

**TENDER DOCUMENT**

<b>TENDER Enquiry</b>	<b>Scope of work</b>	<b>T.E. No. &amp; Date</b>
TENDER FOR PROCUREMENT OF EQUIPMENTS / INSTRUMENTS FOR LABORATORY OF TEXTILES COMMITTEE AT COCHIN	Supply of equipments / instruments for laboratory of Textiles Committee at Cochin	No. <b>TC/LAB/setting/Cochin/ 15(39-1)</b> dated : <b>18/12/2015</b>

**Tender Document No.:-**

**Date of issue :**

**Receipt No.:**

**For Rs. 1000/- (Non-refundable)**

**By DD / PO / BC**

**(Please tick appropriate)**

**Name & Address of Bidder-**

	<b>TEXTILES COMMITTEE</b> <b>(Govt. of India, Ministry of Textiles)</b> The Director (Labs), Laboratory Division, P. Balu Road, Prabhadevi Chowk, Prabhadevi, Mumbai-400 025. Tel: 022-66527519/523 Fax: 022-66527588 E-mail: <a href="mailto:tclabmumbai@gmail.com">tclabmumbai@gmail.com</a> Web site: <a href="http://www.textilescommittee.gov.in">www.textilescommittee.gov.in</a>	
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**Cover Page**

**Issuing Authority**

**KARTIKAY DHANDA**  
**Director (Labs)**

*Copy for Textiles Committee*

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**KARTIKAY DHANDA**  
**Director (Labs)**

*Bidder's copy*

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**Note: Interpretation of any term/ word/ clause lies with the Textiles Committee.**

**TEXTILES COMMITTEE**  
(Govt. of India, Ministry of Textiles)  
LABORATORY DIVISION,  
P. Balu Road, Prabhadevi Chowk, Prabhadevi, Mumbai- 400 025.  
Tel: 91-22-66527519/523, Fax: 91-22-66527588  
E-mail: tclabmumbai@gmail.com Website: [www.textilescommittee.gov.in](http://www.textilescommittee.gov.in)

**T. E. No.: TC/LAB/setting/Cochin/15(39-1)**

**Date: 18/12/2015**

**TENDER NOTICE INVITING BIDS FOR SUPPLY OF EQUIPMENTS / INSTRUMENTS  
FOR THE LABORATORY OF TEXTILES COMMITTEE AT COCHIN**

Bids in two separate sealed covers viz. Technical (Cover-A) and Financial (Cover-B) are invited by Textiles Committee from Textile Testing equipment manufacturers / authorized agents for the supply of testing equipment / instruments for their laboratory at Cochin. Details of the equipment / instrument, specifications, payment terms and other details are given in the tender document. Tender issuing authority is Director (Labs). **Tender documents can be downloaded in PDF format from the website [www.textilescommittee.gov.in](http://www.textilescommittee.gov.in).**

The bidders shall pay **Rs. 1000/-** which is non-refundable **towards the cost of the tender documents and Payment towards Earnest Money Deposit (EMD)** (as prescribed in tender document) by Demand Draft (DD)/Pay Order (PO)/Banker's Cheque (BC) **drawn in favour of "Textiles Committee" payable at Mumbai** at the time of submission of Tender documents. **Sealed bids without the above payments shall not be considered.**

**The last date for submission of duly filled tender both Technical & Financial bids is 08.01.2016 till 3.00 pm.**

**Schedule of Tendering process is given below:**

A.	Date and time for Pre-bid meeting (Briefing Session) in order to clarify any points related to the tender.	28.12.2015 at 3.30 pm
B.	Last date and time of submission of Bid (Both Technical & Financial Bids)	08.01.2016 till 3.00 pm
C.	Date and time of opening of Technical Bid	08.01.2016 at 3.30pm
D.	Date and time of opening of Financial Bid (only for successful technical bidders)	18.01.2016 at 3.00pm
E.	Earnest Money Deposit (Bid Security)	Details are given in Enclosure-1C

**1. ISSUE OF TENDER DOCUMENTS:**

Tender documents can be downloaded in PDF format from the website [www.textilescommittee.gov.in](http://www.textilescommittee.gov.in) The bidders shall pay **Rs. 1000/-** which is non-refundable **towards the cost of the tender documents** by Demand Draft (DD)/Pay Order (PO)/Banker's Cheque (BC) **drawn in favour of "Textiles Committee" payable at Mumbai** at the time of submission of Tender documents to the Textiles Committee.

**2. SUBMISSION OF TENDER DOCUMENTS:**

Bids (both technical & financial) should be submitted in two separate sealed covers, with clear superscription "Cover- "A" as "Technical Bid for the supply of textile testing equipments / instruments for laboratory of Textiles Committee at Cochin" & "Cover- "B" as "Commercial Bid for the supply of textile testing equipments / instruments for laboratory of Textiles Committee at Cochin, along with the tender no and date of opening and both covers are to be enclosed in an outer sealed cover with clear superscription on outer cover as "Bids for supply of equipments / instruments to Textiles Committee" addressed to **The Director (Labs), Textiles Committee, Laboratory Division, P. Balu Road, Prabhadevi Chowk, Prabhadevi, Mumbai- 400025**, along with the documents as per instructions given at the check list for bidders.

Filled in Tender documents which are hand delivered has to be dropped in the Tender box kept for the purpose at aforesaid address. Filled in Tender documents sent by Post/Courier services will be received by Laboratory division of Textiles Committee and after making inward entry for date & time, the same shall be dropped in the Tender box. **Textiles Committee will not be responsible for any late submission of the tender by post/courier.**

A pre-bid meeting (Briefing Session) for bidders will be held at Textiles Committee, Mumbai at the address given above on **28/12/2015 at 3.30 p.m.** in order to clarify any points related to the Tender. The bidders or their authorized representatives may attend this meeting, if desired so.

Last date & time for submission of sealed bids at Textiles Committee, Mumbai is **08.01. 2016 up to 3.00 p.m.** Late bids will not be accepted. The technical bids will be opened on **08.01. 2016 at 3.30 p.m.** in the Conference Hall of the Textiles Committee, 5<sup>th</sup>

Floor, P. Balu Road, Prabhadevi Chowk, Prabhadevi, Mumbai- 400 025. The technical bids will be opened in the presence of bidders or their authorized representatives who may wish to remain present at the time of opening of bids. ***The representative should produce a letter of authority for that purpose.*** The representative without the authority letter will not be allowed to attend the meeting.

After detailed analysis of technical bids, the only bidders who are found to be technically responsive will be considered for financial bid. Only the technically qualified bidder will be communicated. The financial bids will be opened on **18/01/2016 at 3.00 p.m.** in the Conference Hall of the Textiles Committee, 5<sup>th</sup> Floor, P. Balu Road, Prabhadevi Chowk, Prabhadevi, Mumbai – 400 025. The Financial bids will be opened in the presence of only technically responsive bidders or their authorized representatives of technically responsive bidders who may wish to remain present at the time of opening of bids. ***The representative should produce a letter of authority for that purpose.***

Bidders desiring to send the bid document through Post/Courier services may please ensure that the same reaches before the time and date stipulated in the Tender document. **Textiles Committee shall not be responsible for any transit delay. Bids sent through e-mail / Fax shall not be entertained.**

The Textiles Committee reserves the right to accept or reject any or all the bids either in full or any part at its discretion without assigning any reason whatsoever.

**Address for Communication: The Director (Labs), Textiles Committee, Laboratory Division, P. Balu Road, Prabhadevi Chowk, Prabhadevi, Mumbai– 400 025.**

**Tel : 022-66527519 / 523, Fax : 022-66527588 e-mail: tclabmumbai@gmail.com**

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### 3. **INTRODUCTION:**

The Textiles Committee is a statutory body under the Ministry of Textiles, Government of India. The Committee was established by the Textiles Committee Act 1963 by the Parliament. The laboratory is one of the important functional divisions of Textiles Committee which provides Textile Testing & Technical services throughout India. Textiles Committee has established 17 laboratories in various centers spread across India. Textiles Committee is going to establish a new laboratory at Cochin and this tender is floated to invite suppliers for the supply of instruments required for this laboratory.

### 4. **SCOPE OF WORK:**

Bids in two separate sealed covers viz. Technical (Cover-A) and Financial (Cover-B) are invited by Textiles Committee from bonafide manufacturers / authorized agents **for the supply of textile testing equipments / instruments for laboratory of Textiles Committee at Cochin.**

Details of the equipments / instruments, specifications, quantity required, payment terms and other details are given in the tender document. Interpretation of the terms & conditions and other related issues in the tender would rest with Textiles Committee only. The **Director (Labs), Textiles Committee, Mumbai** shall be the tender issuing authority.

### 5. **TERMS AND CONDITIONS- GENERAL:**

5.1) **Tender documents can be downloaded in PDF format from the website [www.textilescommittee.gov.in](http://www.textilescommittee.gov.in)** The bidders shall pay **Rs. 1000/-** which is non-refundable **towards the cost of the tender documents** by Demand Draft (DD)/Pay Order (PO)/Banker's Cheque (BC) **drawn in favour of "Textiles Committee"** payable at Mumbai towards cost of tender documents at the time of submission of Tender to the Textiles Committee.

5.2) Modifications, if any, made in the above documents will be done by addenda/ corrigenda, copies of which will be uploaded in website. One copy of same shall be signed, sealed and submitted packed along with the technical bids. **The bidder shall not make any additions/ deletions to or amend the text of the documents except in so far as may be necessary to comply with any addenda / corrigenda**



**issued. The bidders shall use only tender documents as downloaded for submitting his bid** and shall comply with various terms and conditions.

- 5.3) The authorized person of the bidder shall sign and stamp on **each page** of tender documents.
- 5.4) The full name of the person authorised to file the tender, designation, current and main office address, phone no. fax no. & e-mail ID shall be indicated in the tender.
- 5.5) Bids sent through e-mail, Fax will not be entertained.
- 5.6) The bids shall be filled in English. All accompanying literature / brochures, warranty clause, payment conditions and correspondence shall also be in English.
- 5.7) No claim for costs, charges, expenses incurred by the bidder in connection with preparation & submission of tender and for subsequent clarifications of their tender shall be accepted.
- 5.8) Textiles Committee will not be responsible for any typographical errors/ambiguity/ additions /omissions committed by the bidder while filling up of the tender.
- 5.9) Submission of the bid by the bidder implies that he has read tender documents and has made himself aware of the scope and specifications of the items to be supplied, availability of materials, local conditions and other factors bearing on the execution of the supply.
- 5.10) The bidder shall be deemed to have full knowledge of documents and no extra charges consequent on any misunderstanding or otherwise shall be allowed.
- 5.11) Any question regarding the tender document and discrepancies shall be clarified in the pre-bid meeting. Modifications, if any, made in the above documents during pre bid meeting will be done by addenda / corrigenda, copies of which will be uploaded in website. One copy of same shall be signed, sealed and submitted packed along with the technical bids.

- 5.12) The bidder shall be deemed to have satisfied himself before bidding as to the correctness and sufficiency of his bid and about the rates quoted by him and cover all his obligations under the tender.

