

Tender Ref. No. STPIL/GEN/COE/714/2020-21/01

Dated: 12.06.2021



SOFTWARE TECHNOLOGY PARKS OF INDIA

(An Autonomous Society Under Ministry of Electronics & Information Technology,
Govt. of India)

STPI Lucknow, STP Complex, Adjacent Gomti Barriage,
Gomti Nagar, Lucknow, Uttar Pradesh 226010

Website-<http://www.noida.stpi.in>

Tel. No. 0522-2307913/15

invites bids for

*Supply, Installation, Testing and Commissioning of Lab Equipment for
"MedTech-CoE" with warranty support for 5 years.*

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Section I

Request for Proposal (RFP)

Software Technology Parks of India (STPI) Lucknow invites e-procurement open Tender **under two-bid system (Technical and Commercial bids)** from OEM/ authorized partners of OEM for **Supply, Installation, Testing and Commissioning of Lab Equipment for MedTech, a Centre of Excellence (CoE) in MedElectronics and Health Informatics Sector at SGPGI, Lucknow (herein after referred as “MedTech-CoE”) with total warranty support of 5 years.**

The important Bid Schedule & Venue are mentioned below:

Table 1:

I	Proposal inviting officer Authority, Designation and Address	The Officer-In-Charge, Software Technology Parks of India (Lucknow), STP Complex ,Adjacent Gomti Barrage , Gomti Nagar, Lucknow, Uttar Pradesh 226010
II	Name of the Work	Supply, Installation, Testing and Commissioning of Lab Equipment for “MedTech-CoE” with total warranty support for 5 years.
III	Place of Execution	3rd Floor, New Library Building Centre of Excellence, SGPGI, Raibareli Rd, Lucknow, Uttar Pradesh 226014
IV	Location of Pre-bid Meeting	Software Technology Parks of India (Lucknow), STP Complex ,Adjacent Gomti Barrage , Gomti Nagar, Lucknow, Uttar Pradesh 226010
V	Validity of Bids	180 Days from the last date of Bid Submission

Table 2:

Published on https://eprocure.gov.in/eprocure/app	
Bid Document Download Start Date	12.06.2021
Date & Time of Pre-bid meeting	18.06.2021 till 15:00 Hrs Due to Covid pandemic all Pre-Bid queries shall be entertained by email only: lko.info@stpi.in
Bid Submission Start Date & Time	22.06.2021 11:00 Hrs
Bid Submission End Date & Time	06.07.2021 11:00 Hrs
Technical Bid Opening Date & Time	07.07.2021 11:30 Hrs
Commercial Bid Opening Date & Time	Shall be intimated later

Note: -

- All details, regarding the subject tender are available on the websites, <https://eprocure.gov.in/eprocure/app>, <http://www.medtech.stpi.in> & <http://www.noida.stpi.in>. Any change / modification in the tender enquiry will be intimated through above websites only. Bidders are therefore, requested to visit these websites regularly to keep themselves updated.
- Manual bids will not be accepted.
- For submission of E-bid, bidders are required to get themselves registered with <http://eprocure.gov.in> website along with class II or III digital signature certificates issued by CCS under IT Act – 2000 & its further amendments. The detailed procedure is available in the website under the tab 'Help for Contractors', 'Information about DSC', 'Bidders manual kit' etc.
- Pre-Bid Meeting / other meetings during any stage may be through Video Conferencing facility.

Any queries relating to the process of online bid submission or queries relating to CPP Portal are answered at <http://eprocure.gov.in>. Further, any clarifications, in general may be directed to the 24x7 CPP Portal Helpdesk on 0120-4200462, 0120-4001002, 0120-4001005 & 0120-6277787 or you may send a mail to support-eproc@nic.in .

**Officer-In-Charge
STPI- Lucknow**

Section-II

Instructions to Bidders (ITB)

STPI-Lucknow invites e-procurement open Tender under **Two Bid System** (Technical & Commercial) for **Supply, Installation, Testing & Commissioning of Lab Equipment for MedTech-CoE with warranty support for 5 years** as per the Technical specifications and scope of works mentioned in this RFP.

Tender can be downloaded from the website, <http://www.noida.stpi.in>, <https://eprocure.gov.in/eprocure/app> & <http://www.medtech.stpi.in>.

- This section of the bidding documents provides the information necessary for bidders to prepare online responsive bids. It also provides information on online bid submission, opening, evaluation and award of contract.

