


TENDER DOCUMENT

TENDER Enquiry	Scope of work	T.E. No. & Date
TENDER FOR PROCUREMENT OF EQUIPMENTS / INSTRUMENTS FOR LABORATORIES OF TEXTILES COMMITTEE AT COCHIN INTERNATIONAL CONTAINER FREIGHT STATION (CICFS), OLD AANAVATHIL JUNCTION, ICTT ROAD, KALAMASSERY, COCHIN AND JAWAHARLAL NEHRU PORT TRUST, (JNPT) NAVI MUMBAI	Supply of equipments / instruments for laboratories of Textiles Committee at Cochin International Container Freight Station (CICFS), Kalamassery, Old Avanavathi Junction, ICTT Road, Cochin and Jawaharlal Nehru Port Trust (JNPT), Navi Mumbai	No. TC/LAB/Tendering/Coch in & JNPT/2016- (13-1) dated :07/03/2016
	TEXTILES COMMITTEE (Govt. of India, Ministry of Textiles) The Director (Laboratories), Laboratory Division, P. Balu Road, Prabhadevi Chowk, Prabhadevi, Mumbai-400 025. Tel: 022-66527519/520 Fax: 022-66527588 E-mail: tclabmumbai@gmail.com Web site: www.textilescommittee.gov.in	

CONTENTS

Sr. No.	Description	Page(s)
1	Cover Page	1
2	Contents	2
3	Tender Notice and Broad guidelines	3 - 6
4	Introduction, Scope of work	7
5	Terms and conditions- General	7 - 8
6	Terms and Conditions- Special	8 - 12
7	Earnest Money Deposit (EMD)/Bid security, Performance security, Authority of signing, Quoting of rates, Packing & Submission	13 - 14
8	Cover A: Technical Bid	14
9	Cover B: Financial Bid	15
10	Validity of Tender, Opening of Bids	15
11	Training, Agreement Criteria for rejection, Arbitration, Jurisdiction	15 - 17
12	Enclosure-1A :Details of the Instruments required , Index -	18 - 19
13	Enclosure-1B : Compliance statement	20 - 41
14	Enclosure-1C : Details of EMD to be paid	42
15	Enclosure-1D : Cost details	43 - 44
16	Enclosure-2 : Format for Bank Guarantee	45 – 46
17	Enclosure-3 : Format for Agreement	47 - 48
18	Enclosure-4 : Format for covering letter to be sent along with Enclosure-4A Technical Bid	49 - 51
19	Enclosure-5 : Format for covering letter to be sent along with Financial Bid	52
20	Check List for Bidders	53

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: 91-22-66527519/520, Fax: 91-22-66527588
E-mail: tclabmumbai@gmail.com Website: www.textilescommittee.gov.in

T. E. No.: TC/LAB/Tendering/Cochin & JNPT/2016-(13-1)

Date: 07/03/2016

TENDER NOTICE INVITING BIDS FOR SUPPLY OF EQUIPMENTS / INSTRUMENTS FOR THE LABORATORIES OF TEXTILES COMMITTEE AT COCHIN INTERNATIONAL CONTAINER FREIGHT STATION (CICFS), OLD AANAVATHIL JUNCTION, ICTT ROAD, KALAMASSERY, COCHIN AND JAWAHARLAL NEHRU PORT TRUST(JNPT), NAVI MUMBAI

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 the laboratories at **CICFS, Old Avanavathi Junction, ICTT Road, Kalamassery, Cochin and Jawaharlal Nehru Port Trust (JNPT), Navi Mumbai.** Details of the equipment / instrument, specifications, payment terms and other details are given in the tender document. Tender issuing authority is Director (Laboratories). **Tender documents can be downloaded in PDF format from the website www.textilescommittee.gov.in.**

The bidders shall pay **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 along with the Technical bid** 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 21.3.2016 till 6.00 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.	15.03.2016 at 3.30 pm
B.	Last date and time of submission of Bid (Both Technical & Financial Bids)	21.03.2016 till 6.00 pm
C.	Date and time of opening of Technical Bid	21.03.2016 at 6.30 pm
D.	Date and time of opening of Financial Bid (only for successful technical bidders)	28.03.2016 at 5.00 pm
E.	Earnest Money Deposit (Bid Security)	Details are given in Enclosure-1C

1. ISSUE OF TENDER DOCUMENTS:

Tender documents can only be downloaded in PDF format from the website www.textilescommittee.gov.in .

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 laboratories of Textiles Committee at CICFS, Kalmassery, Cochin and JNPT NAVI MUMBAI” , Name of the Equipment :-----

----- &

“Cover- “B” as “Commercial Bid for the supply of textile testing equipments / instruments for laboratories of Textiles Committee at CICFS, Kalmassery, Cochin and JNPT NAVI MUMBAI” , Name of the Equipment :-----, 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 “Bid for the supply of textile testing equipments / instruments for laboratories of Textiles Committee at CICFS, Kalmassery, Cochin and JNPT NAVI MUMBAI” , Name of the Equipment :-----, addressed to **The Director (Laboratories), 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 are 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 and the same shall be dropped in the Tender box. **Textiles Committee will not be responsible for any late submission of the tender. Bids sent through e-mail / Fax shall not be entertained.**

A pre-bid meeting (Briefing Session) will be held at Textiles Committee, Mumbai at the address given above on **15.03.2016 at 3.30 p.m.** in order to clarify any points related to the Tender. No further technical discussions /enquiries will be entertained after the pre-bid meeting. 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 **21.03.2016 up to 6.00 pm.** Late bids will not be accepted. The technical bids will be opened on **21.03.2016 at 6.30 pm.** in the Conference Hall of the Textiles Committee, 5th 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. The list of technically qualified bidders will be displayed on Textiles Committee's website. The financial bids will be opened on **28.03.2016 at 5.00 p.m.** in the Conference Hall of the Textiles Committee, 5th 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.**

Interpretation of the terms & conditions and other related issues in the tender would rest with Textiles Committee only. Modifications, if any, made in the above documents will be done by addenda/ corrigenda, copies of which will be uploaded on Textiles Committee's website. One copy of same shall be signed, sealed and submitted packed along with the technical bids. The **Director (Laboratories), Textiles Committee, Mumbai** shall be the tender issuing authority.

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 (Laboratories), 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

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 in the process of establishing two new laboratories one each at Cochin & JNPT, Navi Mumbai and this tender is floated to invite suppliers for the supply of instruments required for these two laboratories.

4. SCOPE OF WORK:

Supply of textile testing equipments/instruments/accessories for laboratories of Textiles Committee at Cochin & JNPT, Navi Mumbai. Details of the equipments / instruments, accessories, specifications, quantity required, payment terms and other details are given in the tender document.