**6. EARNEST MONEY DEPOSIT (EMD) / BID SECURITY:**

- 6.1) **Technical bids** must be accompanied by Earnest Money Deposit (EMD) either in the form of Demand Draft (DD)/Pay Order (PO)/Banker's Cheque (BC) in favour of "**Textiles Committee**" payable at Mumbai and shall be interest free. The amount of EMD for each of the items is given at **Annexure- II**. The DD/PO/BC can be for the combined amount of EMD payable for individual items, for which the bidder has quoted.
- 6.2) EMD shall be paid in Indian currency (INR) only. In case of receipt of EMD in Indian currency (INR) from abroad, same shall be refunded in Indian currency only. Textiles Committee will not be responsible for refund of EMD in foreign currency.
- 6.3) The EMD deposited by the successful bidder shall be held back towards the Performance Security as stipulated in the terms & conditions. No interest would be paid to the EMD deposited / held back.
- 6.4) Bids not accompanied by Earnest Money Deposit shall be rejected.
- 6.5) The EMD of the unsuccessful bidder(s) will be returned within 3 months from the date of opening the technical bids.

**7. PERFORMANCE SECURITY:**

The successful bidder shall have to deposit an amount of **10%** of the cost of the machinery/equipment (including the retained EMD amount) towards interest free Performance Security and retention money, in the form of Demand Draft (DD) or Bank Guarantee (BG) as per the format given at Annexure- II. This BG or DD shall be submitted along with the acceptance of the Purchase Order.

**8. AUTHORITY OF SIGNING:**

- 8.1) If the tender is submitted by an individual, it shall be signed by him.
- 8.2) If the bids are submitted by a proprietary firm, it shall be signed by the proprietor with the company seal.
- 8.3) If the bids are is submitted by a partnership firm, it shall be signed by **all the partners** of the firm or by a **partner holding the power of attorney** for the firm for signing the tender with the company seal, in which case, a self attested copy of power of attorney shall accompany the technical bid.
- 8.4) If the bid is submitted by a limited company or a corporation, it shall be signed by a duly authorized person or the person holding the power of attorney for signing the bid with the company seal, in which case a self attested copy of the power of attorney or authorization letter shall accompany the technical bid.

**9. QUOTING OF RATES:**

- 9.1) The bid shall be filled in English neatly handwritten or typed. All the figures and words shall be legible. The rates shall be written both in words and in figures. No overwriting should be there on the figures. Cost of the items and taxes should be mentioned clearly in the Commercial Bid only. Optional and any other essential items / accessories required for the maintenance of the equipment for the next two years should also be specified in the offer separately.
- 9.2) The bidder shall show the rate of each item, the total of each section and the grand total of the whole tender.
- 9.3) Corrections, if any, shall be made by crossing out, initialing with date and rewriting.
- 9.4) In case of conflict between the figures and words in the rates, the latter shall prevail.

- 9.5) The bids shall be verified by the bidder for accuracy in the arithmetical calculations, prior to submission.
- 9.6) The price offered for all imported items should be in **US Dollar** only.
- 9.7) The bidder can submit their bid for all / some of the equipment listed at annexure- I. **In case of if a bidder is bidding for more than one equipment use separate covers for each equipment. In such cases, each equipment will have a separate technical bid cover and a financial bid cover. Finally all the technical bid covers of the individual equipment can be put together in a larger common envelope and similarly the financial bids of individual equipment can be put together in a larger common envelope and submitted.**

**10. PACKING AND SUBMISSION:**

- 10.1) The bid shall be submitted before the scheduled date & time and at the address mentioned in the Tender Notice. Bids (both technical & financial bids) should be submitted in separate sealed covers, with clear superscription “Cover - “A” as “Technical Bid for the supply of textile testing equipments / instruments for laboratory of Textiles Committee at Cochin” & “Cover - “B” as “Financial Bid for the supply of textile testing equipments / instruments for laboratory of Textiles Committee at Cochin”, enclosed in an outer sealed cover with clear superscription on outer cover as “Tender for supply of textile testing equipments / instruments for laboratory of Textiles Committee at Cochin”. Any bid received after due date and time shall not be entertained.
- 10.2) Bid can be submitted personally or can be sent through post/courier services at the address mentioned in the Tender Notice. Bidder desiring to send the tender documents through post/courier services may please ensure that the same reaches before the time and date stipulated. Textiles Committee shall not be responsible for any transit delay. Bid sent through E-mail and Fax shall not be entertained.

**11. COVER “A” (TECHNICAL BID) SHALL CONTAIN:**

- 11.1) Earnest Money Deposit (EMD) in the form of a Demand Draft (DD)/Pay Order (PO)/Banker’s Cheque (BC) for an amount as mentioned in the tender document.
- 11.2) DD/PO/BC for **Rs. 1000/-** (non-refundable) towards the cost of tender documents downloaded from website.
- 11.3) Original Tender document duly signed by the authorized person on all pages.
- 11.4) Compliance to technical specifications of the equipment / item for which bids are submitted – Authorized person to indicate the compliance of technical specification in the respective pages of the tender document and sign the same.
- 11.5) Compliance to the terms and conditions of the tender document – Authorized person to specify “all the above terms and conditions will be complied with” and sign in respective pages of the tender documents, where “terms and conditions” are given.
- 11.6) Adherence to the stipulated delivery schedule of the equipment/item – Authorised person to specify “delivery schedule given above will be complied with” and sign in respective pages of the tender documents where ‘delivery schedule of each of the items’ is given.
- 11.7) In case of **Category- I Sophisticated Equipment / Instrument** - Proof that the bidder is (i) either manufacturer or (ii) an authorised agent for the equipment/item for which the bid is submitted.
- 11.8) In case of **Category- I Sophisticated Equipment/ Instrument** List of organizations in India and abroad, along with Contact Person, address, Tel. No., Fax No. etc. to which similar make/model of the equipment were supplied.

- 11.9) In case of **Category- I Sophisticated Equipment / Instrument** , a Compliance certificate that the bidder has manufactured or supplied the equipment during the past 2 years and performance report from at least 2 such users for the past 2 years.
- 11.10) Covering letter, in the letter head of the bidder stating:
- i.) That the minimum warranty period of one year
  - ii.) That the bid conforms to the terms and conditions of the tender:
  - iii.) Confirmation about the supply of Certified Reference Materials/samples for checking the performance of the testing instruments, wherever applicable.
  - iv.) Confirmation that the quoted rates are valid till \_\_\_\_\_(Should be twelve months, at least)
  - v.) The details regarding the service centres, stocking of spares etc.
- 11.11) Addenda / corrigenda / clarification issued by Textiles Committee before due date of tender, duly signed by the authorised person.
- 11.12) Descriptive leaflet/brochure giving the technical details of the equipment/instruments.
- 11.13) A letter indicating assumptions, criterion, technical alternative etc., if any. However, the alternatives suggested by the bidder would not be taken as the basis for technical/financial evaluation of the bids.
- 11.14) In case of **Category- I Sophisticated Equipment / Instrument** -Details of pre-installation requirements including floor space, size of the table required, electrical power with details of power points / UPS requirements and also to state whether Air-conditioned environment is needed to house the system and to run the tests, etc.
- 11.15) Power of attorney/authorization letter/ partnership deed authorizing the person who has filed the tender, if applicable.
- 11.16) A copy of the certificate of calibration of the similar makes and model equipment/instrument for which bid is submitted from an accredited calibration laboratory or National Physical Laboratory, wherever applicable.

- 11.17) In case of **Category- I Sophisticated Equipment / Instrument – for the Instruments sr.no 1- 5** Copy of audited Balance Sheet of the bidder for the last 3 years indicating the turnover of 1.5 **crores** per year minimum in the field.
- 11.18) Copy of Current and Valid Income Tax Clearance Certificate (ITCC) & PAN Card.
- 11.19) Copy of current and valid clearance from Central and State Sales tax authority.
- 11.20) Copy of Service Tax Registration and latest service tax filing Challan.
- 11.21) Covering letter, in the letterhead of the bidder as per ENCLOSURE- 4. The bidder can add or delete the rows, if necessary.
- 11.22) Tender document duly signed by the authorized person on all designated pages wherever necessary.

**12. COVER “B” (FINANCIAL BID) SHALL CONTAIN:**

- 12.1) Total cost of the main equipment/instrument and accessories (imported/indigenous), required for the functioning of the equipment, including the test control system, printer, packing & forwarding etc. duly filled and signed in the format prescribed in the tender document at **Enclosure-1D**. **No money other than the total indicated above will be payable on any account.**
- 12.2) Minimum required essential spare parts for next 2 years after the warranty period are to be specified. The cost of the spares is to be quoted separately along with the financial bids, as optional as per the details given in **Enclosure-1D**.
- 12.3) Annual Maintenance charges for comprehensive and non-comprehensive the next 5 years, after the expiry of the warranty period, in the format prescribed in the tender document at **Enclosure-1D**.
- 12.4) All the pre-installation requirements such as Voltage stabilizer, surge arrestor, necessary length of cables, plugs etc. should be provided by the bidder along with the equipment/item. The bidder shall quote for these items separately. The Centre

will provide adequate space, furniture and electricity only for the installation and commissioning of the equipment/item.

- 12.5) Covering letter, in the letterhead of the bidder as per Enclosure-5. The bidder can add or delete the rows, if necessary.

**13. VALIDITY OF THE TENDER:**

- 13.1) The tender is valid for 90 days.
- 13.2) Rates quoted by the bidder shall be valid till **12** months from the date of placing the purchase order or to an extended date as agreed upon mutually. The Performance Security shall remain valid for a period of sixty days beyond the date of completion of all contractual obligations including warranty obligations.
- 13.3) The Bidder shall not withdraw or revise or alter any conditions, rate(s) quoted within this stated period, unless he is called upon to do so on mutual agreement / negotiations.
- 13.4) The Secretary of Textiles Committee reserves the right to forfeit the security deposit (EMD) if the bidder revokes or withdraws the bid within this stated period.
- 13.5) Interpretation of the terms & conditions and other related issues in the tender would rest with Textiles Committee only.

**14. OPENING OF BIDS:**

The bids shall be opened by the Purchase Committee constituted by the Competent Authority of Textiles Committee. Time, Date and Venue are as given in the "Tender Notice".

**15. TERMS AND CONDITIONS- SPECIAL:**

- 15.1) Cost details are to be filled in the prescribed format as given at Enclosure-1D for all the instrument as applicable to imported / indigenous indicating therein ex-works price, agency commission payable to Indian agents, FOB, Insurance, packing and



forwarding and total CIF charges, applicable taxes etc. including that of the accessories like voltage stabilizers etc.

15.2) Agency commission for imported equipments / instruments will be paid in Indian Rupees, only after the successful installation of the equipment and imparting training to the technical personnel of the laboratory concerned.

15.3) All accessories start up kit required for installation & commissioning the main equipments are to be specified and quoted.

