offer/rates in the permitted column and upload the same in the Price bid. **Bidder shall not tamper/modify downloaded price bid template in any manner.** In case if the same is found to be tempered/modified in any manner, **tender will be completely rejected and EMD would be forfeited** and tenderer is liable to be banned from doing business with ICAR-NRCB Trichy.

The screenshot shows an Excel spreadsheet titled "Item Rate BoQ". It contains a form for bidder information and a "PRICE SCHEDULE" table. The table has 8 columns: NUMBER #, TEXT #, NUMBER #, TEXT #, NUMBER, NUMBER #, NUMBER #, and TEXT #. The corresponding headers are: Sl. No., Item Description, Quantity, Units, Estimated Rate in Rs. P, BASIC RATE in Figures To be entered by the Bidder in Rs. P, TOTAL AMOUNT Without Taxes in Rs. P, and TOTAL AMOUNT in Words. The table is mostly empty, with a "Total in Figures" row showing "0.00 INR Zero Only" and a "Quoted Rate in Words" row showing "INR Zero Only".

- 1. The rates shall be quoted in Indian Rupee or any other currencies as per the BoQ.
- 2. The rates has to filled at the particular cells in the BoQ_XXXX.xls such as Basic Rate, GST in %, Freight Charges, levies, etc. and any revision in the statutory taxes, fees, etc will be the responsibility of the Bidder.
- 3. The payment will be made to the Consultant/Bidder/Supplier/Contractor at any Bank Account maintained in India by way of ECS/RTGS after deducting the TDS as applicable.
- 4. The quoted rates shall remain firm throughout the tenure of the contract and no revision is permissible for any reason.

Instructions for Online Bid Submission:

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

Registration :

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “**Online bidder Enrollment**” on the CPP Portal which is free of charge.
 - 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
 - 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
 - 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
 - 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC’s to others which may lead to misuse.
 - 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.
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Searching for tender documents :

1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

Preparation of bids:

1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
 2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Deviations from these may lead to rejection of the bid.
 3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
 4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.
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Submission of bids:

1. Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3. Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
4. Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
5. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
6. The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
7. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys.

8. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
9. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
10. Upon the successful and timely submission of bids (ie after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
11. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

Assistance to bidders :

1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

The Director,
National Research Centre for Banana (ICAR),
Thogamalai Road, Thayanur P.O,
Tiruchirappalli – 620 102.

ANNEXURE - I TENDER

ACCEPTANCE LETTER

(To be given on Company Letter Head)

To,

The Director,

ICAR – National Research Centre for Banana,
Thogamalai Main Road,
Thayanoor,
Tiruchirappalli – 620 102.

Subject : Acceptance of Terms & Conditions of e-Tender – Reg

NRCB Ref.No. : F.No : 25(1)/2020-2021/SP.

Tender ID : _____

Name of Tender / Work: Supply and Installation of Dietary Fibre Estimation System) at ICAR - NRCB, Trichy- 620 102.

Make & Model No : _____

Country Of Origin : _____

Dear Sir,

1. I/ We have downloaded the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. 1 to 17 (including the Technical Bid, Price Bid, documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organization too has also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety and also unconditionally accept that ICAR – NRCB has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

5. I / We accept that being L1 alone will not confer the award of the contract by the NRCB. The Award of the contract will be communicated by ICAR-NRCB, Trichy through Post/ Fax / electronic form of communication, which is final and I / we shall abide by the terms / conditions / clauses contained therein.

6. I / We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/Public sector undertaking.

7. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

ANNEXURE - II
PRICE BID UNDERTAKING

(To be given on Company Letter Head)

From: (Full name and address of the Bidder)

To,

The Director,
ICAR- National Research Centre for Banana,
Thogamalai Main Road,
Thayanur,
Tiruchirappalli – 620 102.
Dear Sir/Madam,

Sub : Price Bid Undertaking – Reg.

Ref.No. : F.No:25(1)/2020-2021/SP

I submit the Price Bid for the “**Supply and Installation of Dietary Fibre Estimation System**”

(Make _____ Model _____) at

ICAR-NRCB, TRICHY” as envisaged in the Bid document.

2. I have thoroughly examined and understood all the terms and conditions as contained in the Bid document, and agree to abide by them.

3. I offer to supply at the rates as indicated in the price Bid of this tender.

Place :

Yours Faithfully,

Date :

Signature of authorized Representative

ANNEXURE – III

SPECIFICATION REQUIREMENTS- DIETARY FIBRE ESTIMATION SYSTEM

A. ENZYMATIC DIGESTION SYSTEM WITH WATER BATH SHAKING

- *Water Bath tank should be made of Stainless Steel with Plate to hold shaking clamps
- *Heater should be immersion Heater with thermostat (temperature range up to 110 degree Celsius) of 1500 Watts
- *Temperature controller should be microprocessor based PID Digital Temperature Controller with Auto tuning facility
- *Timer should be inbuilt digital timer: 0 to 99.59 Settable in Hrs. Mins & Secs
- *Temperature Range should be Ambient to 100° C
- *Temperature Accuracy should be Increments of 1°C
- *Temperature & Timer Setting should be Feather touch membrane keys
- *Stirring should be 0 to 120 strokes / minute continuously variable designed with Heavy duty permanent magnet DC motor with speed control designed for uniform noiseless reciprocal motion. Can operate continuously 12 -24 hrs. With stirring involving reciprocal shaker
- *Speed settings should be Rotary potentiometric knob for continuously variable speed
- *Speed Indication should be Digital Display with LED indication
- *Enzymatic digestion vessels (Beakers) seated on SS clamps - 4 nos.
- *Conical Flasks should be 4 Nos of 250 ml each.
- *Inbuilt Safety features with CE to fulfill GLP Norms: Over temperature protection, Auto error Indication, Sensor break protection, Heater cut off feature with buzzer indication and alarm, Acoustic signals with visual display, Auto tuning facility, Anti vibration mount, Auto stop & Start feature
- *Structure should be Acid prone parts made of stainless steel with Epoxy powder coating. Both tank and platform made of stainless steel of thickness SS 316 grade. Other parts of MS powder coated with anti-corrosive epoxy finish.