5. TERMS AND CONDITIONS- GENERAL:

- 5.1 **The bidder shall use only downloaded tender documents for submitting his bid.**
- 5.2 **The bidder shall not make any additions/ deletions to or amend the text of the documents.**
- 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 The bids shall be filled in English. All accompanying literature / brochures, warranty clause, payment conditions and correspondence shall also be in English.
- 5.6 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.
- 5.7 Textiles Committee will not be responsible for any typographical errors/ambiguity/ additions /omissions committed by the bidder while filling up of the tender.
- 5.8 Submission of the bids 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 that has bearing on the execution of the supply.
- 5.9 The bidder shall be deemed to have full knowledge of documents and no extra charges consequent on any misunderstanding or otherwise shall be allowed.
- 5.10 Any queries regarding the tender document and discrepancies shall be clarified in the pre-bid meeting. Modifications, if any, to be made in the above documents

based on the discussions 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.**

- 5.11 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.
- 5.12 Interpretation of the terms & conditions and other related issues in the tender would rest with Textiles Committee only.

6. TERMS AND CONDITIONS- SPECIAL:

- 6.1 Covering letter, for the Technical bid in the letter head of the bidder as given in the format **Enclosure-4 for category 1 and Enclosure-4A for category 2** shall be submitted along with the annexure containing the essential details as specified in the format. Similarly, the Financial bid also shall be submitted with a covering letter as given in the format **Enclosure- 5 along with filled in Enclosure -1D**.
- 6.2 In case of **Category- I Sophisticated Equipment/ Instrument** List of **Specific organizations** to which **same make & model** of the equipment were supplied in India and abroad, along with Contact Person, address, Tel. No., Fax No. etc. is to be submitted. **A general list of customers for different products may not be submitted.**
- 6.3 In case of **Category- I Sophisticated Equipment / Instrument**, a Compliance certificate that the bidder is the manufacturer or authorized supplier of the equipment at least during the past 2 years shall be submitted along with performance reports from at least 2 users of the same model quoted.
- 6.4 **Tender document and Addenda / corrigenda / clarification** issued by Textiles Committee, **duly signed by the authorized person, shall be submitted along with the Technical Bids**
- 6.5 **Brochure / catalogue giving the technical details of the specific model of the equipment /instruments quoted.**
- 6.6 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.
- 6.7 In case of **Category- I Sophisticated Equipment/Instrument** - Details of any special **pre-installation requirements** including floor space, size of the table required, electrical power with details of power points / UPS requirements , Air-conditioning etc **to be clearly specified, if required.**
- 6.8 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.

- 6.9 Agency commission, if any 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 laboratories concerned.
- 6.10 All accessories & start up kit required for installation & commissioning of the main equipments are to be specified and quoted.
- 6.11 Minimum required essential spares for next 2 years after the warranty period are to be specified.
- 6.12 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 **Enclosure-3**)
 - 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 laboratories concerned.
- 6.13 The bidder should take responsibility for delivering the equipments **inside the premises of the laboratories of Textiles Committee, at CICFS, Kalmassery, Cochin and JNPT, NAVI MUMBAI** as specified in the Purchase Order.
- 6.14 **The Foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees and other such levies imposed outside India.**
- 6.15 **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.**
- 6.16 **Delivery schedule and the Penalty for delayed delivery:**
- In case of **Category-1 Sophisticated Equipment / Instrument** -The bidder should deliver the instrument/Equipment within a period of 4-6 weeks from the date of the purchase order. In case of **Category-2 Laboratory Accessories**-The bidder should deliver the instrument/Equipment within a period of 4 weeks from the date of the purchase order. The bidder shall deliver the item within the delivery period of the equipment / items as committed by him or the delivery period specified above, whichever is earlier. **Penalty for non-execution of the order within the delivery period shall be 0.2% of the cost of the equipment / item for every week of delay.**
- 6.17 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. The pre-Installation requirements of the instrument should be clearly stated in the financial bid documents and the readiness of the same shall be ensured from time to time by the bidder after the receipt of purchase order so that the installation can be made within the specified time.

- 6.18 The bidder should give **minimum one year warranty period for all the instruments / Equipments** which is essential and may quote for more / five years optionally. During the warranty period, regular servicing/maintenance shall be undertaken free of charge, including replacement of defective parts/travel cost etc. Subsequently, servicing/maintenance shall be undertaken by the manufacturer / supplier / authorised agency as per the annual maintenance contract conditions.
- 6.19 Details of onsite warranty, maintenance of the system during and post warranty and Annual Maintenance Contract/Comprehensive/non-comprehensive after the warranty period shall be given in the Technical offer. In case of foreign quote, the details and particulars of the Indian Agency who shall be responsible for maintenance during warranty and AMC beyond warranty shall be given in the Technical Offer.
- 6.20 **The supply of spare parts for the model quoted is to be guaranteed at least for a period of 10 years after the supply & Installation of the equipment at Textiles Committee.**
- 6.21 After successful installation, in case of breakdowns during the warranty / AMC post warranty, 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 within the specified down time, alternatives to be provided to maintain the specified minimum down time.
- 6.22 No sub-contracting will be allowed for installation or maintaining system/equipment / instrument during or after warranty period.
- 6.23 Discount offered should be mentioned clearly in the commercial bid only.
- 6.24 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.
- 6.25 **The bidder shall give warranty for at least one year in respect of items quoted.**
- 6.26 Operation manuals, calibration procedures and other instruction manuals of the specific model should be provided along with each of the equipment.
- 6.27 The Test Control Systems like computer and printer, compatible to the main instrument, are to be supplied indigenously and are to be branded with latest configuration and with licensed operating system. **Assembled models and unlicensed operating system will not be accepted.**
- 6.28 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 be rejected**
- 6.29 It is the sole responsibility of the supplier to process insurance claim in case of machine / equipment / instrument 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.