•INSTRUCTIONS FOR ONLINE BID SUBMISSION:

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

•REGISTRATION:

- Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "Online Bidder Enrolment" on the CPP Portal is free of charge.
- As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal
- Upon enrolment the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certificate Authority recognized by CCA India (e.g. Sify/nCode /eMudhra etc.), with their profile.
- Only one valid DSC should be registered by a bidder. Please note that

Bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.

- Bidders can then log into the site through the secured login by entering their user ID / password and the password of the DSC / eToken.

PREPARATION OF BIDS

Only Online Bids need to be submitted on <http://eprocure.gov.in/eprocure/app>. The tenders shall be of TWO bid system (Technical Bid & Commercial Bid). Manual bids will not be accepted.

The following instructions may be followed by the bidders while submission of their bids on online mode.

- Bidder should do Online Enrolment in this Portal using the option Click Here to Enrol available in the Home Page. Then the Digital Signature enrollment has to be done with the e-token, after logging into the portal. The e-token may be obtained from one of the authorized Certifying Authorities such as eMudhraCA/GNFC/IDRBT/MtnlTrustline/SafeScript/TCS.
- Bidder then logs into the portal giving user id / password chosen during enrolment.
- The e-token that is registered should be used by the bidder and should not be misused by others.
- DSC once mapped to an account cannot be remapped to any other account. It can only be inactivated.
- The Bidders can update well in advance, the documents such as certificates, purchase order details etc., under My Documents option and these can be selected as per tender requirements and then attached along with bid documents during bid submission. This will ensure lesser upload of bid documents.
- After downloading / getting the tender schedules, the Bidder should go through them carefully and then submit the documents as per the tender document; otherwise, the bid will be rejected.
- The BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bid is liable to be rejected. Bidders are allowed to enter the Bidder Name and Values only.
- If there are any clarifications, this may be obtained online through the eProcurement Portal, or through the contact details given in the tender document. Bidder should take into account of the corrigendum published if any before submitting the bids online.
- Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender schedule and they should be in PDF/XLS/RAR/DWF formats. If there is more than one document, they can be clubbed together.

- The bidder must read the terms & conditions and accept the same to proceed further to submit the bids.
- The bidder has to submit the tender document(s) online well in advance before the prescribed time to avoid any delay or problem during the bid submission process.
- There is no limit on the size of the file uploaded at the server end. However, the upload is decided on the Memory available at the Client System as well as the Network bandwidth available at the client side at that point of time. In order to reduce the file size, bidders are suggested to scan the documents in 75-100 DPI so that the clarity is maintained and also the size of file gets reduced. This will help in quick uploading even at very low bandwidth speeds.
- It is important to note that, the bidder has to click on the Freeze Bid Button, to ensure that he/she completes the Bid Submission Process. Bids which are not frozen are considered as Incomplete/Invalid bids and are not considered for evaluation purposes.
- The NEFT/RTGS transaction details of the Earnest Money Deposit (EMD) to be submitted physically to the Department and the scanned copies furnished at the time of bid submission online should be the same. Otherwise the bid will be summarily rejected.
- The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
- The bidder may submit the bid documents through online mode only via CPP portal. Offline documents will not be handled through this system.
- At the time of freezing the bid, the eProcurement system will give a successful bid updating message after uploading all the bid documents submitted and then a bid summary will be shown with the bid no, date & time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed using the e-token of the bidder and then submitted.
- After the bid submission, the bid summary has to be printed and kept as an acknowledgment as a token of the submission of the bid. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening event.
- Successful bid submission from the system means, the bids as uploaded by the bidder is received and stored in the system. System does not certify for its correctness
- The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected
- The time that is displayed from the server clock at the top of the tender Portal, will be valid for all actions of requesting bid submission, bid opening etc., in the e-Procurement portal. The Time followed in this portal is as per Indian Standard Time (IST) which is GMT+5:30. The bidders should adhere to this time during bid

submission.

- All the data being entered by the bidders would be encrypted at the client end, and the software uses PKI encryption techniques to ensure the secrecy of the data. The data entered will not be view able by unauthorized persons during bid submission and not view able by any one until the time of bid opening. Overall, the submitted bid documents become readable only after the tender opening by the authorized individual.
- During transmission of bid document, the confidentiality of the bids is maintained since the data is transferred over secured Socket Layer (SSL) with 256-bit encryption technology. Data encryption of sensitive fields is also done.
- The bidders are requested to submit the bids through online eProcurement system to the TIA well before the bid submission end date and time (as per Server System Clock).