15.4) The terms of payment shall be:

i) 20% of the total price of the machinery/equipment will be paid as advance on receipt of (i) acceptance of purchase order, (ii) applicable security deposit in the form of BG or DD and (iii) Bank Guarantee for an equal amount valid for the duration up to delivery of the equipment. (Format of BG given at Annexure- IV)

ii) 60% of the ex-works price of the machinery/equipment plus government levies will be paid against invoice and delivery of the equipment in good condition.

iii) 20% remaining amount including packing, freight and insurance charges will be paid after successful commissioning of the equipment, demonstration of satisfactory performance and imparting training to the technical personnel of the laboratory concerned.

15.5) The bidder should take responsibility for delivering the equipments **inside the premises of the laboratory of Textiles Committee, at Cochin** as specified in the Purchase Order.

15.6) The Foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees and other such levies imposed outside India.

- 15.7) The Local supplier shall be entirely responsible for all taxes, duties, license fees etc. incurred until delivery of the contracted goods to the purchaser viz. Textiles Committee.
- 15.8) The bidder shall adhere to the delivery period of the equipment / items as committed by him as indicated in Annexure- V of the tender document, whichever is earlier. **Penalty for non-execution of the order within the delivery period shall be 2% of the cost of the equipment / item for every week of delay.**
- 15.9) The installation and commissioning of the equipment/ item should be completed within 30 days from the date of delivery, failing which penalty shall be levied @ 2% of the cost of the equipment/item for every week of delay.
- 15.10) During the warranty period, regular servicing/maintenance should be undertaken free of charge, including replacement of defective parts/travel cost etc. Subsequently, servicing/maintenance should be undertaken by the authorised agency of the manufacturer / supplier as per the annual maintenance contract conditions.
- 15.11) Details of onsite warranty, maintenance of the system during and post warranty and undertake Annual Maintenance Contract/Comprehensive Service Maintenance Contract beyond warranty shall be given in the Technical offer. In case of foreign quote, the Indian Agent who shall maintain during warranty and AMC beyond warranty shall be given in the Technical Offer.
- 15.12) The supply of spare parts is to be guaranteed at least for a period of 10 years after the supply & Installation of the equipment at Textiles Committee.
- 15.13) After successful installation, in case of breakdowns the minimum down time of equipment/instrument. Is to be specified. If the identified firm or person fails to put the system into working condition alternatives to be provided to maintain the specified minimum down time .
- 15.14) charges for comprehensive and non-comprehensive Maintenance Contract (for 5 years or more after warranty period). to be mentioned separately in commercial bid

- 15.15) No sub-contracting will be allowed for installation or maintaining system/equipment / instrument during or after warranty period.
- 15.16) Discount offered should be mentioned clearly in the commercial bid only.
- 15.17) The Bidders are requested to quote for Educational Institutional Price / Academic Price for Equipment and Software since Textiles Committee is involved in training and R & D activities.
- 15.18) The bidder shall give warranty for at least one year in respect of items quoted.
- 15.19) Operation manuals, calibration procedures and other instruction manuals should be provided along with each of the equipment.
- 15.20) Terms of service contract (comprehensive or non-comprehensive) after the expiry of warranty period are to be included.
- 15.21) The Test Control Systems like computer and printer, compatible to the main instrument, are to be supplied indigenously with latest configuration and licensed operating system. Assembled models and unlicensed operating system will not be accepted.
- 15.22) If the equipment/item is not manufactured by the bidder, authorization of the manufacturer to the bidder for marketing and servicing the equipments in India should be enclosed along with the technical bid of the tender. In the absence of such authorization, the bid will not be considered at all.
- 15.23) It is the sole responsibility of the supplier to process insurance claim in case of machine / equipment / instrument is received in fully or partly damaged condition or missing in transit. No extra payment will be borne by Textiles Committee towards clearing charges, freight, cost towards deputation of service person or any other charges whatsoever for rectifying / replacement of the damaged parts / equipment / instruments.

- 15.24) The responsibility for customs clearance (in case of imported equipments), transporting and delivering the equipment/instrument inside the laboratory at Cochin, as the case may be lies with the bidder only. All the relevant documents required for the customs clearance and transportation will be provided to the bidder or his representative by the Textiles Committee within a reasonable period of time. In case of delay in the customs clearance of imported equipments, the demurrage has to be paid by the bidder only. Hence, suppliers may inform their principals abroad to give timely information regarding the dispatch of equipments/items.
- 15.25) In case of short supply or wrong supply of equipment/instrument, its parts or accessories or supply of items in damaged conditions, it is the responsibility of the bidder to arrange for the supply of the required items in working condition as per the purchase order, within a reasonable time. Additional expenditure, whatsoever for the above will be borne by the bidder only.
- 15.26) The specifications given in this document are the minimum requirement. The bidders are free to offer equipment/instruments with better features also. However, the evaluation shall be based on the features mentioned in the tender document. If different models are quoted, the cost details may be given in separate sheets.
- 15.27) Orders for the supply of items once placed with successful bidder is non transferable and sub-contracting is not permitted. Textiles Committee reserves the right to cancel the order in such event.
- 15.28) The items and number of units of the items being procured are tentative and liable to change without assigning any reason.
- 15.29) Financial statement of the manufacturer incorporating the turnover of business for the last 3 years should be submitted along with the financial bids. In case of authorized agents who are submitting the bids, income tax returns for the last 3 years have to be submitted along with the financial bids.
- 15.30) Any non-fulfillment of the stipulation given above will make the bid invalid.
- 15.31) The full payment will be released to the bidders only after completion of satisfactory performance check of the instrument/equipment.

15.32) In case of computer related equipment, the bidders have to quote for indigenous computer only instead of imported computers, if any.

15.33) The bids shall first be evaluated for their “technical responsiveness” which shall inter-alia include

- (i) Compliance to EMD requirement
- (ii) Proof that the bidder is (i) either manufacturer or (ii) an authorized agent for the equipment/item for which the bid is submitted.
- (iii) Compliance to technical specifications of the machinery/equipment for which the bid is submitted.
- (iv) Adherence to the warranty clause.
- (v) Documents in support of compliance to the calibration of the equipment and its traceability to national/international standards of measurement and proven performance through proficiency testing, wherever such requirement is specified.
- (vi) Necessary documentary proof that the bidder has manufactured or supplied the equipment during the past 2 years along with the list of such customers and performance report of the equipment from at least 2 such customers/users for the past 2 years.  
Attachment of the Copy of the balance sheet of the bidder for the past three years for assessing their financial stability.
- (vii) Details regarding the service centers, ex-stock of spares etc.
- (viii) Confirmation about the supply of Certified Reference Material / Samples for checking the performance of the testing instruments, wherever applicable.
- (ix) Compliance to all other relevant and critical terms and conditions of the tender
- (x) DD for Rs. 1000/- towards the cost of the tender document.
- (xi) Validity of the bid up to 12 months.
- (xii) For the equipment under category- 1 and some of the automatic equipment under category- 2, the bids will be evaluated by grading system based on the following criteria
  - a. The range, sensitivity / detection limit, technique used, calibration traceability, overall technical compliance and satisfactory user certificate etc. Benchmark grading for technical responsiveness would be 60% marks.
  - b. 40 % marks for the financial bid

- (xiii) If any of the above mentioned parameters are not fulfilled, the bid will be considered as technically non-responsive.

15.34) The financial bids of these bidders who are technically responsive only shall be evaluated based on the following criteria:

- (i) Total price of the equipment inclusive of accessories/ancillary equipment, taxes duties etc.
- (ii) AMC charges (comprehensive as well as non-comprehensive) for five years after the expiry of the warranty period.

**16. TRAINING:**

The successful bidder of the equipment should provide adequate training for at least 2 technical personnel of the laboratory per equipment including trouble shooting etc. and making them confident of operating the equipment independently.

In case of major and sophisticated instruments specified under Category –I, the successful bidder should give training in the following 3 phases:

- i. **Phase 1 - Basic theory, application (Textiles testing) and operational technique of the equipment:** The purpose is to train Textiles Committee officials in fundamental aspects on the above. This will be an open house classroom training at a mutually convenient venue. and date To & fro (including local conveyance), lodging and boarding charges for 2 persons per equipment is to be borne by the successful bidder.
- ii. **Phase -2 –Installation and application training :** This will be conducted at the time of actual installation of the instrument. This involves hands on experience on the instrument , customized applications related to Textile testing explaining complete capabilities of the software and brief trouble shooting, routine maintenance including application technique, if any.
- iii. **Phase-3 : Advanced training on Instrument operation and application :** This will be conducted abroad after completion of the 2<sup>nd</sup> stage for at least two persons. Boarding, lodging, to & fro local conveyance, airfare and training expenses of the trainee has to be borne by the successful bidder.

In addition to above training, continuous ongoing support in application area from the supplier and their principal abroad are to be provided. Further any information update on the advancements in research /publications/ journals should be provided at least for a minimum period of five years.

**17. AGREEMENT:**

The successful bidder shall sign, stamp and return copy of Purchase Order placed with him, as a token of acceptance of the terms and conditions of the Purchase Order. The bidder shall also enclose the applicable performance security in the form of DD or BG in favor of “Textiles Committee” payable at Mumbai as specified at Clause No. 7. The successful bidder shall submit the agreement along with the copy of the purchase order in the prescribed format as given at Enclosure- 3 .

**18. CRITERION FOR REJECTION:**

- 18.1) The Textiles Committee, Govt. of India, Ministry of Textiles reserves the right to accept or reject any bid or reject all bids without assigning any reasons whatsoever for their decision.
- 18.2) Bids are liable to be rejected in which any of the particulars / prescribed information is either missing or incomplete in any respect and/or if the prescribed conditions are not fulfilled.
- 18.3) Bids, which are found to be technically non-responsive, shall be rejected and their financial bid shall not be opened.
- 18.4) Canvassing in connection with tender is strictly prohibited and bid submitted by bidder who resorts to canvassing will be rejected.
- 18.5) If the stipulated validity period of quoted rates as prescribed in the tender document, is not mentioned the bids will be rejected..
- 18.6) Bids containing specific conditions of the bidder other than the terms and conditions given in the tender document which are not acceptable to the Textiles Committee, are liable to be rejected.

18.7) Prior to submission of the bid, the prospective bidders are expected to examine technical specifications of the equipments / instruments required, terms and conditions, etc., given in this tender document. Failure to furnish all information required in the tender document may result in the rejection of the bid.

18.7) Bidder shall ensure that the Technical & Financial bids to be submitted in the prescribed formats given in the tender document only.

**19. ARBITRATION:**

In the event of any dispute or difference arising out of operation of this agreement, the same shall be referred to the sole arbitrator governed by the Arbitration and Conciliation Act 1966 and the arbitrator will be **Textile Commissioner or Vice-Chairman of Textiles Committee** or any other officer appointed by him whose decision shall be final and binding on both the parties.

**20. JURISDICTION:**

In case, any dispute arises in transacting the contract, the Jurisdiction will be at Mumbai.