- 6.30 The responsibility for **customs clearance** (in case of imported equipments), transporting and delivering the equipment/instrument inside the laboratories at Cochin and JNPT, Navi Mumbai, 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.
- 6.31 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 as per the purchase order, within a reasonable time. Additional expenditure, whatsoever for the above will be borne by the bidder only.
- 6.32 The specifications given in this document are the essential minimum requirement. The bidders are free to offer equipment/instruments with better features also. However, the evaluation shall be based on the specifications mentioned in the tender document. If different models are quoted, the Technical / cost details may be given in separate sheets.
- 6.33 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 and forfeit the EMD.
- 6.34 The items and number of units of the items being procured are tentative and liable to change without assigning any reason.
- 6.35 In case of **Category- I Sophisticated Equipment / Instrument** -Financial statement of the manufacturer / authorized agent incorporating the turnover of business for the last 3 years should be submitted along with the financial bids. Business turnover of the bidder should be Rs.15.00 lakhs in case of bidders who are the authorised agents/company agents and Rs.150.00 lakhs in case of the bidders who are manufacturers of the instrument.
- 6.36 Any non-fulfillment of the stipulations given above will make the bid invalid.
- 6.37 The full payment will be released to the bidders only after completion of satisfactory performance check of the instrument/equipment.
- 6.38 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. 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.
 - vi. Attachment of the Copy of the balance sheet of the bidder for the past three years for assessing their financial stability.
 - vii. Validity of the bid shall be 180 days.
 - viii. Business turnover of the bidder should be Rs.15.00 lakhs in case of bidders who are the authorised agents/company agents and Rs.150.00 lakhs in case of the bidders who are manufacturers of the instrument.
- 6.39 The financial bids of technically responsive bidders 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.
- 6.40 **In case of Category-I sophisticated instruments**, the successful bidder should demonstrate the suitability of the equipment to the purpose for which they are bought as mentioned in the tender before the purchase order is placed. A demonstration for the above purpose shall be arranged at a mutually agreed place using the instrument of the same model quoted.

7. EARNEST MONEY DEPOSIT (EMD) / BID SECURITY:

- 7.1 **Technical** bids shall 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 in **Enclosure- 1C**. The DD/PO/BC can be for the combined amount of EMD payable for individual items, for which the bidder has quoted.
- 7.2 EMD shall be paid in Indian currency (INR) only. In case of receipt of EMD in foreign currency from abroad, the same shall be refunded only in Indian currency. Textiles Committee will not be responsible for refund of EMD in foreign currency.
- 7.3 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.
- 7.4 **Bids not accompanied by Earnest Money Deposit shall be rejected.**
- 7.5 The EMD of the unsuccessful bidder(s) will be returned within 3 months from the date of opening the Financial bids.

8. 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 Enclosure -2. This BG or DD shall be submitted along with the acceptance of the Purchase Order.

9. AUTHORITY OF SIGNING:

- 9.1 If the tender is submitted by an individual, it shall be signed by him.
- 9.2 If the bids are submitted by a proprietary firm, it shall be signed by the proprietor with the company seal.
- 9.3 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.
- 9.4 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.

10. QUOTING OF RATES:

- 10.1 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.
- 10.2 Corrections, if any, shall be made by crossing out, initialing with date and rewriting.
- 10.3 In case of conflict between the figures and words in the rates, the latter shall prevail.
- 10.4 The bids shall be verified by the bidder for accuracy in the arithmetical calculations, prior to submission.
- 10.5 The price offered for all imported items should be in **US Dollar** only.

11. PACKING AND SUBMISSION:

- 11.1 The bidder can submit their bid for all / some of the equipment listed at **enclosure-1A In case a bidder is bidding for more than one equipment use separate covers for each equipment duly super scribing the name of the item quoted. In such cases, each equipment shall have a separate technical bid cover and a financial bid cover. Finally, all the technical bid covers of the individual equipments 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. The common covers of Technical and commercial bids shall be kept in one single sealed cover and submitted.**
- 11.2 Bids 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.

12. COVER “A” (TECHNICAL BID):

In case of Category-I : The technical bid shall contain all the 22 Annexure, as applicable, as specified in the format for covering letter for the Technical bid (Enclosure-4). **Non- submission of any annexure should be clearly indicated and highlighted.**

In case of Category-II : The technical bid shall contain all the 9 Annexure, as applicable, as specified in the format for covering letter for the Technical bid (Enclosure-4A) . **Non- submission of any annexure should be clearly indicated and highlighted.**

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

- 13.1 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 extra amount other than the total indicated will be payable on any account.**
- 13.2 The cost of the spares for next 2 years is to be quoted separately along with the financial bids, as per the details given in **Enclosure-1D**.
- 13.3 Annual Maintenance charges for both comprehensive and non-comprehensive for the next 5 years, after the expiry of the warranty period, in the format prescribed in the tender document at **Enclosure-1D**.
- 13.5 Covering letter, in the letterhead of the bidder as per Enclosure-5. The bidder can add or delete the rows, if necessary.

14. VALIDITY:

- 14.1 The tender shall be valid for 180 days.
- 14.2 The rates offered by the bidders shall remain valid for 180 days from the date of opening of the tender. Once, the order is placed on the bidder within the validity or extended validity period as agreed upon, the price quoted by the bidders shall remain FIRM throughout the entire period of operation of the contract.
- 14.3 The Performance Security shall remain valid for a period of sixty days beyond the date of completion of all contractual obligations including warranty obligations.
- 14.4 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.
- 14.5 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.

15. 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”.

16. **TRAINING:**

The successful bidder of the equipment should provide adequate training for at least 2 technical personnel of the laboratories 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 at the application / training centre after completion of the 2nd stage training 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. **CRITERIA 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 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.
- 18.6 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. If any other format is used they are liable to be rejected.

19. ARBITRATION:

In the event of any dispute or difference arising out of operation of this tender , the same shall be referred to the sole arbitrator governed by the Arbitration and Conciliation Act 1966 and the arbitrator will be **Secretary 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 contact, the Jurisdiction will be at Mumbai.

**DETAILS OF INSTRUMENTS REQUIRED FOR THE LABORTORY OF
TEXTILES COMMITTEE AT CICFS, KALMASSERY, COCHIN AND JNPT, NAVI MUMBAI**

Category-I :- Sophisticated Equipment / Instrument:

Sr. No.	Name of the Equipment	No. of units	
		For CICFS, KALMASSERY COCHIIN	For JNPT, NAVI MUMBAI
1.	Fourier Transform Infra Red Spectrophotometer (FTIR)	1	1
2.	Gas Chromatograph coupled with Mass Spectrometer (GC-MS)	1	1
3.	High Performance Liquid Chromatograph (HPLC) with Quick Analyzer	1	1
4.	High Performance Thin Layer Chromatograph (HPTLC)	1	1
5.	Tensile Tester Universal: 1000 Kgs Capacity	1	1

Category- II :- Laboratory Accessories:

Sr. No.	Name of the Equipment	No. of units	
		For CICFS, KALMASSERY COCHIIN	For JNPT, NAVI MUMBAI
1.	Microscope (Binocular Type) with Camera	1	1
2.	Analytical Balance	1	1
3.	Water Purification System	1	1
4.	Hot air Oven	1	1
5.	Deep Freezer	1	1
6.	Hot plate	1	1
7.	Refrigerator	1	1
8.	Evaporator	1	1
9.	Ultra Sonic Bath	1	1
10.	Water bath Shaker	1	1

INDEX

FOR SPECIFICATION OF EQUIPMENT

Category- I Sophisticated Equipment / Instrument:

Sr. No.	Name of the Equipment	Page No.
1.	Fourier Transform Infra Red Spectrophotometer (FTIR)	24 - 26
2.	Gas Chromatograph coupled with Mass Spectrometer (GC-MS)	27 - 31
3.	High Performance Liquid Chromatograph (HPLC) with Quick Analyzer	32 - 33
4.	High Performance Thin Layer Chromatograph (HPTLC)	34 - 36
5.	Tensile Tester Universal: 1000 Kgs Capacity	37 - 38

Category- II Laboratory Accessories:

Sr. No.	Name of the Equipment	Page No.
1.	Microscope (Binocular Type) with Camera	39 - 41
2.	Balance	42
3.	Water purification system	42
4.	Hot air Oven	42 - 43
5.	Deep Freezer	43
6.	Hot plate	44
7.	Refrigerator	44
8.	Evaporator	44 - 45
9.	Ultra Sonic Bath	45
10.	Water bath Shaker	45

STATEMENT OF COMPLIANCE REGARDING SPECIFICATIONS OF INSTRUMENTS –

Category- I Sophisticated Equipment / Instrument:

(Compliance with specification column is to be filled up with the details of model of the equipment quoted)

1. FOURIER TRANSFORM INFRARED SPECTROPHOTOMETER (FTIR):

Model No: -----

Year of introduction of the model: -----

(The bidder to fill the above detail)

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

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
1.	Basic Features	Multi-range FTIR Spectrophotometer capable of both rapid and step scan operation covering minimum spectral range. 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) The interferometer windows to be coated with moisture resistant Zn Se material so as to be completely air sealed for efficient protection. The interferometer must be permanently aligned. Interferometer design. System that require alignment (either manual or automatic) are not acceptable. 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.	
2	Wave length range	485 to 8,500 cm ⁻¹ or better	
3	Signal to noise	50,000: 1peak to peak and 25,000:1 RMS or better (4 cm ⁻¹ spectral resolution, 5 second data collection time, room temperature, ZNSE optics, DTGS detector)	
4	Weave length accuracy	0.7 or better over entire range	
5	Spectral resolution	0.7 cm ⁻¹ or better over entire range	
6	Detector	High intensity Ceramic infra-red source with high sensitivity recovery - Deuterated triglycine sulfate (DTGS) detector.	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
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 1st – 4th 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 & analysis.</p>	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
		<p>VI. Spectral comparison algorithm and Euclidean 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</p> <p>IX. Should provide library of, organic, inorganic Polymer compounds, Textiles, Plastic, Rubber, Paints & 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 (should be quoted separately) .	
11	Computer	Latest configuration PC and printer (should be quoted 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 <ul style="list-style-type: none"> i) Basic technique. ii) During installation. iii) Application centre/training centre. 	
13	Warranty	Minimum 1 year for the whole unit, can quote for 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(to be quoted separately).	

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)

Model No : -----

Year of introduction of the model : -----

(The bidder to fill the above detail)

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
1.	Basic Features	GC system with accurate electronic flow and pressure controllers with optimum use of carrier gas. Enables result comparison, transfer method with minimum method modification preferably GMP compliant.	
2.	Pneumatics Control	Pneumatic control 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 and above.	
	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 Pneumatics Control and as PTV with heating rate of 200°C or more 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 Pneumatics Control. (one each for MS and another for future addition of ECD).	
5.	Auto sampler	The sampler should have the capacity to hold at least 90 vials or more 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 with a tray capacity of 75 vials or more, 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.	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
	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 9 temperature ramps (10 plateaus)	
7.	Cooling rate	300°C to 50°C in 5 min (max) at 25°C ambient temperature	
8.	Capillary Column	Capillary columns 0.10-0.25 mm ID, 30 Mts, DB5-MS and DB 35-MS or equivalent suitable for the analysis. System should be provided 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/adjusted 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 \pm 10V, 50 Hz.	

MASS SPECTROMETER (MS)

Model No :-----

Year of introduction of the model :-----

(The bidder to fill the above detail)

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
1.	Basic Features of MS	The instrument should have Quadropole based collector for the analysis of various compounds with a mass range up to 1050 amu or better metallic/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 1050 amu in 0.1 amu steps or better. Mass resolution should be unit mass resolution throughout the range Mass Axis Stability should be ± 0.10 amu / 48 hrs or better. Scan rate should be 5,000 to 12,000 amu /sec or better Dynamic range should be 10^6	
5.	Signal to noise ratio	EI Scan – 1000:1 S/N for 1 pg/ul OFN standard as performance scan or better 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. With or without Provision for quadruple heating (150 °C or above) to keep the source clean for a long period. Ionization source temperature programmable up to 300 °C or more. It should include turbo molecular pump with 260 L/Sec capacity or better. Unit resolution across the total mass range	
9.	Mass Stability :	± 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.	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
11.	Calibration Kit	Suitable start up kit should be provided with calibration compound. Perfluorotributylamine (PFTBA) / Heptacosane or the necessary reagents of GC-MS to be provided along 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.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
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 within the period of warranty then the same should be provided free of cost by the supplier/manufacturer.</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	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
		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.	
3.	Data base / Atlas of spectra	Latest version of NIST databases (including original CD) with license number from manufacturer. Refining Provision for refining of spectra Libraries – Should provide NIST 2014, or latest version.	
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/NET work load not acceptable). It should be with 5 years comprehensive warranty to keep system in continuous working condition.	
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:	Minimum 1 year for the GC and MS units with accessories, However, can quote for additional period.	
7	Spares	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 Maintenance	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 vendor 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) Application centre/Training centre	
11.	Suitability of power supply	Suitable for 230 V \pm 10V, 50 Hz	

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

Model No : ----- Year of introduction of the model : -----
(The bidder to fill the above detail)