Any queries relating to the process of online bid submission or queries relating to CPP Portal are answered at <http://eprocure.gov.in>. Further, any clarifications, in general may be directed to the 24x7 CPP Portal Helpdesk on 0120-4200462, 0120-4001002 & 0120-4001005 or you may send a mail to support-eproc@nic.in .

Introduction

Software Technology Parks of India (STPI) is an Autonomous Society under Ministry of Electronics and Information Technology, Government of India, established by the Government of India in 1991 with the objective of boosting the Software Exports from India.

The “MedTech- Centre of Excellence” is a unique initiative of STPI / Meity Government of India to open a MediElectronics and Health Informatics center of excellence at SGPGI Lucknow. This novel initiative is being set up by a consortia comprising of Software Technology Parks of India (STPI), SGPGI Lucknow, Department of IT and Electronics, Government of UP, Association of Indian Medical Device Industry (AIMED), Andhra Pradesh MedTech Zone (AMTZ). This MedTech-Centre of Excellence will specifically focus on fulfilling the demand of medical electronic equipment and consumables which is currently being made by 65% import. The demand of medical products and the service is going to rise exponentially. The development activities of MedTech-CoE will be purely not for profit and based on research and development carried out by the activities in MedTech Centre Of Excellence SGPGI Lucknow. Keeping in view of the Holistic approach and objective of promoting innovation in MediElectronics sector, the MedTech-CoE invites turnkey proposals from the bidders such that the maximum benefits in terms of custom duty exemption, special educational and other discounts etc. may be extended to the MedTech-CoE to empower young researchers and budding entrepreneurs in medical electronics and health Informatics sector. It may be further mentioned here that the entire work will be carried out at SGPGI Lucknow in a project mode.

For the purpose of this document, STPI, STPI-Lucknow, & MedTech-CoE can mean to refer singularly to any one or combined to all of them.

- **PURPOSE OF TENDER**

Proposals under two bid systems are hereby invited by STPI Lucknow for **Supply, Installation, Testing and Commissioning of Lab Equipment for “MedTech-CoE” with total warranty support for 5 years.**

- **VALIDITY OF THE BID**

The Bid must be valid for a period of 180 days from the last date of Bid Submission. The Bidder shall not be entitled (during the said period of 180 days without the consent in writing of STPI) to revoke or cancel the offer or to vary any term thereof.

- **REJECTION & RETURN OF BID**

- STPI reserves the right to reject any or part of any Bid without assigning any reason. The documentation submitted by Bidders shall not be returned. STPI shall not pay any costs incurred for the purchase, preparation and submission of any Bid.
- If the Bidder gives wrong information in the Bid, STPI reserves the right to reject such Bid at any stage or to cancel the Contract, if awarded.
- Canvassing in any form in connection with the Bids is strictly prohibited and the Bids submitted by the Contractors who resort to canvassing are liable for rejection.
- Bids, in which any of the particulars and prescribed information are missing or are incomplete, in any respect and / or prescribed conditions are not fulfilled, shall be considered non responsive and are liable to be rejected.

- **BIDDER'S ELIGIBILITY CRITERIA**

- Bidder shall be a registered Indian company, firm, proprietorship, etc. **Documentary evidence to be submitted.**
- Bidder must be an OEM or authorized partner of reputed and renowned OEM. **Copy of Certificate of Authorized partner from OEM only, to be provided.**
- Bidder shall have necessary experience and capability of supply, installation, testing and commissioning of similar lab equipment to Government organizations, educational institutions, industry, etc. in timely manner. Bidder should have completed minimum two works of similar nature during financial years 2017-18, 2018-19 and 2019-20. **Copies of two such work orders showing name of client, description of work, order no., order date and order amount to be provided as documentary evidence. Altered, redacted or tampered copies of work orders will not be accepted as documentary evidences.**
- The bidders should not be blacklisted by any State/Central Govt. body/PSU/ Autonomous Body/Private Company/Firm. Bidders should not be under a declaration of ineligibility for corrupt and fraudulent practices.
- The bidder shall have necessary statutory registration certificate for GST and PAN Registration. **Documentary evidence to be submitted.**
- The bidder's average Annual turnover during last three years (FY 2017-18, 2018-19 & 2019-20) should be above Rs. 5.00 Crores. Annual turnover FY 2017-18, 2018-19 & 2019-20 duly certified by Chartered Accountant to be provided as documentary evidence.