**DETAILS OF INSTRUMENTS REQUIRED FOR THE LABORTORY OF  
TEXTILES COMMITTEE AT COCHIN**

**Category- I Sophisticated Equipment / Instrument:**

<b>Sr. No.</b>	<b>Name of the Equipment</b>	<b>No. of units</b>
1.	Fourier Transform Infra Red Spectrophotometer (FTIR)	1
2.	Gas Chromatograph coupled with Mass Spectrometer (GC-MS)	1
3.	High Performance Liquid Chromatograph (HPLC) with Quick Analyzer	1
4.	High Performance Thin Layer Chromatograph (HPTLC)	1
5.	Tensile Tester Universal: 500 Kgs Capacity	1
6.	Microscope (Binocular Type) with Camera	1

**Category- II Laboratory Accessories:**

<b>Sr. No.</b>	<b>Name of the Equipment</b>	<b>No. of units</b>
1.	Analytical Balance	1
2.	Water Purification System	1
3.	Hot air Oven	1
4.	Deep Freezer	1
5.	Hot plate	1
6.	Refrigerator	1
7.	Evaporator	1
8.	Ultra Sonic Bath	1
9.	Water bath Shaker	1

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## FOR SPECIFICATION OF EQUIPMENT

### Category- I Sophisticated Equipment / Instrument:

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6.	Microscope (Binocular Type) with Camera	41 - 43

### Category- II Laboratory Accessories:

<b>Sr. No.</b>	<b>Name of the Equipment</b>	<b>Page No.</b>
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**COMPLIANCE STATEMENT TO SPECIFICATIONS OF INSTRUMENTS –**

**Category- I Sophisticated Equipment / Instrument:**

(Compliance with specification column is to be filled up by the bidder stating 'YES / NO' as the case may be)

**1. FOURIER TRANSFORM INFRARED SPECTROPHOTOMETER (FTIR):**

This equipment is required for the qualitative analysis of fibres, polymers and other analytical applications based on the needs from time to time. The specifications of the equipment should be as follows:

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1.	Basic Features	<p>Multi-range FTIR Spectrophotometer capable of both rapid scan and step scan operation covering minimum spectral range of 485 to 8,500 cm<sup>-1</sup> with alignment free Michelson's interferometer. Moisture-free and controlled atmosphere within the sealed optical compartment to ensure rapid and trouble free access to higher range without the need for purging is required. The beam splitter of Germanium coated with Zinc Selenide (Zn Se) / KBr with suitable coating on both sides to protect against humidity effect.</p> <p>The interferometer windows to be coated with moisture resistant Zn Se material or completely air sealed for efficient protection to the beam splitter or better with built in auto-drier.</p> <p>The interferometer must be permanently aligned. Interferometer design. System that require alignment (either manual or automatic) are not acceptable.</p> <p>The interferometer bearing mechanism must be wear-free (frictionless) design to ensure unlimited lifetime. Bearings with wear are not acceptable as they require frequent maintenance and costly exchange.</p> <p>The interferometer must utilize retro reflecting cube corners for instantaneous correction of instability due to mirror tilt.</p>	
2	Weave length range	485 to 8,500 cm <sup>-1</sup>	
3	Signal to noise	50,000: 1peak to peak and 25,0000:1 RMS or better (4 cm <sup>-1</sup> spectral resolution, 5 second data collection time, room temperature, ZNSE optics, DTGS <i>detector</i> )	
4	Weave length accuracy	0.5 or better over entire range	
5	Spectral resolution	0.5 cm <sup>-1</sup> or better over entire range	
6	Detector	High intensity Ceramic infra-red source with high sensitivity Fast recovery deuterated triglycine sulfate (DTGS) detector.	

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
7	Source	High intensity source.	
8	Software and data handling	<p>I. Latest window operating system compatible software to control all the instrument functions and Communication interface. Required system controlled through using appropriate software and interphases for quick and reliable data acquisition and analysis, Fully automated switch-over through software between the Mid-and Near-IR spectral ranges. Require software able to perform operations like Qualitative and Quantitative analysis of spectra perform Scan background scan, File save, display spectrum in different colours, Spectral calculator, spectral comparison, Processes, difference, derivative smooth, interpolation, normalize and baseline correction etc. Printing basic export like export to ASCII and EPS format in both Mid IR and NIR region. The software having PLS/PCR/CLS/Beer's law as standard featured is required.</p> <p>II. Processing 1<sup>st</sup> – 4<sup>th</sup> derivative with a variable filter, smooth (Savitsky-Golay, moving average and triangular), difference, normalization, A, %T, %R, KM, LOG (1/Processing R), ordinate modes, cm-1, nm and micron abscissa modes, +, -, *. /, difference, baseline correction, smooth, deconvolution, normalize, apex, interpolate, blank, Kubelka-Munk conversion, Kramers-Kronig, ATR correction, film thickness, spectral purity measurement peak table, peak height and peak area.</p> <p>III. Spectrometer components like source, laser, detector, and interferometer must be continuously monitored for operation within factory specifications. The operator must be immediately notified by system software if any of the factory specifications are not met. The software must offer detailed information about the nature of the failure and suggest possible remedy.</p> <p>IV. Optical components like detector and source must be electronically coded, so that these components are automatically recognized when placed in the spectrometer. Appropriate parameter must be automatically transferred to the application software.</p> <p>V. Software to control all the functions required for infrared analyses, instrument control, data manipulation &amp; analysis.</p> <p>VI. Spectral comparison algorithm and Euclidean</p>	

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
		<p>searching available. Spectral searching against commercially available or customer developed libraries. Software should be fully GLP, GMP compliant with audit trails, multilevel password protection and report generation in Acrobat format.</p> <p>VII. Software to have provision for multilevel validation which should include measurement of energy of background spectra, wavelength accuracy, resolution check, repeatability of wave number and transmittance.</p> <p>VIII. The system should come with Polystyrene film standard and NG Schott glass for validation.</p> <p>IX. Should provide library of, organic, inorganic Polymer compounds, Textiles, Plastic, Rubber, Paints &amp; coating (min: 10,000 compounds)</p>	
9	Accessories	ATR (Attenuated Total Reflectance) with Sampling accessories for measurement of liquid, films, pastes, mulls, volatiles and powder samples without making pellets, hydraulic Pellet Press 15 ton, Agate & Pestle etc, KBr Die set and DRS (Diffused Reflectance System) of direct analysis of powder.	
10	Additional accessories	Suitable UPS with minimum 30 min backup and essential spares as applicable for at least two years ( <b>should be quoted separately</b> ).	
11	Computer	Latest configuration PC and printer are to be included in the bid separately. Assembled PC with unlicensed software will not be accepted	
12	Training	<p>Training should be imparted to at least 2 technical personnel in 3 phases as follows</p> <ul style="list-style-type: none"> <li>i) Basic technique.</li> <li>ii) During installation.</li> <li>iii) At manufacturer's site / Application centre.</li> </ul>	
13	Warranty	Should be provided for all the optics up to 5 years or more. Should provide Hardware support up to 10 years.	
14	Suitability of power supply	Suitable for 230V $\pm$ 10V, 50 Hz	
15	Certified reference Materials (Optional)	Provision of Certified reference Materials for PVC, Phthalates, Poly urethane and poly acrylate.	

## 2. GAS CHROMATOGRAPH COUPLED WITH MASS SPECTROMETER (GC-MS):

Equipment is required for the analysis of Banned amines, Pesticide, PCP, PCBs, TeCP, Phenol (Chlorinated and Ortho-Phenyl Phenol (OPP)), PVC plasticizer, such as TBT, DBT, Dyes, Brominated Flame-retardant finishes auxiliaries, chemicals and other analytical applications based on the needs from time to time. The specifications of the equipment should be as follows:

### GAS CHROMATOGRAPH (GC)

Sr. No.	Specification	Requirements	Compliance with specifications (Yes / No)
1.	Basic Features	A GMP Compliance GC system with accurate electronic flow and pressure controllers with optimum use of carrier gas. Enables result comparison, transfer method with minimum method modification.	
2.	Electronic Pneumatics Control (EPC) Channel	EPC should be provided to inlet Detector and Auxiliary gas	
	Pressure Adjustment	Should be possible to adjust the pressure in increments of 0.01 psi up to 100 psi	
	Flow Programmed	Should be possible to program 3 steps Flow or pressure ramps.	
3.	Injector port for capillary column	Should have two Split/Split less injector with EPC and as PTV with heating rate of 700°C per min. One capillary split/split less and one PTV split/split less injection port.	
4.	Detector port	Should have at least two detector ports with EPC. (one each for MS and another for future addition of ECD).	
5.	Auto sampler	The sampler should have the capacity to hold at least 100 vials of 2ml. capacity, controllable from the GC keyboard or software (optionally). Area Reproducibility: 0.5 % RSD and Injection volume linearity with 99% correlation. The Head Space Sampler should be transfer line based with loop system for precise quantification and it should be from same manufacturer. It should have up gradation facility as well.	
6.	Column oven	Easy access of two capillary columns with a temperature range 4°C above ambient to 450°C with a temperature set point resolution of 1°C. Operating Temperature from ambient to 450 °C with fast oven heating from 50 to 450 °C in 5 minutes and cool down time from 450 to 50 °C in 4 Minutes. 15- Step or more oven temperature programming.	
	Temperature Ramp rate	Maximum temperature ramp rate should be at least 120°C/min and min 1°C/min	
	Pressure range	Pressure setting range should be 0-970 kPa	
	Plateaus	Should be possible to program 6 temperature ramps (7 plateaus)	

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
7.	Cooling rate	300°C to 50°C in 5 min (max) at 25°C ambient temperature	
8.	Capillary Column	Capillary columns 0.32 mm ID, 30 Mts, DB5 and DB 35 suitable for the analysis System should come with three stationary phase columns for azo dyes identification.	
9.	Injection volume	Should have the facility to inject from 0.1 to 100 micro L	
		System should have capability of locking/adjusting the retention time so that same retention time can be reproduced from system to system and the method should be electronically transferred. NIST 2014 or latest library along-with AMDIS/DRS software should be provided and also retention time locked databases with NIST Database.	
		The system should be capable of replacement GC column without venting MS vacuum which results in elimination of GC/MS downtime.	
10.	Additional accessories	Voltage stabilizers, UPS and essential consumables as applicable should be quoted separately	
11.	Safety Standards	The system to conform to International safety standards and manufactured under a quality system registered to ISO 9001	
12.	Suitability of power supply	Suitable for 230 V ± 10V, 50 Hz.	