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.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
1.	Basic Features	An automated quaternary LC system capable of pumping four 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 4 solvents. ii) Flow Rate Range: - 0.001ml/min to 5.0 ml and above in 0.001 ml/ min increments iii) Flow Precision: - Less than 0.1% or better iv) Operating Pressure:- approx up to 9500 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.	Column oven	Should provide a temperature ranging from 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: ± 0.5	
4.	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)	
5.	Autosampler	i) Should have sample capacity of at least 70 or more 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	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
6.	Signal to noise ratio	$\pm 0.25 \times 10^{-5}$ AU at 254 nm and at 750nm or less	
7.	Diode Array Detector	Diode Array detector with wave length range of 190 – 800 nm or more and with wave length accuracy of ± 1.0 nm and programmable band width from 1 - 8 nm, should have 3D Software	
8.	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	
9.	Software and data handling	<ul style="list-style-type: none"> • Should be Window based or better with user friendly interface • Single Keyboard control of entire system • Parameter validation management • Compatibility with diode array and UV/Visible to process signals from five wave lengths • Ability to acquire and analyses and store spectral library • Flexible report publisher to make report in desired format • On-line calculation should be possible • Software should have query functions • Software to have the provision for multilevel calibration of injection volume, flow rate, wavelength accuracy and oven temperature • Fully GLP compliant software with audit trails, multilevel password protection and report generation in Acrobat format • To provide the latest compatible computer specifications 	
10.	Computer	Latest configuration PC and printer are to be included in the bid separately. Assembled PC with unlicensed software will not be accepted.	
11.	Training	Training should be imparted to at least 2 technical personnel in 3 phases as follows: <ul style="list-style-type: none"> i) Basic technique ii) During installation iii) Application centre/Training centre 	
12.	Suitability of power supply	Suitable for 230 V \pm 10V, 50 Hz	
13.	Warranty	Minimum 1 year for the main unit and accessories. However, can quote for additional period.	
14.	Additional accessories	Suitable UPS with minimum 30 min backup and essential spares as applicable for at least two years (should be quoted separately).	

4. HIGH PERFORMANCE THIN LAYER CHROMATOGRAPH (HPTLC):

Model No: -----

Year of introduction of the model: -----

(The bidder to fill the above detail)

Equipment is required primarily for the qualitative and quantitative analysis of cleavable aryl amines and 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.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
1.	Sample applicator	Semi-automatic sample applicator should be provided with Data input and monitoring through software. Provision should be for the application of spots, bands. 4 mode Applicator. Preferably with 1) Quantitative analysis, 2) Micro-preparative isolation, 3) In-situ addition of internal std. or reagents 4) Superimpose. 10-method memory storage, stand-alone or System Manager control. Sample positioning on X & Y axis freely selectable, variable automatic rate of delivery, 100 µl syringe for analytical work and micro-preparative work. Self diagnostic + software link to System Manager built-in. Built in validation method, GLP compliance	
2.	Chromatogram development	<u>Twin Trough Chambers</u> : 200x100mm, 100x100mm and 200x200mm <u>Dipping Chambers</u> : 100x100mm, 100x200mm and 200x200mm Twin trough glass chambers with stainless steel lid for 20 x 10, 10 x 10, 10 x 5, cm plates.	
3.	TLC scanner	Measurement of reflected light, either in absorbance or fluorescence mode, object formats up to 200 x 200 mm, spectral range 190 to 900nm, automatic start of all lamps, deuterium, tungsten and mercury, rapid data transfer, A/D Converter for rapid data transfer (to ensure optimally adapted resolution of the measurement signal), all functions of Densitometer-cum-scanner should be controlled by software, 32 bit software, conformity with GLP, automatic control	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
		<p>of monochromator, lamps and filters, the optical components should be flushed with nitrogen. Two wavelength measurement, multi-wavelength measurement, 3D view should be possible, spot/track optimization should be built-in, calibration through linear, Polynomial or Michaelis-Menten function, automatic filter and lamp change, all settings choice of lamp, filter and grating setting, shutter size and object position should be controlled by software program and resultant signal changes should be evaluated, slit width and slit height with various combinations. GLP/GxP conform.</p> <p>Measurement of reflection: in Absorbance or Fluorescence mode, transmission (optional) Object format up to 20 x 20 cm Weave length range: 190 – 900 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</p>	
4.	Chromatograph derivatisation	<p>Immersion device (manual or battery operated) : In case of battery operated ,the device should have a uniform vertical speed selectable between 30 mm/s and 50 mm/s. Immersion time should be selectable between 1 to 8 seconds. Able to accommodate 10 cm plate height.</p>	
5.	UV Cabinet	<p>to combine two UV-tubes for 254 and 366nm in one unit and it should allow inspection of thin-layer chromatograms, automatic UV-cut off when opening the door.</p> <p>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.</p>	
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 handling	to control Sample Applicator and Densitometer-cum-Scanner and data acquisition and data processing with report.	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
		<p>Latest version Window based compatible software to control all the functions of TLC and scanner.</p> <p>Quick measurement time.</p> <p>Measurement up to 36 tracks.</p> <p>Integration either with automatic or manual baseline correction.</p> <p>Quantitative evaluation with calibration functions.</p> <p>Multi wave length scan.</p> <p>GLP and GMP compliant software with audit trails, multilevel password protection and report generation in Acrobat format</p>	
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	<p>Training should be imparted to at least 2 technical personnel in 3 phases as follows:</p> <ul style="list-style-type: none"> i. Basic technique ii. During installation iii. Application centre/Training centre 	
10.	Suitability of power supply	Suitable for 230 V \pm 10V, 50 Hz	
11.	warranty	Minimum 1 year for units and accessories, However, can quote for additional period.	
12.	Additional accessories	Suitable UPS with minimum 30 min backup and essential spares as applicable for at least two years (should be quoted separately).	

5. TENSILE TESTER UNIVERSAL: 1000 Kg CAPACITY:

Model No : -----

Year of introduction of the model : -----

(The bidder to fill the above detail)

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

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
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	5 N, 100N, 1000N and 10000N(10KN) 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.	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
6.	Accessories	<p>1. Pneumatic clamps: (up to a capacity of 10000N). with anti slip lining Upper Jaw: with a set of 75 x min 25 mm jaw faces. Lower Jaw: with a set of 75 x min 25 mm jaw faces.</p> <p>2. Pneumatic clamps: (up to a capacity of 10000N) with anti slip lining Upper Jaw: with a set of 150 X min 50 mm jaw faces. Lower Jaw with a set of 150 x min 25 mm jaw faces.</p> <p>3. Grab insert: up to a capacity of 10000N). with anti slip lining 1 set of 25X 25 mm jaw faces.</p> <p>4. Fibre grip: 1 set (up to a capacity of 5N). with anti slip lining</p> <p>5. Bollard grip: 1 set capable of testing single thread strength of cotton yarn, high tenacity yarn , with pneumatic gripping. (up to a capacity of 10000N). with anti slip lining</p> <p>6. Lea grip: 1 set - required only if the provision for the same is not available with bollard grips. Pre-load weights for fabric strength test for applying the tension, if applicable.</p>	
7.	Compressor	Suitable silent compressor should also be provided up to a capacity required	
8.	Suitability of power supply	Suitable for 230 V \pm 10V, 50 Hz	
9.	Warranty	Minimum 1 year the main units with accessories, However, can quote for additional period.	
10.	Additional accessories	Suitable UPS with minimum 30 min backup and essential spares as applicable for at least two years (should be quoted separately).	