• **Bid-Security Declaration:**

Separate Certificate to be submitted by the bidder for Bid Security Declaration on company's letter head (**As per Annexure-V**)

• **CONTENTS OF TECHNICAL BID:**

Technical bid should contain copies of all the following documents, towards eligibility criteria, in the stipulated format

- Tender Acceptance Letter As per Annexure -VI
- Copy of certificate of incorporation/ registration of the company, firm, proprietorship, etc.
- CA certified copy/ copies of annual turnover of the bidder for FY 2017-18, 2018-19 and 2019-20.
- Copies of minimum two purchase orders of similar nature, executed by the bidder during FY 2017-18, 2018-19 and 2019-20. The submitted copies of work order should not be altered, redacted or tempered with in any manner. The copies must clearly mention description and scope of order, name of client, order number and date, order amount, delivery period, etc.
- Copy of letter of authorization (on company letter head) to signatory, issued by the bidder company, firm, etc.
- Copy of Authorized Partnership/ distributorship certificate, issued by OEM to bidder.
- Copy of Bid Security Declaration on company letter head as per Annexure-V
- Copy of the PAN Card and GST Registration certificates.
- Duly Filled and signed Technical Compliance Sheet as per Annexure-II.

• **CONTENTS OF COMMERCIAL BID:**

The format for Commercial/price bid is attached at ANNEXURE-III. The same BOQ. XLS for this tender from CPP portal is to be downloaded by the bidder and duly filled in before submission.

The bidder should quote the prices applicable to start-up incubator/ educational/ research institutes for equipment/ licenses.

Bidders shall adhere to the procedure and processes laid down in this document and shall follow fair and ethical practices of trade.

• **Deadline for Submission of Bids**

Bids must be submitted within the due date & time, specified in the tender.

- STPI Lucknow may extend this deadline for submission of bids by amending the bid

documents. This will be suitably notified in the websites <https://eprocure.gov.in/eprocure/app.>, www.medtech.stpi.in & <http://www.noida.stpi.in>

- The date fixed for opening of bids, if subsequently declared as holiday by STPI, the revised date of schedule will be notified. However, in absence of such notification, the bids will be opened on next working day. The time and venue remaining unaltered.
- STPI Lucknow reserves the right to accept the offer in full or in parts or reject summarily.
- No financial information is to be mentioned in the technical bid. Failure to do so may lead to rejection of the bid.
- **Clarification on the bid Document**
The bidding process is stipulated in the tender document clearly. In case of any clarifications about bidding process/eligibility criteria, the bidders may seek clarification during the pre-bid meeting or through email to lko.info@stpi.in prior to pre-bid meeting. The clarifications sought after the pre-bid meeting date will not be entertained.
- The bid shall contain no insertions, erasures or overwriting except as necessary to correct errors made by the bidder in which case, such corrections shall be signed by the person or persons signing the bid and the same have to be scanned and uploaded by the bidder.
- **SITE VISIT:**
Bidders are advised to inspect and examine the site of delivery and installation and its surrounding and satisfy themselves before submitting their tenders. A tenderer shall be deemed to have full knowledge of the site whether he/ she inspects it or not and no extra charges consequent on misunderstanding or otherwise, shall be allowed. For access to the installation site for inspection, please contact Mr. Praveen Kumar Dwivedi, Joint Director @ lko.info@stpi.in 24 hours in advance, on week days between 9:00AM to 6:00 PM.
- Conditional bids will not be accepted.
- The bidders are requested to submit only the relevant documents as requested/mentioned in the tender document.

Section-III

General Terms and Conditions

- The bid should be submitted only through Online on <https://www.eprocure.gov.in>
- The bill of material for supply, installation, testing and commissioning are divided into following categories,
 - **Category A:-Equipment for MediElectronics Lab**
 - **Category B:-Equipment for IoT Health Care Lab**
 - **Category C:- Consumables Items**

The bidder must compulsorily have to bid for all items listed in all category.

In case, bidder submits a partial bid for any category, such bid will be treated as incomplete and will be rejected.

- **BID EVALUATION PROCESS**

The Bid evaluation process shall be in two steps as follows,

- **Technical bid evaluation**

Technical bid shall be opened first and will be evaluated for fulfilment of the Bidder's Eligibility Criteria stated **as per para 4 of Section-II** and documents mentioned in **Para 7 of Section-II**.