### MASS SPECTROMETER (MS)

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1.	Basic Features of MS	The instrument should have Quadropole based collector for the analysis of various compounds with a mass range up to 1150 amu or better preferably monolithic quartz type.	
2.	Source and pump	Should be EI ion-source and air-cooled single turbo molecular vacuum pump or dual turbo backed by rotary pump with positive and negative modes of operations. The EI source should be inert to active compounds. CI ion-source should be quoted as optional. They should have automated tuning for EI/CI. Dual filament for easy switching in EI mode	
3.	Detector	Electron Multiplier Tube	
4.	Range of detection	Should have Mass range up to 1150 amu in 0.1 amu steps or better. Mass resolution should be unit mass resolution throughout the range Mass	

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
		Axis Stability should be $\pm 0.10$ amu / 48 hrs or better. Scan rate should be 5,000 to 10,000 amu /sec Dynamic range should be $10^6$	
5.	Signal to noise ratio	EI Scan – 100:1 S/N for 1 pg/ul OFN standard scan from 50 to 300 u with Helium or better EI SIM – 10:1 S/N for 20 fg OFN	
6.	Temperature of Ion Source, Transfer line and Quadrupole	Temperature of the ion source, transfer line and quadrupole should be independently controlled and quadrupole can have pre-filters	
7.	Nature of Source material	The quadrupole should be made of inert material and EI source should be inert or chemically coated to make it inert to active compounds.	
8.	Mode of scanning:	Full Scan or SIM. Scan speed up to 12,000 u/sec or better. Provision for quadruple heating (150 °C or above ) to keep the source clean for a long period. Ionization source temperature programmable up to 350 °C. It should include turbo molecular pump with 260 L/Sec capacity or better. Unit resolution across the total mass range	
9.	Mass Stability :	$\pm 0.1$ units over 48 hours. EI Sensitivity: Sub picogram sensitivity with full scan ( S/N : 1000:1 or better) and femotogram sensitivity under SIM mode.	
10.	High speed scanning:	20 spectra/sec or better. Capable to run up to 90 SIM ions or above.	
11.	Calibration Kit	Suitable start up kit should be provided with calibration compound. Perfluorotributylamine (PFTBA) / Heptacosa or the necessary celebrants' of GC-MS to be provided alongwith with the certificate of analysis	
12.	Auto Tuning	Automatic Tuning, calibration and snapshot capabilities	
13.	Spares Availability	A certificate of the principle be included stating the instrument spares and services will be available for 10 years after the supply.	
14.	Tool kit	. Tool kit for routine maintenance of GC and MS.	

#### SOFTWARE & OTHER REQUIREMENTS

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
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Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1.	Computer	Latest configuration branded PC and printer are to be included in the bid separately. Assembled PC with unlicensed software will not be accepted.	
2.	Software and data handling	<p>User friendly software to control GC, MS, auto sampler and all instrumental operations included qualitative and quantitative data analysis and automatic report generation (original CD with license number).</p> <p>.Latest version Window Operating System compatible software to control all the instrument function and Communication interface capable of controlling maximum of our chromatographs Instrument control, data acquisition, data analysis, calibration, reporting, automation and customization Capable of networking and GLP compliant, upload and download all GC parameters.</p> <p>Display to show multiple overlaid chromatographic signals and instrument parameters. Should be possible to set a customized compound database, based on retention times.</p> <p>If there is any up-gradation of software with in the period of warranty then the same should be provided free of cost by the supplier/manufacturer.</p> <p>Full function of off-line copy to allow users the flexibility of analyzing samples at different locations. Real time plot should be displayed throughout the run. Fully GLP compliant software with audit trails, multilevel password protection and report generation in Acrobat format SIM/SCAN – should be possible to acquire both SIM and SCAN data from a single injection. Should have System suitability test facility. Fully GLP compliant software with audit trails, multilevel password protection and report generation in Acrobat format</p>	
3.	Data base / Atlas of spectra	<p>Latest version of NIST databases (including original CD) with license number from manufacturer.</p> <p>Refining Provision for refining of spectra Libraries – Should provide NIST, Wiley07, Pesticide, Drug toxicology or any other latest library</p>	
4	UPS	UPS with built-in input and output isolation transformer. Compliant for inductive loads; SMF batteries; Minimum one hour back up with full load (UPS suitable for IT/NETwrok load not acceptable). It should be with 5 years comprehensive warranty to keep system in continuous working condition.	

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
5	Consumables	Consumable spare parts for five years (the list at least include source filaments – 20 Nos, Source Heater – 20 Nos, Injection port glass liners – 10 Nos, GC Septum - 200 Nos, Column inlet/outlet nuts – 10 each, inlet/interface ferrules – 20 each, source insulator, vacuum oil 5 Nos).	
6	Warranty:	Five Years Comprehensive Warranty and additional two years maintenance warranty must be provided in order to keep system in continuous working conditions.	
7	Sspares	The company should indicate the percentage discount on the list price of the spares to be replaced, if any, during non-comprehensive warranty period. Vendor should assure the availability of the spares for 10 years from date of installation.	
8	Routine Maaintenance	Instrument must be attended within 48 hours in case of breakdown. Down time of instruments will be less than 5% of the warranty period per year. In the event of longer downtime the vender shall increase the comprehensive maintenance period by five times of the down time.	
9.	Safety and QMs	The GC-MS system to conform to International safety standards designed and manufactured under a quality system registered to ISO 9001.	
10.	Training	Training should be imparted to at least 2 technical personnel in 3 phases as follows: i) Basic technique ii) During installation iii) At manufacturer's site / Application centre	
11.	Suitability of power supply	Suitable for 230 V ± 10V, 50 Hz	

### 3. HIGH PERFORMANCE LIQUID CHROMATOGRAPH (HPLC)WITH QUICK ANALYZER:

Equipment is required for the analysis of banned amines , PCP, PCBs, dyes , auxiliaries, chemicals and other analytical applications based on the needs from time to time. The specifications of the equipment should be as follows:

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1.	Basic Features	An automated quaternary LC system capable of pumping two solvents at a time with a wide range of flow rate and with minimum dead volume. The system should have reliable and stable solvent delivery over a wide range of flow rate	
2.	Solvent Delivery System	i) High pressure Quaternary Pump with on-line vacuum degasser able to deliver 2 solvents. ii) Flow Rate Range: - 0.001ml/min to 5.0 or more ml/min. in 0.001 ml/ min increments iii) Flow Precision: - Less than 0.1% or better iv) Operating Pressure:- approx up to 95000 psi or more v) Flow rate accuracy:- $\pm 1\%$ vi) Gradient composition precision: less than 0.20% RSD at 1 ml/min vii) Delay volume:- standard delay volume config.: 700 – 1100 micro L Active plunger seal wash pH range : 2-12 or better.	
3.	Manual Injector	Rheodyne Injector with mounting brackets having 20 micro L loop injector Syringe:- 25 micro L or 100 micro L	
4.	Column oven	Should provide a temperature ranging from 10°C below ambient to 80°C or better with temperature accuracy $\pm 0.1^\circ\text{C}$ with force air cooling or better. Should have capacity to hold 2 columns up to 300 mm length. Should have provision to upgrade with a column switching valve Temperature accuracy: $\pm 0.5$	
5.	Column	C-18 column & C-8 column with coating of < 2 micron and length of < 5 cm. Normal phase column for PCP analysis. (Should be quoted separately)	
6.	Autosampler	i) Should have sample capacity of at least 100 x 2 ml vials ii) Should have an injection range of 0.1 – 100 micro L. in 0.1 micro L. increments iii) Precision: Less than 0.25% RSD from 5100 micro L. Less than 1% RSD from 1-5 micro L, variable volume iv) Carry over less than 0.1% without automated needle wash and less than 0.05% with automated needle wash v) Recommended pH range: 2.0 – 12	
7.	Signal to noise ratio	$\pm 0.25 \times 10^{-5}$ AU at 254 nm and at 750nm or less	
8.	Diode Array Detector	i) Diode Array detector with wave length range of 190 – 800 nm and with wave length	

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
		accuracy of 1.0 nm and band width of 8 nm ii) Should have 3 D Software	
9.	Calibration	Calibration kit to be provided for the calibration of flow rate, injection volume, oven temperature and sensitivity of the detector with traceability certificate of analysis	
10.	Software and data handling	<ul style="list-style-type: none"> <li>• Should be Window based</li> <li>• Single Keyboard control of entire system</li> <li>• Parameter validation management</li> <li>• Compatibility with diode array and UV/Visible to process signals from five wave lengths</li> <li>• Ability to acquire and analyses and store spectral library</li> <li>• Flexible report publisher to make report in desired format</li> <li>• On-line calculation should be possible</li> <li>• Software should have query functions</li> <li>• Software to have the provision for multilevel calibration of injection volume, flow rate, wavelength accuracy and oven temperature</li> <li>• Fully GLP compliant software with audit trails, multilevel password protection and report generation in Acrobat format</li> <li>• To provide the latest compatible computer specifications</li> </ul>	
11.	Computer	Latest configuration PC and printer are to be included in the bid separately. Assembled PC with unlicensed software will not be accepted.	
12.	Training	Training should be imparted to at least 2 technical personnel in 3 phases as follows: i) Basic technique ii) During installation iii) At manufacturer's site / Application centre	
13.	Suitability of power supply	Suitable for 230 V $\pm$ 10V, 50 Hz	

#### 4. HIGH PERFORMANCE THIN LAYER CHROMATOGRAPH (HPTLC):

Equipment is required for the qualitative and quantitative analysis of cleavable aryl amines, dyes, auxiliaries, chemicals, purity of chemicals and other analytical applications based on the needs from time to time. The specifications of the equipment should be as follows:

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1.	Sample applicator	Automatic sample applicator should be provided with Data input and monitoring through software. Provision should be for the application of spots, bands. Application mode should be both contact and Spray Application of sample solutions onto any planar medium Application volume: (i) 5 micro litre by contact method (ii) 0.5 to > 50 mico litre by spray method Variable rate of delivery Built in validation method, GLP compliance	
2.	Chromatogram development	Twin trough glass chambers with stainless steel lid for 20 x 10, 10 x 10, 10 x 5 cm plates Twin Trough glass chambers with glass lid for size 20 x 20 cm plates	
3.	TLC scanner	Measurement of reflection: in Absorbance of Fluorescence mode, transmission (optional) Object format up to 20 x 20 cm Weave length range: 190 – 800 nm or better with Deuterium and Halogen lamps. Build-in Mercury lamp for fluorescence measurement Scan speed: 1 – 100 mm/ s Data step resolution : 25 – 200 µm Spectrum recording up to 100 nm/s Software controlled scanner for automatic spectrum scanning for identification / purity check / automatic quantitative measurement. Build in validation method, GLP compliance	
4.	Chromatograph derivatisation	Immersion device: The device should have a uniform vertical speed selectable between 30 mm/s and 50 mm/s. Immersion time should be selectable between 1 and 8 seconds. Able to accommodate 10 cm plate height. Battery operated or independent of power supply	
5.	UV Cabinet	Two UV lamps of short wave – 254 nm and long wave – 366 nm fitted inside a viewing cabinet, auto switch off by timer after 10 min. to reduce the risk of exposure to radiation.	
6.	Calibration	Calibration kit to be provided for the calibration of injection volume and sensitivity of the detector with traceable certificate of analysis	
7.	Software and data	Latest version Window based compatible	

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
	handling	software to control all the functions of TLC and scanner. Quick measurement time. Measurement up to 36 tracks. Integration either with automatic or manual baseline correction. Quantitative evaluation with calibration functions. Dual and multi wave length scan. Track optimization. Calibration/validation for checking the instrument performance. Spectrum library with provision of user to create his own library. Report printout of the entire analysis including all the measurement. Fully GLP and GMP compliant software with audit trails, multilevel password protection and report generation in Acrobat format	
8.	Additional accessories	Voltage stabilizer and essential spares as applicable should be quoted separately.	
9.	Computer	Latest configuration branded PC and printer are to be included in the bid separately. Assembled PC with unlicensed software will not be accepted.	
10.	Training	Training should be imparted to at least 2 technical personnel in 3 phases as follows: <ol style="list-style-type: none"> <li>i. Basic technique</li> <li>ii. During installation</li> <li>iii. At manufacturer's site / Application centre</li> </ol>	
10.	Suitability of power supply	Suitable for 230 V $\pm$ 10V, 50 Hz	