COMPLIANCE STATEMENT TO SPECIFICATIONS OF INSTRUMENTS –
(Compliance with specification column is to be filled up with the details of model of the equipment quoted)

Category-II Laboratory Accessories:

1. MICROSCOPE WITH CAMERA:

Model No : -----

Year of introduction of the model:-----

(The bidder to fill the above detail)

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

Sr. No.	Particulars	Technical Specification / Requirement	Specification s of Quoted Instrument (values / features)
1.	Basic feature	Infinity Optical System	
		C shape corrosion resistant stand with convenient location of focus controls, Anti Fungus Treated	
2	Viewing Head	Siedentopf Trinocular tube, 30°, inclined, 360°, rotatable, IPD 54-75mm with in-built 3.0 Mega Pixel Digital	
3	Eyepiece	Wide Field eyepiece WF 10x/20mm paired with Dipoter Adjustment & eye guards	
4	Nosepiece	Quadruple Reverse angle Nosepiece (Ball bearing type)	
5	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	
6	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	
7	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	
8	• Illumination	Koehler Illumination Built-in Super Bright White LED lamp with intensity control regulator.	
9	Image Sensor:	1/ 2.5CMOS, Valid Pixel: 2048x1536. Digital Output: 24-bit(color) Image Format 2048x1536 4f/s,	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
		1024x768 10f/s framerate Sensitivity: 053v@550um/lux/s, . Image Output: USB2.0 Directshow and Twain Windows System: XP/Vista/Win 7 32bit 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	
10	Optional Accessories:	Phase Contrast Kit, Dark Field kit, Polarizing kit, Dark Field Kit, Fluorescence attachment, Green Filter.	
11	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	
12	others	POWER CONSUMPTION Work≤1.3W, Stand by≈0.3W WORKING TEMPERATURE 0°C~50°C STORAGE TEMPERATURE -20°C~60°C WORKING HUMIDITY 10%-90%RH (No condensation) STORAGE HUMIDITY 10%-60%RH LENS MOUNT: C/CS mount Image Capturing Software Standard Accessories Packed in Moulded Styrofoam box with: Operation Manual Cleaning Cloth Dust cover	
13	Software	dgsoft proMED™ Ver. 5.06 Image Analysis & Measurement Software Features	

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
		<p>include User Friendly Installation;</p> <p>IMAGE EDITING: Cut, Copy, and Paste; Crop,duplicate, restore; Resize; Compression Conversion to other format BMP, JPG, TIF,PNG, GIF & PSD; Grid creation; VIEW: Zoom in/out; Zoomed preview; Rotation at 90,180,270 or custom; Image flipping; horizontal or vertical axis; Intensity histogram; ImageInformation; Redo/Undo on all operations;Ruler in Various units; Slide show. IMAGEPROCESSING: Background subtraction andcontrast enhancement of color or monochromeimages; Arithmetic image functions (BooleanMath; Add, AND, OR, XOR, DIFF, MIN, MAX, +,-, /, *, And Simple). ROUTINE FILTERS: Invert, Brightness, Contrast,Hue,Saturation,Blur,Noise Remove, Emboss, Engrave, Gamma R, Gamma G, Color, Colorize, Oilify, Despeckle,Postarize. SPECIAL FILTERS & KERNELS:High Boost, High Spatial, Low Pass Spatial,Ranking (Max, Med, Min), Point detection, Line detection, Homogeneity.</p> <p>MEASUREMENT:</p> <p>Spatial 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:</p> <p>Manual, Auto bright and Auto dark methods to identity intensity range defined object to be measured. Various calculation & 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:</p> <p>Three options: Direct printout with original image processed Image & Tabular results; Export to MS Office or Excel for further modification.</p>	
14	Suitability of power supply	Suitable for 230 V \pm 10V, 50 Hz	

2. ANALYTICAL BALANCE:

Model No :-----

Year of introduction of the model :-----

(The bidder to fill the above detail)

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

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
1.	Capacity	220 gm	
2.	Readability	0.0001g (0.1mg)	
3.	Pan Size	85 mm dia	
4.	Display	Easy to read Large Backlit GRAPHICAL LCD Display with A.E.P(Advanced Eye Protection)	
5.	Calibration :	EXTERNAL	
6.	Suitability of power supply	Suitable for 230 V \pm 10V, 50 Hz	

3. WATER PURIFICATION SYSTEM:

Model No :-----

Year of introduction of the model :-----

(The bidder to fill the above detail)

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
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	

4. HOT AIR OVEN:

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
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	

5. DEEP FREEZER:

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
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) or equivalent Insulation of 150mm thick high density with 100% vapor barrier.	

6. HOT PLATE:

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
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 dia	
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	

7. REFRIGERATOR:

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
1.	Capacity (Litre)	258	
2.	Compressor	Smart Inverter Compressor	
3.	Star Rating	3 Star or better	
4.	Cooling Technology	Multi Air Flow	
5.	Refrigerant	Eco-friendly Refrigerant	
6.	Temperature Control	Knob Type I-Micom	
7.	Works without stabilizer	135V-290V LVS	

8. TURBO EVAPORATOR:

Model No: -----

Year of introduction of the model: -----

(The bidder to fill the above detail)

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
1.	General	Turbo nitrogen gas vortex shearing evaporation based solvent Evaporator with accessories. It is for simultaneous evaporation of up to 50 tubes of 50 ml 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. The equipment with water bath of suitable capacity (about 6.4 liters) and temperature range from ambient to 90°C, with temperature and timer control. Should have separate gas control for the 5 independent manifolds preferably Teflon, each manifold consisting of 10 tube positions and the gas supply should be controllable between 60 -90 psi	
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 Aluminum Base 110mm Dia x 115mm High	
3.	Rotation	Rotating Stage 60mm Dia. Adjustable Tilt 0-90O	
4.	Operating Vacuum	1×10^{-2} to 1×10^{-5}	
5.	Vacuum Gauge ATM	$- 1 \times 10^{-2}$	
6.	Turbo molecular pump	50L/Second	

9. ULTRA SONIC BATH:

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
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 min.	