If the Bidder's Eligibility Criteria is fulfilled, STPI may ask the bidder for any clarifications during technical evaluation process.

The clarification shall be given in writing immediately / within defined time.

Commercial Bids will be opened only for those bidders who will be found technically qualified during evaluation.

- **Commercial bid evaluation**

The commercial bids of all the technically qualified bidders will be opened and evaluated.

The bidder with lowest commercial offer (L-1) as per "**Net Payable Amount**", of Commercial Bid (Annexure-III) will be considered for award of contract.

NOTE: Arithmetical errors, if any, in the Commercial bids shall be rectified on the following basis:

- If there is a discrepancy between net payable amount mentioned in words and figures, the lower of the two shall be considered.
- If there is any discrepancy in the calculation of Net Payable Amount, the same will be corrected by the evaluation committee by considering the

Unit Price. If the Contractor does not accept the correction of the errors, his/ her bid shall be rejected.

- **SEEKING CLARIFICATION ON SUBMITTED BIDS:**

To assist in the examination, evaluation and comparison of bids STPI may, at its discretion ask the bidder for the clarification of its bid. The request for clarification and the response shall be in writing. However, no post bid clarification at the initiative of the bidder shall be entertained after opening of the tender.

If a bidder does not provide clarifications of its bid by the date and time set by STPI for clarification, their bid may be rejected.

- In respect of interpretation/clarification of this bid document and in respect of any matter relating to this bid document, the decision of Officer-In-Charge, STPI-Lucknow will be final.

- **AWARD OF CONTRACT**

- Purchase order will be released to the L1 bidder.
- The selected bidder will be required to provide
 - an acceptance of the purchase order, in writing, within 7 working days from the date of purchase order
 - performance bank guarantee, as explained in para 8 of this section
 - Signed copy of Non-Disclosure Agreement, as per Annexure-VII.
- If the successful bidder fails to provide the above-mentioned documents (in Para b above) within 7 working days, STPI Lucknow reserves the right to cancel the purchase order to the bidder and in this case.

- **PAYMENT TERMS**

The payment will be released through online bank transfer after the submission of Invoice.

- 10% payment will be released after successful delivery of complete bill of material mentioned in the order and based on Delivery Acceptance Report.
- 80% of payment will be released after completion of supply, installation & commissioning within 30 days and submission of warranty certificates of 5 years.
- Remaining 10% amount will be paid to the bidder after the end of applicable warranty.

- **PERFORMANCE SECURITY:**

- Within 7 days of award of the work, the successful bidder shall furnish Performance Security @ 3% of the total value of order amount by way of irrevocable and unconditional Bank Guarantee (BG) from a reputed Nationalized Bank in favour of STPI.
- This BG must be valid for minimum 5 years and 60 days to cover the risk of STPI which may be extended further as per requirement of STPI,
- The proceeds of the BG shall be payable to STPI as compensation for any loss resulting from the successful bidder's failure to complete its obligations under the terms and conditions of the contract. The BG will be discharged by STPI and returned to the successful bidder not later than 60 days following the date of completion of the successful bidder's performance related obligations under the terms & conditions of the 5 year contract.

- **Liquidity Damages:**

Penalty for Delayed Delivery will be applicable @ 0.5% of the contract value per week subject to maximum of 5% of total order value, in case of delay / non completion of work within the stipulated time period.

- **Warranty support:**

- The warranty support for all hardware and software items supplied by the successful bidder shall be onsite at "MedTech-CoE" (as per Service Level Agreement- Annexure-IV).
- Documentary proof of applicable warranty to be provided by the supplier at the time of delivery.
- If defective items require such type of servicing, maintenance, repair, replacement, etc. which cannot be carried out Onsite at "MedTech-CoE" and hence required to be taken offsite, the supplier will be solely responsible for logistics and safety of the item and their complete repair, replacement, etc. Also, the supplier will also provide alternate/replacement for the defective item during repair period. No additional cost will be paid to the supplier for the above.

- **Non-Disclosure Agreement (NDA)**

The successful bidder has to enter into NDA as per the Annexure-VII. The NDA

shall be submitted along with the acceptance of the Order.