**5. TENSILE TESTER UNIVERSAL: 1000 Kg CAPACITY:**

Equipment is required for the determination of tensile properties of fibre, yarn & fabrics. The specifications of the equipment consist of the following:

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1.	Basic feature	Twin column Tensile tester electronic suitable for carrying out test for tensile properties of fibre, yarn and fabrics as per IS 235-1969, ASTM 5034, ISO 13934 part I & II with facility for testing lea /skein strength as per IS 1671. Tear strength ASTM 5587, ISO 13937 part 2 – 4 Seam slippage test as per ASTM D 434 / 1683 & ISO 13936 part 1 & 2: Peel bond strength ASTM D 2724, ISO 6939, 2062 etc. Desirable : capability to test Textile Accessories viz : Zippers, Elastic etc.	
		Fully automatic computer controlled static tensile tester operating on the principle of constant rate of extension.	
2.	Software	The basic function of process control and storage of data by date should be combined in the microprocessor system and equipment should take-over all major functions like statistical evaluation of data and should be capable of displaying data graphically and providing hard copies of such graphics. Standard software program shall be supplied. Software should have provision for retrieval of test findings and its analysis. Program for load and extension cycles 999 cycles. Compression test software Digital display of test findings on the control panel and also on the computer.	
3.	Load Cell	<b>5 N, 100N, 1000N and 10000N(10KN)</b> Loading accuracy: $\pm 1\%$ at 20% of nominal range of load. Provision for calibration of load cells Calibration certificates for all the load cells (covering the entire range of each cell) issued by an accredited laboratory or NPL.	
4.	Speed	Draw of clamps speed: 1 mm/min. steps adjustable from 3 to 500 mm/min or better	
5.	Gauge length	Adjustable in 1 mm step. Maximum gauge length 750 mm or better.	
6.	Accessories	A) Pneumatic clamps: (up to a capacity of 5000N). (i) One set for high tenacity yarn. (ii) One set for filament and staple yarn (single thread testing up to a capacity of 1000N). (iii) One set for fibre tensile testing (grips for a	

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
		<p>capacity of 5N billion).</p> <p>(iv) One set for fabric tensile test with suitable jaw faces for ravelled strip and grab test (grips of capacity 5000N) – as per the standard.</p> <p>(v) One set of clamps for seam slippage.</p> <p>(vi) 1 set of mechanical clamps for lea strength test (grips of capacity 5000N, i.e. lea strength of 2<sup>s</sup> (Ne) Count).</p> <p>(vii) Pre-load weights for fabric strength test for applying the tension, if applicable.</p>	
7.	Jaws	<p>Pneumatic rubber:</p> <ul style="list-style-type: none"> <li>- 25 x 25 mm – set of 2</li> <li>- 25 x 75 mm – set of 2</li> <li>- optional 25 x 25 mm – set of 2</li> </ul> <p>Grab insert</p> <p>Manual jaws: 25 x 25 mm - set of 2 25 x 75 mm - set of 2</p> <p>Fibre grip set of 2</p> <p>Bollard grip- 1</p> <p>Compression kits- 1</p> <p>Lea grip up to 500 kg – 1</p> <p>Manual Vice grips for 5 KN:</p> <ul style="list-style-type: none"> <li>- 25 mm x 75 mm - set of 2</li> </ul> <p>Corrugated jaws:</p> <ul style="list-style-type: none"> <li>- 25 mm x 75 mm - set of 2</li> </ul>	
8.	Compressor	Suitable silent compressor should also be provided up to a capacity required	
9.	Suitability of power supply	Suitable for 230 V ± 10V, 50 Hz	



**6. MICROSCOPE WITH CAMERA:**

Equipment is meant for identification of textile fibres by having longitudinal view / cross sectional view of the fibres. The specifications of the equipment should be as follows:

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1.	Basic feature	Infinity Optical System	
		C shape corrosion resistant stand with convenient location of focus controls, Anti Fungus Treated	
	Viewing Head	Siedentopf Trinocular tube, 30°, inclined, 360°, rotatable, IPD 54-75mm with in-built 3.0 Mega Pixel Digital	
	Eyepiece	Wide Field eyepiece WF 10x/20mm paired with Dipoter Adjustment & eye guards	
	Nosepiece	Quadruple Reverse angle Nosepiece (Ball bearing type)	
	Objectives	IP series DIN Infinity Plan Achromatic objectives 4x, 10x, 40x(SL) and 100x (SL, Oil immersion) stage rectangular size 140 x 132mm double plate with mechanical stage cross travel 75 x 50mm on ball bearing with co-axial control, Spring clip Double Slide Holder	
		Co-axial coarse and fine focusing mechanism with tension control	
	Stage	Rackless Double plate stage size 222 x 160mm, X/Y travel range 78mm x 54mm. Low drive right hand movement controls. Hard coated surface for scratch resistance. Double specimen holder	
	Condenser	Sub-stage ABBE condenser NA 1.25 with aspheric lens. Iris diaphragm and special day light blue filter Koehler Illumination system Super Bright White LED with intensity control	
	• Illumination	Koehler Illumination Built-in Super Bright White LED lamp with intensity control regulator.	
	Image Sensor:	1/ 2.5CMOS, Valid Pixel: 2048x1536. Digital Output: 24-bit(color) Image Format 2048x1536 4f/s, 1024x768 10f/s framerate Sensitivity: 053v@550um/lux/s, . Image Output: USB2.0 Directshow and Twain Windows System: XP/Vista/Win 732bit or 64 bit Image Analysis & Measurement Software dgsoft ProMED™ version 5.06 for image capturing processing Measurement Image amalgamation. Features include Image editing, Vie Image Processing Filters, Custom Reports, Capturing etc	
	Optional Accessories:	Phase Contrast Kit, Dark Field kit, Polarizing kit, Dark Field Kit, Fluorescence attachment, Green Filter.	

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
	Digital Camera	Module DGCAM3000 SENSOR SIZE: 3.0 Mega Color CMOS EFFECTIVE PIXELS: 2048 x 1536 RESOLUTION & FRAME RATE 8.8fps@2048 x 1536 16.5fps@1024 x 768 44fps@640 x 480 Random Size ROI PIXEL SIZE 3.2*3.2 micrometer SENSITIVITY 1V/lux-sec(550nm) SNR 43dB SCANNING MODE Progressive scan SHUTTER Electronic rolling shutter EXPOSURE TIME 0~300ms EXPOSURE CONTROL Auto exposure/Manual exposure/Area exposure WHITE BALANCE Manual white balance/Once key white balance/Area white balance SUPPORT SYSTEM Windows XP(32/64-bit); Win7(32/64-bit) SUPPORT INTERFACE TWAIN, DirectShow DATA INTERFACE USB 2.0,480Mbps,3M cable	
	others	<b>POWER CONSUMPTION</b> Work≤1.3W, Stand by≈0.3W <b>WORKING TEMPERATURE</b> 0°C~50°C <b>STORAGE TEMPERATURE</b> -20°C~60°C <b>WORKING HUMIDITY</b> 10%-90%RH (No condensation) <b>STORAGE HUMIDITY</b> 10%-60%RH <b>LENS MOUNT:</b> C/CS mount <b>Image Capturing Software</b> <b>Standard Accessories</b> Packed in Moulded Styrofoam box with: Operation Manual Cleaning ClothDust cover	
	Software	dgsoft proMED™ Ver. 5.06 Image Analysis & Measurement Software Features include User Friendly Installation; <b>IMAGE EDITING:</b> Cut, Copy, and Paste; Crop,duplicate, restore; Resize; Compression Conversion to other format BMP, JPG, TIF,PNG, GIF & PSD; Grid creation; <b>VIEW:</b> Zoom in/out; Zoomed preview; Rotation at 90,180,270 or custom; Image flipping; horizontalor vertical axis; Intensity histogram; ImageInformation; Redo/Undo on all operations;Ruler in Various units; Slide show. <b>IMAGEPROCESSING:</b> Background subtraction andcontrast enhancement of color or monochromeimages; Arithmetic image functions (BooleanMath; Add, AND, OR, XOR, DIFF, MIN, MAX, +, -, /, *, And Simple). <b>ROUTINE FILTERS:</b>	

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
		<p>Invert, Brightness, Contrast,Hue,Saturation,Blur,Noise Remove, Emboss, Engrave, Gamma R, Gamma G, Color, Colorize, Oilify, Despeckle,Postarize. SPECIAL FILTERS &amp; KERNELS:High Boost, High Spatial, Low Pass Spatial,Ranking (Max, Med, Min), Point detection, Line detection, Homogeneity.</p> <p>MEASUREMENT:            Spartial calibration; Line measurements for Distance, Length, Width, Perimeter, Angle, Three Point Radius; Area by enclosed line controlled by four arrow keys available on keyboard arrows with zoomed preview.</p> <p>COUNT AND CLASSIFICATION: Identification of objects in an image, count them, obtain several atures measurements. Objects identification by user or automatically. User defined classification on basis of size or intensity.</p> <p>THRESHOLD PARTICLE MEASUREMENT:            Manual, Auto bright and Auto dark methods to identity intensity range defined object to be measured. Various calculation &amp; measurements available for selected Particle are; Dimensions, Area,Perimeter, Ferrite Length, Min/Max Radius, Thread Length, Thread Width, Fiber Length, Fiber Width.</p> <p>MORPHOMETRY: Roundness,Shape, Orientation, Elongation, Equal Circular Diameter, Equal Sphere Volume.</p> <p>REPORT:            Three options: Direct printout with original image processed Image &amp; Tabular results; Export to MS Office or Excel for further modification.</p>	
2.	Suitability of power supply	Suitable for 230 V ± 10V, 50 Hz	

## COMPLIANCE STATEMENT TO SPECIFICATIONS OF INSTRUMENTS –

### Category- II Laboratory Accessories:

(Compliance with specification column is to be filled up by the bidder stating 'YES / NO' as the case may be)

#### 1. ANALYTICAL BALANCE:

Equipment is meant for weighing of samples /chemical / reference standards. The specifications of the equipment should be as follows:

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1.	Capacity	220 gm	
2.	Readability	0.0001g (0.1mg)	
3.	Pan Size	85 mm dia	
4.	Display	Easy to read Large Backlite GRAPHICAL LCD Display with A.E.P(Advanced Eye Protection)	
5.	Calibration :	EXTERNAL Calibration weights traceable to NPL	
6.	Suitability of power supply	Suitable for 230 V $\pm$ 10V, 50 Hz	