10. WATER BATH SHAKER:

Sr. No.	Particulars	Technical Specification / Requirement	Specifications of Quoted Instrument (values / features)
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:

Sr. No.	Name of the Equipment	EMD /Bid security Per unit	No. of units	EMD / BID SECURITY to be paid (In INR)
1.	Fourier Transform Infra Red Spectrophotometer (FTIR)	50000	2	100000
2.	Gas Chromatograph coupled with Mass Spectrometer (GC-MS)	112500	2	225000
3.	High Performance Liquid Chromatograph (HPLC) with Quick Analyzer	75000	2	150000
4.	High Performance Thin Layer Chromatograph (HPTLC)	125000	2	250000
5.	Tensile Tester Universal: 1000 Kgs Capacity	50000	2	100000

Category- II Laboratory Accessories:

Sr. No.	Name of the Equipment	EMD /Bid security Per unit	No. of units	EMD / BID SECURITY to be paid (In INR)
1.	Microscope (Binocular Type) with Camera	7500	2	15000
2.	Balance	3750	2	7500
3.	Water Purification System	12500	2	25000
4.	Oven	1250	2	2500
5.	Deep Freezer	1250	2	2500
6.	Hot plate	250	2	500
7.	Refrigerator	375	2	750
8.	Evaporator	12500	2	25000
9.	Ultra Sonic Bath	1875	2	3750
10.	Water bath Shaker	1250	2	2500

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

Name of the Instruments:				
Model No :		year of Introduction of the Model:		
Sr. No.	Details	Cost in Rs.(₹) / USD (\$)		
i.)	Foreign components : Total landing cost of the equipment including accessories inside the laboratories of Textiles Committee at cochin and JNPT, Navi Mumbai including installation, freight, agency commission, packing, forwarding, insurance, custom clearing etc.			
ii.)	Indigenous Components: 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)	Year	Comprehensive	Non-Comprehensive
		1 st :		
		2 nd :		
		3 rd :		
		4 th :		
		5 th :		
Delivery schedule of the equipment:-		4-6 weeks		

Note : Textiles Committee will provide the custom duty exemption certificate for the imported equipments and reimburse the applicable duty paid by the supplier.

Part 2: COST DETAILS OF INDIGENOUS EQUIPMENTS/ INSTRUMENTS

Name of the Instruments:				
Sr. No.	Cost Details of Indigenous items	Cost in Rs.(₹)		
i.)	Total cost (inclusive of all taxes, installation charges)			
ii.)	AMC details: (a) AMC rate/per year	Year	Comprehensive	Non-Comprehensive

	(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 st :		
		2 nd :		
		3 rd :		
		4 th :		
		5 th :		
Delivery schedule of the equipment:-			4 weeks	

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

Part 1A: (IMPORTED ITEMS)

Sr. No.	Cost Details of foreign components	Cost in USD(\$)
i.)	Total cost at the specified laboratories 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)

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

Sr. No.	Details of requirement for Opening of L/C (for imported items only)	
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	

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. _____ dated: _____

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.

FORMAT TO BE FILLED UP AND SUBMITTED
IN THE LETTER HEAD OF THE BIDDER

To,
The Director (Labs),
Textiles Committee,
P. Balu Road, Off Veer Savarkar Road,
Prabhadevi Chowk, Prabhadevi, MUMBAI- 400 025

Sub: **Supply of textile testing instrument to the laboratories of Textiles Committee as per the specifications and quantities mentioned in the tender**

Sir,

- a) Having examined the conditions and Tender and Specifications of the instruments & equipments, we, the undersigned, offer to supply instruments and equipments as mentioned in the **Tender document** as per the quantity and specifications given in the tender along with standard spares/accessories as specified.
- b) Earnest Money Deposit (EMD) as given in **Tender document** in the form of Bank Demand Draft / Pay Order in favour of 'Textiles Committee' payable at Mumbai as detailed in Tender Conditions is enclosed.
- c) The original tender document duly signed on all pages is enclosed.
- d) We agree to abide by this tender for the period from the opening date fixed for receiving the same and it shall remain binding upon as for a mutually extended period agreed in writing by us.
- e) If our tender is accepted, we undertake to supply the instruments and equipments and install the same in the laboratories as mentioned in the tender within the specified periods mentioned in **Tender document** from receipt of the order from the Textiles Committee in writing.
- f) We agree to supply consumable spare parts and replacement of the broken/damaged/non-compatible parts during the guarantee / warrantee period, free of charge, as per the terms & conditions.
- g) We agree to train the personnel of laboratories free of charge, as per the terms and conditions.
- h) If our tender is accepted we will, obtain and arrange:
 - 1. Security Deposit / Bank Guarantee as defined
 - 2. Insurances
 - 3. Any other statutory obligation, if any, prior to commencement of supply of machinery.

- i) We agree for the validity of our tender up to 180 days from the date of opening the financial bids.
- j) We agree to your right to forfeit our EMD/Security deposit without prejudice to any other right or remedy for the following failures on our part.
- 1) Charges in terms and conditions of tender are made within validity period.
 - 2) Supply and installation of instrument and equipment is not commenced within specified period as given in the Tender document.
 - 3) Obligations under (e) above are not fulfilled.
- k) We have used only tender documents as issued for submitting his bid and shall comply to various terms and conditions.
- l) We agree that Unless and until a formal Agreement/order is prepared and issued, this tender together with your written acceptance thereof, shall constitute a binding contact between us and Textiles Committee.
- m) Earnest Money Deposit (EMD) as given in **ANNEXURE-II** in the form of Bank Demand Draft / Pay Order in favour of 'Textiles Committee' payable at Mumbai as detailed in Tender Conditions is enclosed.
- n) We agree to make a presentation of the products to be supplied by us, before the Purchase Sub-Committee, and demonstrate the suitability of the equipment model quoted to the purpose indicated in the tender document, if need be, and on a mutually convenient date & place.

Authorized Signatory to tenderer
Signature dated
Name:
Designation/Capacity:

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 – Category - 1
Ref: Tender Enquiry No. TC/Lab/Tendering/Cochin & JNPT/2016 (13-1) dated 07.03.2016

Sir,

This has reference to tender enquiry No.TC/Lab/Tendering/Cochin & JNPT/2016 (13-1) dated 07.03.2016. We have downloaded the tender document from the Textiles Committee's website.

Please find enclosed following documents in Cover-A i.e. Technical Bid. The annexures are to be enclosed clearly marking the Annexure No and are arranged serially.