- **Disputes Clause & Arbitration:**

In case of any dispute arising between the parties or otherwise, efforts shall be made to settle/resolve them through mutual discussion amicably. However, if any matter still remains unresolved, it will be referred to DG STPI who would resolve the matter after due discussion with all the concerned. In case of no amicable settlement, the dispute shall be referred to arbitration in accordance with the provisions of the Indian Arbitration and Conciliation Act, 1996. The venue of arbitration shall be in New Delhi, the language of the arbitration proceedings shall be in English” .

- **Force Majeure:**

Notwithstanding the provisions relating to time line fixed elsewhere in the Agreement, the Vendor/Parties shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that the delay in performance or other failure to perform its obligation under the Contract/Agreement is the result of an event of Force Majeure. The Force Majeure in the context of this Contract/Agreement, means an event beyond the control of the Vendor/Party and not involving the Vendor's/Party's fault or negligence and not foreseeable. Such events may include, interalia, wars or revolutions, fires, floods, epidemics, quarantine restrictions, freight embargoes, earthquakes, explosions, strikes and other acts of God referred to as eventualities.

If, at any time, during the continuance of the agreement, the performance in whole or in any part by either party of obligation under this Contract/Agreement shall be prevented or delayed by reasons of the eventualities then, notice of such happening of any such eventualities is given by either party to the other within two days from the date of occurrence thereon, neither party shall, by reason of such eventualities be entitled to terminate this contract/agreement nor shall either party have any claim of damages against the other in respect of such non-performance or delay in performance. Performance of the contract agreement shall, however, be resumed as soon as practicable but not later than seven days after such eventuality has come to an end.

- **Termination By default**

The STPI Lucknow may, without prejudice to any other remedy for breach of contract, by written notice of default sent to supplier, terminate the Contract in whole or part:

- If the Supplier fails to provide services /rectify the fault within the time period specified in the contract or any extension thereof granted by the STPI-Lucknow.
- If the Supplier fails to perform any other obligations under the Contract.
- In case of violation of any clause of Non-Disclosure Agreement.
- **Other Terms and Conditions**
 - **Product Specifications & Compliance Statement:**
 - The technical specifications mentioned in Annexure-I (Bill of Material) are minimum requirement.
 - Any part number specified in Annexure-I is only to help the supplier to understand better the requirement. It does not indicate preference for any vendor, OEM, etc. in any manner.
 - The supplier should quote the products either with the technical specifications strictly as mentioned in the Annexure-I (Bill of Material) or higher and only of technically reputed, reliable and globally acclaimed brands / OEMs.
 - The bidder should not quote the end of life/ support products.
 - The supplier should quote the prices applicable to start-up incubator/ educational/ research institutes for equipment/ licenses.
 - **Delivery:** The delivery, installation, testing and commissioning of the equipment and afterwards demo/training are to be done at “MedTech-CoE”, 3rd Floor, New Library Building Centre of Excellence, SGPGI, Raibareli Rd, Lucknow, Uttar Pradesh 226014 and should be completed **within 8 weeks** from the date of award of contract.
 - STPI Lucknow, will not accept any material/ software delivered and/ or installed/ commissioned in damaged condition, i.e. safety of the equipment during delivery to “MedTech-CoE” and during installation and commissioning is sole responsibility of the respective supplier.
 - If the material or part thereof is lost or rendered defective during transit/ installation/ commissioning, the supplier shall immediately arrange for the supply of the equipment or part thereof, as the case may be, at no extra cost.
 - Supplier material must be properly packed against any damage and insured up to the destination. The material should directly be supplied to “MedTech-CoE”, 3rd Floor, New Library Building Centre of Excellence, SGPGI, Raibareli Rd, Lucknow, Uttar Pradesh 226014. All the expenses involved in shipping the equipment to “MedTech-CoE” and installation and commissioning of the equipment thereafter shall be borne by the Suppliers.

All aspects of safe delivery shall be the exclusive responsibility of the Supplier.

- STPI Lucknow will have the right to reject the items supplied, if these do not comply with the specifications at any point of installation / inspection.
- STPI Lucknow reserves the right to accept / reject the offers or cancel the whole RFP proceedings without assigning any reason whatsoever.
- Bids received through Email / Fax, by post, courier, etc. and open offers shall not be accepted. Late / Delayed bids shall not be accepted under any circumstances. Incomplete offers will be rejected.
- **Disclaimer:** This Request for Proposal (RFP) is not an offer by STPI Lucknow but an invitation for supplier's response. No contractual obligation whatsoever shall arise from the RFP process.
- **Confidentiality & RFP Ownership**
 - This RFP is both confidential and proprietary to STPI Lucknow and it reserves the right to recall the RFP in its entirety or in part. Suppliers must not duplicate, distribute or otherwise disseminate or make available this document or the information contained in it without the express written consent of STPI Lucknow.
 - The supplier shall not include or refer the contents of this RFP in public without prior written approval from the client, which, if required, shall be requested in written to the individuals named above. Suppliers must accept all of the foregoing terms and conditions without exception. All responses to the RFP will become the property of STPI Lucknow and will not be returned.