#### 2. WATER PURIFICATION SYSTEM:

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1.	General	Generate both 'Pure' and s 'ultrapure' water Suitable for sample preparation and analysis using HPLC-GC-MS	
2.	Flow rate	Pure water: up to 16L/hour ,Ultra pure water : 2L/hour.	
3.	Leakage detect	available	
4.	Auto check function on pump operation	available	
5.	Auto recycling facility	available	
6.	TOC	< 5 ppb	
7.	Bacteria	< 1 cfu/ml	
8.	Flow Rate**	0.05 – 2 L/min	
9.	Timer Control	Control with alarm	

**3. HOT AIR OVEN:**

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1.	General	Provision of 3 slots for Three perforated compartments. The inner walls are to be insulated with appropriate insulation material to minimize the heat loss. Inner walls are Stainless steel, outer is covered by mild steel with powder coated.	
2.	Size	Internal Dimensions 24" X 24"X24"	
3.	Temperature Range	Provision for control of temp in the oven up to 250C with an accuracy within +/- 2 C	
4.	Digital Temp. Control with digital display	Provision for digital display and the readability of the temp - 0.5° C.	
5.	Timer Control	Control with alarm	

**4. DEEP FREEZER:**

Sr. No.	Specification	Requirements	Compliance with specifications ( Yes / No )
1	General	CFC & HCFC free hermetically sealed Compressor with Electronic time delay to safeguard the Compressor. Mounted on heavy duty Castor wheels for easy move ability.	
2	Capacity LTRS (Size)	1000 (TWIN CHAMBER) – 500 LTRS. EACH CHAMBER INTERNAL DIMENSION 65 x 65 x 120 Each Chamber EXTERNAL DIMENSION 177 x 87 x 184 Outer chamber made of Mild Steel [ 20swg.] duly powder coated and inner chamber made of Stainless Steel LM-304 grade [ 20 swg.] Mirror finish.	
3	Temperature Range	TEMPERATURE RANGE: - 25°C Accuracy : ± 1°C	
4	Digital Temp. Control with digital display	RESOLUTION : 0.1°C	
5	Condensation Unit	Air cooled condenser with external blower motor type fan suitable for continuous operation.	
6	Control panel	Control panel comprises of Microprocessor based Digital Temperature Controller cum Indicator with an accuracy of ± 1°c along with Indicator lamps. Audio-Visual alarm for Under & Over temperature, Power failure.	
7	Insulation	Polyurethane foam (PUF) Insulation of 150mm thick high density with 100% vapour barrier.	

**5. HOT PLATE:**

<b>Sr. No.</b>	<b>Specification</b>	<b>Requirements</b>	<b>Compliance with specifications ( Yes / No )</b>
1.	General	Mild Steel body of Stainless Steel 304, Imported auto tuned PID Controller cum Indicator with PT-100 Sensor	
2.	Size	20.5 cm	
3.	Temperature Range	Hot plates manufactured according to the industries standards to suit very high corrosive atmosphere and ensured long life performance with Energy Regulator	

**6. REFRIGERATOR:**

<b>Sr. No.</b>	<b>Specification</b>	<b>Requirements</b>	<b>Compliance with specifications ( Yes / No )</b>
1.	Capacity (Litre)	258	
2.	Compressor	Smart Inverter Compressor	
3.	Star Rating	3 Star	
4.	Cooling Technology	Multi Air Flow	
5.	Refrigerant	Ecofriendly Refrigerant	
6.	Temperature Control	Knob Type I-Micom	
7.	Works without stabilizer	135V-290V LVS	

**7. TURBO EVAPORATOR:**

<b>Sr. No.</b>	<b>Specification</b>	<b>Requirements</b>	<b>Compliance with specifications ( Yes / No )</b>
1.	General	Turbo Evaporator simultaneous evaporation of up to (50) 15mL centrifuge tubes, offering many interchangeable tube racks which gives the flexibility for automated low volume sample preparation ranging in volumes size from 1.5 ml to 30 ml	
2.	Size	450mm Wide x 350mm Deep x 175mm High (Overall height with Work Chamber 750mm) Work Chamber 'Borosilicate Glass over all sizes 165mm Dia x 125mm High Safety Shield Polycarbonate Aluminium Base 110mm Dia x 115mm High	
3.	Rotation	Rotating Stage 60mm Dia. Adjustable Tilt 0-900	
4.	Operating Vacuum	1 x 10 <sup>-2</sup> to 1 x 10 <sup>-5</sup>	
5.	Vacuum Gauge ATM	- 1 x 10 <sup>-2</sup>	
6.	Turbo molecular pump	50L/Second	

**8. ULTRA SONIC BATH:**

<b>Sr. No.</b>	<b>Specification</b>	<b>Requirements</b>	<b>Compliance with specifications ( Yes / No )</b>
1.	General	The Ultrasonic Chamber and Ultrasonic Generator are housed in integral MS powder coated Cabinet with castor wheels.	
2.	Size	300x200x175 mm clear working area. Capacity: 10 liters. (approx.)	
3.	Transducers	PZT type transducers mounted on bottom side of the Chambers.	
4.	Temperature Range	Ambient to 95°C	
5.	Heater	Heater of 0.8 KW capacity with Digital Temp. Controller.	
6.	Timer	Digital – 0 to 99 mins	

**9. WATER BATH SHAKER:**

<b>Sr. No.</b>	<b>Specification</b>	<b>Requirements</b>	<b>Compliance with specifications ( Yes / No )</b>
1.	General	S.S. Interior, M.S Exterior with powder coating	
2.	Size	Overall tank size :450 x 350 x 160 mm Moving Tray : 350 X 300 X 110 mm	
3.	Rotation	Reciprocating (-)	
4.	Temperature Range	Ambient to 95°C	
5.	Digital Temp. Control with digital display	Accuracy : $\pm 0.2^{\circ}\text{C}$	
6.	Speed of rotation	40 – 180 cycles per minute	
7.	No. of replaceable trays	i. To hold min. 250 ml flask ii. To hold min 40 – 50 no: 30 ml reaction vessel. iii. Size: 285 X 225 mm	
8.	Timer Control	Control with alarm	
9.	LID	See through Lid (Acrylic /glass )	

**DETAILS OF EMD (BID SECURITY) TO BE SUBMITTED  
FOR EACH OF THE EQUIPMENT**

**Category- I Sophisticated Equipment / Instrument:**

<b>Sr. No.</b>	<b>Name of the Equipment</b>	<b>No. of units</b>	<b>EMD / BID SECURITY to be paid (In INR )</b>
1.	Fourier Transform Infra Red Spectrophotometer (FTIR)	1	50000
2.	Gas Chromatograph coupled with Mass Spectrometer (GC-MS)	1	112500
3.	High Performance Liquid Chromatograph (HPLC) with Quick Analyzer	1	75000
4.	High Performance Thin Layer Chromatograph (HPTLC)	1	125000
5.	Tensile Tester Universal: 500 Kgs Capacity	1	50000
6.	Microscope (Binocular Type) with Camera	1	7500
	<b>TOTAL</b>		420000

**Category- II Laboratory Accessories:**

<b>Sr. No.</b>	<b>Name of the Equipment</b>	<b>No. of units</b>	<b>EMD / BID SECURITY to be paid (In INR )</b>
1.	Balance	1	3750
2.	Water Purification System	1	12500
3.	Oven	1	1250
4.	Deep Freezer	1	1250
5.	Hot plate	1	250
6.	Refrigerator	1	375
7.	Evaporator	1	12500
8.	Ultra Sonic Bath	1	1875
9.	Water bath Shaker	1	1250
	<b>TOTAL</b>		35000



**FORMAT FOR COST DETAILS**  
(Cost particulars should be given in this format instrument wise / accessories wise separately)

**Note:** All the cost particulars should be furnished either in Indian Rupees or US Dollars only. If more than one model of the instrument is quoted, use separate sheets

**Part 1: COST DETAILS OF IMPORTED EQUIPMENTS/INSTRUMENTS**

<b>Name of the Instruments:</b>		
<b>Sr. No.</b>	<b>Cost details of foreign components</b>	<b>Cost in Rs.(₹) / USD (\$)</b>
i.)	Total landing cost of the equipment including accessories inside the laboratory of Textiles Committee at Cochin including installation, freight, agency commission, packing, forwarding, insurance, custom clearing etc.	
ii.)	Total landing Cost of indigenous accessories such as computers and peripherals, UPS, Voltage stabilizer etc.	
iii.)	AMC details: (a) AMC rate/per year (comprehensive/non-comprehensive) for the next 5 years, after the expiry of warranty period including the accessories (Minimum Two preventive and one breakdown visits)	1 <sup>st</sup> Year: 2 <sup>nd</sup> Year 3 <sup>rd</sup> Year 4 <sup>th</sup> Year 5 <sup>th</sup> Year
<b>Delivery schedule of the equipment:-</b>		<b>months</b>

**Note :** Textiles Committee will provide only custom duty exemption certificate whereby the duty payable will be around 9.27%

**Part 2: COST DETAILS OF INDIGENOUS EQUIPMENTS/ INSTRUMENTS**

<b>Name of the Instruments:</b>		
<b>Sr. No.</b>	<b>Cost Details of Indigenous items</b>	<b>Cost in Rs.(₹)</b>
i.)	Total cost (inclusive of all taxes, installation charges)	
ii.)	AMC details (including the accessories):- AMC (2 preventive visits / 1 breakdown visits) rate comprehensive/non-comprehensive cost for the next per annum 5 years, after the expiry of warranty period	1 <sup>st</sup> Year: 2 <sup>nd</sup> Year 3 <sup>rd</sup> Year 4 <sup>th</sup> Year 5 <sup>th</sup> Year
<b>Delivery schedule of the equipment:-</b>		

**Cost details of optional items/spare parts required for the next 2 years.**

**Part 1A: (IMPORTED ITEMS)**

<b>Sr. No.</b>	<b>Cost Details of foreign components</b>	<b>Cost in USD(\$)</b>
i.)	Total cost at the specified laboratory including agency commission, freight, packing and forwarding, insurance, etc.	

**Cost details of optional items/spare parts required for the next 2 years.**

**Part 2A: (INDIGENOUS ITEMS)**

<b>Sr. No.</b>	<b>Cost Details of indigenous items</b>	<b>Cost in Rs.</b>
i.)	Total cost (inclusive of freight, packing and forwarding, insurance and installation charges)	

<b>Sr. No.</b>	<b>Details of requirement for Opening of L/C (for imported items only)</b>
1.	Foreign Supplier's Name and Complete address on whom L/C will be opened.
2.	Foreign Banker's Name & Address
3.	Foreign supplier's Bank Account No.
4.	Port of Shipment
5.	Country of Origin
6.	Period to keep open the L/C – (Validity of L/C)
7.	Period of negotiation will be 21 days
8.	Delivery Schedule from the date of issuance of Purchase Order

**ENCLOSURE- 2:                    FORMAT FOR BANK GUARANTEE**

**FORMAT OF BANK GUARANTEE (ON NON-JUDICIAL STAMP PAPER OF Rs.100/-)**

**(Applicable for successful bidders, to be submitted in lieu of performance security deposit)**

Bank guarantee No. \_\_\_\_\_ date: \_\_\_\_\_

This deed of guarantee made this \_\_\_\_\_ day of \_\_\_\_\_ 2015 {(Name and address of the Bank) hereinafter referred to as `the Bank')} which expression shall where successors and assignees of the Bank and the, Textiles Committee, (hereinafter referred to as the Committee) which expression shall unless repugnant to the context of the meaning thereof include its legal representatives, successors and assignees.