Sr. No	Details of documents	
1.	Tender document duly filled and signed by authorized signatory on all pages with seal	Annexure-1
2.	Addenda / corrigenda / clarification issued by Textiles Committee before due date of tender, duly signed by the authorised person, if any.	Annexure-2
3.	Full details of the person authorized to file the tender.	Annexure-3
4.	Profile of Manufacturer and Authorized agent.	Annexure-4
5.	Proof that the bidder is either i) manufacturer or ii) authorized agent for the Supply of Equipment / Accessories	Annexure-5
6.	List of the last 2 year's customers to whom the quoted model of the instrument with full details along with performance reports from at least 2 users of the same model quoted as mentioned in the tender document.	Annexure-6
7.	Envelope containing 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: _____ for the item -----quoted as per the details in Enclosure1-C	Annexure-7
8.	<u>Documents to be signed by:</u> i. Proprietor - In case of proprietary firm. ii. All the partners of the firm or by a partner holding the power of attorney – in case of Partnership firm along with copy of Power of Attorney iii. Duly authorized person or power of attorney - in case of limited company / corporation along with Authorization letter for the signatory	Annexure-8

9.	A statement incorporating the turnover of business of the bidder for the last 3 years signed by an Chartered Accountant years (It may be noted that the turnover of the bidder should be Rs 15 lakhs if he is an authorized agent and Rs 150 lakhs if he is a manufacturer of the instrument.	Annexure-9
10.	Copy of Memorandum of Association or Partnership deed if it is not a proprietary firm	Annexure-10
11.	Copy of Current and Valid Income Tax return for the last 3 years (ITCC) & PAN No.	Annexure-11
12.	Copy of current and valid registration certificate from Central / State Sales tax authority.	Annexure-12
13.	Copy of Service Tax Registration certificate	Annexure-13
14.	Any other documents in compliance with the Tender. (Please specify)	Annexure-14
15.	The format Enclosure-1B for compliance to specifications of instruments quoted, duly filled and signed by the Authorized person.	Annexure-15
16.	Brochure / catalogue giving the technical details of the specific model of the equipment /instruments quoted.	Annexure-16
17.	A letter indicating assumptions, criterion, technical alternative etc., if any.	Annexure-17
18.	Details of any special pre-installation requirements including floor space, size of the table required, electrical power with details of power points / UPS requirements , Air-conditioning etc to be clearly specified, if required.	Annexure-18
19.	Details of optional items/spare parts required for the next 2 years	Annexure-19
20.	Statement that the instrument is a current model and it will be supported for the next 10 years.	Annexure-20

We hereby confirm that we have read, understood and agree with all the terms & conditions given in the Tender document.

Thanking you,

Yours faithfully,

Name & Sign of Authorised
Signatory of the bidder
Company Seal

Encl: a/a in Cover-A

**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, MUMBAI- 400 025

Sub: Technical Bid – Category - 2
Ref: Tender Enquiry No. TC/Lab/Tendering/Cochin & JNPT/2016 (13-1) dated 07.03.2016

Sir,

This has reference to tender enquiry No.TC/Lab/Tendering/Cochin & JNPT/2016 (13-1) dated 07.03.2016. We have downloaded the tender document from the Textiles Committee's website.

Please find enclosed following documents in Cover-A i.e. Technical Bid. The annexure are to be enclosed clearly marking the Annexure No and are arranged serially.

Sr. No.	Details of documents	
1.	Tender document duly filled and signed by authorized signatory on all pages with seal	Annexure-1
2.	Addenda / corrigenda / clarification issued by Textiles Committee before due date of tender, duly signed by the authorised person, if any.	Annexure-2
3.	Proof that the bidder is either i) manufacturer or ii) authorized agent for the Supply of Equipment / Accessories along with profile.	Annexure-3
4.	Envelope containing 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: _____ for the item -----quoted as per the details in Enclosure1-C	Annexure-4
5.	<u>Documents to be signed by:</u> i. Proprietor - In case of proprietary firm. ii. All the partners of the firm or by a partner holding the power of attorney – in case of Partnership firm along with copy of Power of Attorney iii. Duly authorized person or power of attorney - in case of limited company / corporation along with Authorization letter for the signatory	Annexure-5
6.	Copy of Current and Valid Income Tax return for the last 3 years (ITCC) & PAN No.	Annexure-6
7.	Copy of current and valid registration certificate from Central / State Sales tax / Service Tax authority	Annexure-7
8.	The format Enclosure-1B for compliance to specifications of instruments quoted, duly filled and signed by the Authorized person.	Annexure-8
9.	Descriptive leaflet/brochure giving the technical details of the specific model of the equipment /instruments quoted.	Annexure-9

We hereby confirm that we have read, understood and agree with all the terms & conditions given in the Tender document.

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. TC/Lab/Tendering/Cochin & JNPT/2016 (13-1) dated 07.03.2016

Sir,

This has reference to tender enquiry No.TC/Lab/Tendering/Cochin & JNPT/2016 dated 07.03.2016. We have downloaded the tender document from the Textiles Committee's website.

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) as per Enclosure-1D.

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. No	Type of Instruments / Accessories	Details of documents
1.	Category - 1	20 Annexure
2.	Category - 2	9 Annexure

Sr.	PARTICULARS
1.	Bids must be submitted in a single sealed cover containing two separate sealed covers for Technical & Commercial Bids addressed to Director (Laboratories), Textiles Committee, LABORATORY Division, Mumbai. If quoting for more than one instrument follows the procedure as per 11.1 of the tender document.
2.	Whether all documents are 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.
	Cover A: Technical Bid
4.	Covering letter along with Technical Bid.
5.	Compliance with Technical specifications of the Equipment / Accessories
	Details to be Provided
6.	Details of EMD submitted. Requisite Bid security (EMD) in the form of a Demand Draft/Pay Order/Banker's Cheque for Rs. _____ (Rupees _____ only), drawn in favour of "Textiles Committee" payable at Mumbai.
7.	Full details of the person authorized to file the tender.
8.	Profile of Manufacturer or Authorized agent.
9.	Proof that the bidder is either i) manufacturer or ii) authorized agent for the Supply of Equipment / Accessories
10.	List of the last 2 year's customers along with full details as mentioned in the tender document.
11.	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.
12.	Financial statement of the bidder incorporating the turnover of business for the last 3 years.
13.	Copy of Current and Valid Income Tax return (ITCC) & PAN No.
14.	Copy of current and registration certificate from Central and State Sales tax authority.
15.	Copy of Service Tax Registration and latest service tax filing challan.
16.	Any other documents in compliance with the Tender.
	Cover B: Financial Bid
17.	Covering letter along with Financial Bid.
18.	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.

***** X*****