B. DIETARY FIBER FILTRATION UNIT

- *Filtration Unit should be designed to filter the enzymatic digested solution
- *Crucible should be Sintered Silica Glass Crucible (4 Nos.) of 70 mm height each.
- *Pore Size should be P1 grade porosity disc (Optional P0/P2 Porosity Disc)
- *Should provide 4 Nos. of Holders and Crucibles
- *Suction Pressure Pump should be Vacuum suction for rapid filtration
- *Should provide 4 Nos. Fixed filtration glass chamber in the filtration module.
- *Sample loading should be Individual sample loading with independent mechanical control
- *Uniquely designed residue collection vessel
- *Counter pressure option with reverse air stream

*Control valves should be Individual control valves for vacuum and filtration.

*Includes Essential Accessories like Spray Bottle, Crucible Rubber, Extractor Rubber, Teflon Bush & Nylon Bush

*It should be operated with 230V, 50 Hz. AC Mains

*Related published document, web links and list of publication in support of your claims on dietary fibre estimation system supplied/manufactured by you.

*If necessary, the equipment has to be demonstrated in our laboratory.

*Warranty for a period of 2 years should be provided for the compressor.

*AMC charges for minimum three years after warranty period, year wise may be quoted separately

ANNEXURE – IV

Technical compliance sheet

The bid stands duly rejected if the supplier doesn't produce the signed and scanned copy of the duly filled technical compliance sheet along with the Technical Bid.

Reasons has to be mentioned by the supplier against each item. The make, model, capacity, quantity, measurements etc. of that particular item/component has to be clearly mentioned for being technically compliant and non-compliant.

The reasons should substantiate the technical specification of the item quoted by the supplier so as to enable the indentor/committee to evaluate the technical bids without any ambiguity.

Make & Model No : _____

Country Of Origin : _____

Sl. No	Specifications of Dietary Fibre Estimation System	Complied Yes/No	Reasons for being technically compliant / non-compliant
	<u>A. ENZYMATIC DIGESTION SYSTEM WITH WATER BATH SHAKING</u> Water Bath tank should be made of Stainless Steel with Plate to hold shaking clamps.		
	Heater should be immersion Heater with thermostat (temperature range up to 110 degree Celsius) of 1500 Watts.		
	Temperature controller should be microprocessor based PID Digital Temperature Controller with Auto tuning facility.		
	Timer should be inbuilt digital timer: 0 to 99.59 Settable in Hrs. Mins & Secs		
	Temperature Range should be Ambient to 100° C		
	Temperature Accuracy should be Increments of 1°C		
	Temperature & Timer Setting should be Feather touch membrane keys		
	Stirring should be 0 to 120 strokes / minute continuously variable designed with Heavy duty permanent magnet DC motor with speed control designed for uniform noiseless reciprocal motion. Can operate continuously 12 -24 hrs. With stirring involving reciprocal shaker		
	Speed settingshould be Rotary potentiometric knob for continuously variable speed		
	Speed Indication should be Digital Display with LED indication		
	Enzymatic digestion vessels (Beakers) seated on SS clamps - 4 nos.		
	Conical Flasks should be 4 Nos of 250 ml each.		
	Inbuilt Safety features with CE to fulfill GLP Norms: Over temperature protection, Auto error Indication, Sensor break protection, Heater cut off feature with buzzer indication and alarm, Acoustic signals with visual display, Auto tuning facility, Anti vibration mount, Auto stop & Start feature		

Structure should be Acid prone parts made of stainless steel with Epoxy powder coating. Both tank and platform made of stainless steel of thickness SS 316 grade. Other parts of MS powder coated with anti-corrosive epoxy finish.		
<u>B. DIETARY FIBER FILTRATION UNIT</u>		
Filtration Unit should be designed to filter the enzymatic digested solution		
Crucible should be Sintered Silica Glass Crucible (4 Nos.) of 70 mm height each.		
Pore Size should be P1 grade porosity disc (Optional P0/P2 Porosity Disc)		
Should provide 4 Nos. of Holders and Crucibles		
Suction Pressure Pump should be Vacuum suction for rapid filtration		
Should provide 4 Nos. Fixed filtration glass chamber in the filtration module		
Sample loading should be Individual sample loading with independent mechanical control		
Uniquely designed residue collection vessel		
Counter pressure option with reverse air stream		
Control valves: should be Individual control valves for vacuum and filtration.		
Includes Essential Accessories like Spray Bottle, Crucible Rubber, Extractor Rubber, Teflon Bush & Nylon Bush		
It should be operated with 230V, 50 Hz. AC Mains		
Related published document, web links and list of publication in support of your claims on dietary fibre estimation system supplied/manufactured by you.		
If necessary, the equipment has to be demonstrated in our laboratory.		
Warranty for a period of 2 years should be provided for the compressor.		
AMC charges for minimum three years after warranty period, year wise may be quoted separately		