WHEREAS the Committee has placed its Purchase Order bearing No. \_\_\_\_\_ dated \_\_\_\_\_ on (name and address of the bidder) (hereinafter called `the supplier' for the supply of \_\_\_\_\_.

The Bank shall not be discharged or released from this guarantee by any arrangement between the supplier and the Committee with or without the consent of the Bank or any alterations in the obligation of the parties or by any indulgence, forbearance shown by Committee to the supplier and the same shall not prejudice or restrict remedies against the Bank nor shall the same in any event be a ground of defence by the Bank against the Committee. In case the Committee puts forth a demand in writing on the Bank for the payment of the amount in full or in part against this Bank guarantee, the Bank shall consider that such demand by itself is a conclusive evidence and proof that the supplier has failed in complying with the terms and conditions stipulated by Committee in the purchase order and payment shall be made to the Committee without raising any dispute regarding the reasons for any such lapse/failure on the part of the supplier.

This guarantee shall be in addition to and without prejudice to any other securities or remedies which the Committee may have to hereinafter possess against the supplier and the Committee shall be under no obligation to marshal in favor of the Bank any such securities or fund or assets that the Committee may be entitled to receiving or have a claim upon and the Committee at its absolute discretion may vary, exchange renew, modify or refuse to complete or enforce or assign any security or instrument.

The Bank agrees that the amount hereby guaranteed shall be due and payable to the Committee on Committee's serving with a notice requiring the payment of the amount and such notice shall be deemed to have been served on the bank either by actual delivery thereof to the Bank or by dispatch to Committee thereof to the Bank by Registered Post shall be deemed to have been duly served on the Bank notwithstanding that the notice may not in fact have been delivered to the Bank.

In order to give full effect to the provisions of this guarantee, the Bank hereby waives all inconsistent with the above provisions and which the Bank might otherwise as guarantor be entitled to claim and enforce.

NOTWITHSTANDING anything contained herein before, the liability under this guarantee is restricted to Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only). The guarantee shall remain in force till the \_\_\_\_\_ and unless the guarantee is renewed or a claim is preferred against the Bank within three months from the said date all rights of the Committee under the guarantee shall cease and Bank shall be released and discharged from all liability hereunder.

\_\_\_\_\_  
(SIGNATURE)

PLACE:

DATE:

SEAL

CODE NO.

**NOTE:** SUPPLIERS SHOULD ENSURE THAT SEAL AND CODE NO. OF THE SIGNATORY ARE AFFIXED BY BANKER, BEFORE SUBMISSION OF THE BANK GUARANTEE.

**ENCLOSURE- 3: AGREEMENT TO BE SUBMITTED BY SUCCESSFUL BIDDER**  
**(ON NON-JUDICIAL STAMP PAPER OF Rs. 100/-)**

**THIS AGREEMENT** is made at \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_ 2015 between THE TEXTILES COMMITTEE, a Statutory Body under the Ministry of Textiles, Government of India having its Head Office at P. Balu Road, Prabhadevi Chowk, Prabhadevi, Mumbai – 400 025 hereinafter referred to as "the Committee", which expression shall unless it be repugnant to the context or meaning thereof be deemed to mean and include its successors, assignees or representatives of the One Part and M/S. \_\_\_\_\_ having its registered office at \_\_\_\_\_ hereinafter referred to as the "Supplier" which expression shall unless it be repugnant to the context or meaning thereof include its successors, assignees, representatives or partners as the context may admit of the Other Part.

**WHEREAS:**

1. The Committee has placed an order with \_\_\_\_\_ hereinafter referred to as Supplier of equipment / accessories.
2. The Supplier has agreed to supply the equipment / accessories at the conditions given in purchase order No. \_\_\_\_\_ dated \_\_\_\_\_ placed at **Annexure- I (Order Details)**.
3. The Supplier shall abide by the terms and conditions as set out in Purchase Orders issued from time to time.
4. Both the parties shall bear with the force-majeure, which could not be reasonably foreseen.
5. Any disputes or differences under this agreement shall be resolved mutually between the parties.

Signed:

Authorised Signatory of  
Laboratory , Textiles Committee  
Name and Designation  
Seal of Textiles Committee

Signed:

Authorised Signatory of  
Supplier  
Name and Designation  
Seal of Supplier

**ENCLOSURE- 4:**

**FORMAT FOR COVERING LETTER TO BE SENT ALONG WITH TECHNICAL BID  
(ON COMPANY'S LETTER HEAD)**

To  
The Director (Lab)  
LABORATORY Division  
Textiles Committee,  
P. Balu Road, Prabhadevi Chowk, Prabhadevi,  
MUMBAI- 400 025

Sub: Technical Bid  
Ref: Tender Enquiry No. 600/CAT/Supply of Equipment / Accessories/2015 dated  
\_\_\_\_\_

Sir,

This has reference to tender enquiry No. 600/CAT/Supply of Equipment / Accessories/2015 dated \_\_\_\_\_. We have purchased tender document No. \_\_\_\_\_ on \_\_\_\_\_ after payment of Rs.1000/- by Cash/ Demand Draft (DD) / Pay Order (PO) /Banker's Cheque (BC) **OR** We have downloaded the tender document from the Textiles Committee's website and Demand Draft (DD) / Pay Order (PO) /Banker's Cheque (BC) for Rs. 1000/- is attached herewith in technical bid.

**We hereby confirm that we have read & understood the terms & condition given in the Tender document.**

Please find enclosed following documents in Cover-A i.e. Technical Bid.

Sr. No.	Details of documents
1.	Tender document duly filled in (Technical Bid).
2.	Tender document fees of Rs.1000/-(Non refundable), in the form of Demand Draft/Pay Order/ Banker's Cheque, in case Tender document downloaded from website.
3.	Full details of the person authorized to file the tender.
4.	Profile of Manufacturer or Authorized agent.
5.	Proof that the bidder is either i) manufacturer or ii) authorized agent for the Supply of Equipment / Accessories
6.	List of the last 2 year's customers along with full details as mentioned in the tender document.

7.	Requisite Bid security (EMD) in the form of a DD/PO/BC for Rs. _____/- (Rupees _____ only), drawn in favour of "Textiles Committee Account" payable at Mumbai. DD/PO/BC No. _____ date: _____ Drawn on: _____ Branch name: _____ Payable at: _____
8.	Self attested copy of power of attorney in favor of the signatory signing the Tender documents. It is not required in case of proprietary firm if the proprietor himself signs the documents.
9.	Financial statement of the bidder incorporating the turnover of business for the last 3 years.
10.	Copy of Memorandum of Association or Partnership deed if it is not a proprietary firm.
11.	Copy of Current and Valid Income Tax clearance Certificate (ITCC) & PAN No.
12.	Copy of current and valid clearance from Central and State Sales tax authority.
13.	Copy of Service Tax Registration and latest service tax filing challan.
14.	Any other documents in compliance with the Tender. (Please specify)

Thanking you,

Yours faithfully,

Name & Sign of Authorised  
Signatory of the bidder  
Company Seal

Encl: a/a in Cover-A

**ENCLOSURE - 5:**

**FORMAT FOR COVERING LETTER TO BE SENT ALONG WITH FINANCIAL BID**

(ON COMPANY'S LETTER HEAD)

To  
The Director (Lab)  
LABORATORY Division,  
Textiles Committee,  
P. Balu Road, Prabhadevi Chowk, Prabhadevi,  
**MUMBAI- 400 025**

Sub: Financial Bid  
Ref: Tender Enquiry No. 600/CAT/Supply of Equipment / Accessories/2015 dated  
\_\_\_\_\_

Sir,

This has reference to tender enquiry No. 600/CAT/Supply of Equipment / Accessories/2015 dated \_\_\_\_\_. We have purchased tender document No. \_\_\_\_\_ on \_\_\_\_\_ after payment of Rs.1000/- by Cash/ Demand Draft (DD) / Pay Order (PO) /Banker's Cheque (BC) **OR** We have downloaded the tender document from the Textiles Committee's website and Demand Draft (DD) / Pay Order (PO) /Banker's Cheque (BC) for Rs. 1000/- is attached herewith in technical bid.

**We hereby confirm that we have read & understood the terms & conditions given in the Tender document.**

Please find enclosed following documents in Cover-B i.e. Financial Bid.

Sr. No.	Details of documents
1.	cost details for the supply of Equipment / Accessories duly filled in (Financial Bid).

Thanking you,

Yours faithfully,

Name & Sign of Authorised  
Signatory of the bidder  
Company Seal

Encl: a/a in Cover-B



CHECK LIST FOR BIDDERS

Sr.	PARTICULARS	Y	N
1.	Bids must be submitted in a single sealed cover containing two separate sealed covers for Technical & Commercial Bids addressed to Director (Labs), Textiles Committee, LABORATORY Division, Mumbai		
2.	Whether all documents is fully authenticated by the authorized signatory of the bidder under his signature with official seal.		
3.	Whether designated sections/pages of bid are duly signed by the authorized signatory of the bidder with official seal as compliance statement.		
4.	<b>Cover A: Technical Bid</b>		
5.	Covering letter along with Technical Bid.		
6.	Compliance with Technical specifications of the Equipment / Accessories		
7.	Production details.		
8.	Details of EMD submitted. Requisite Bid security (EMD) in the form of a Demand Draft/Pay Order/Banker's Cheque for Rs._____ (Rupees _____ only), <b>drawn in favour of "Textiles Committee" payable at Mumbai.</b>		
10.	Full details of the person authorized to file the tender.		
11.	Profile of Manufacturer or Authorized agent.		
12.	Proof that the bidder is either i) manufacturer or ii) authorized agent for the Supply of Equipment / Accessories		
13.	List of the last 2 year's customers along with full details as mentioned in the tender document.		
14.	Requisite Tender document fees (Non refundable), in case Tender document downloaded from website.		
15.	Self attested copy of power of attorney in favor of the signatory signing the Tender documents. It is not required in case of proprietary firm if the proprietor himself signs the documents.		
16.	Financial statement of the bidder incorporating the turnover of business for the last 3 years.		
17.	Copy of Current and Valid Income Tax clearance Certificate (ITCC) & PAN No.		
18.	Copy of current and valid clearance from Central and State Sales tax authority.		
19.	Copy of Service Tax Registration and latest service tax filing challan.		
20.	Any other documents in compliance with the Tender.		
21.	<b>Cover B: Financial Bid</b>		
22.	Covering letter along with Financial Bid.		
23.	Equipment / Accessories - cost details.		

(The Bid Security i.e. EMD in the form of DD/Pay Order/Banker's Cheque must be annexed with the bidding documents itself)

**Note:** The bidder may please note that non-submission of requisite documents as per checklist above and tender document shall automatically disqualify the bidder in the first stage of technical evaluation itself.