SECTION IV

SCOPE OF WORKS

The Scope of Work shall be as follows: -

- Supply, installation, testing and commissioning of equipment in 'ready-to-work' mode.
- Providing detailed demo/15 days (twice in year) onsite/offsite training about the working, operations and routine maintenance for all the equipment and/or tools as may be required for its safe and normal operations. To this effect, necessary documentation, manuals, datasheets, website URLs, etc. are to be provided by the supplier.

- Providing regular servicing/ preventive maintenance of the equipment and tools as per the SLA enclosed at Annexure-IV or any prescribed norms or as per any industry standards to ensure their highest uptime levels and working conditions. To this effect, the supplier will be required to submit, preventive maintenance/ servicing schedule at the time of Final Acceptance Report (FAR).
- Facilitating inspection and testing of the tools and equipment by way of supply of samples, etc. during Delivery Acceptance Report (DAR) and Final Acceptance Report (FAR) and wherever requested by STPI during the contract period of 5 years.
- Providing warranty technical support and continuous engagement for operation and maintenance of each of the equipment during the entire contract period of 5 years onsite. The project is for a period of 5 years with a possibility of extension.

Testing of Equipment:

- **Delivery Acceptance Report (DAR)**
- A nominated committee, designated by STPI Lucknow will prepare Delivery Acceptance Report, after the delivery of the all the equipment as per Purchase order, by the supplier at "MedTech-CoE".
- The objective of DAR is to determine the successful and timely supply of the equipment as per order and Service Level Agreement (SLA) and along with all the required, necessary and standard spares and documentations, warranty support details, etc.
- Based on the report of DAR, 10% payment of the respective order amount will be paid after deducting liquidity damages (if any).

- **Final Acceptance Report (FAR)**
- A committee, nominated by STPI Lucknow will conduct final acceptance test and prepare FAR, after the installation and commissioning of the all the equipment as per purchase order by the supplier at "MedTech-CoE".
- The objective of FAR is to check the successful and timely installation, commissioning of the equipment by the respective supplier, as per order and Service Level Agreement (SLA), functional testing of each equipment and necessary training and demo sessions provided by the supplier, OEM, etc. for proper working, operations and maintenance of each of the equipment.
- Based on FAR, 80% payment of the respective order amount will be paid after

deducting liquidity damages (if any).

ANNEXURE-I

Bill of Material (BoM)

CATEGORY A: Test Equipments for MediElectronics Lab

Sr. NO	Item Code	Test Equipment	Specification	Remarks
1	TEML 01	Multisim	The premier design platform for circuit simulation and PCB layout Combine simulation software with Ultiboard™ Power Pro layout software. Complete suite of interactive simulation instruments and analyses to optimize design behaviour Integrate seamlessly with the flexible, 64-layer design environment of Ultiboard Integrate simulation and real measurements to validate prototype behaviour and improve analysis Reduce prototype errors and design time with an integrated flow from schematic to layout Information based on current version	
2	TEML 02	Ansys Simulation Software	Simulation Software for medical purpose.	
3	TEML 03	Labview Software	Lab view Software H/W software driven for medical purpose.	
4	TEML 04	Signal Acquisition Software	Measurement resolution: 7 ½ digit. Max no of channels: 500 or more No of available slots to add various card: 6 or more Resistance measurement range: 1 to 100 M ohm. Connection interface: GPIB, USB, LAN No of voltage channels: 120 Max voltage: 300 V DC or RMS, Current specifications: 2 A switched (3 A carry), 60 Ω, 125 VA maximum. Measurement speed including relay time for DC voltage measurement: >110ch/s.No of direct current measurement channels: 10 Switch configuration: 2-pole Form C with common Guard Max current: 4A. System should be provided with screw terminal to	

			connect input to switch card.	
5	TEML 05	AutoCAD Fusion 360 Ultimate	EDA tool, with integrated schematic and PCB design solution for HDI and high-speed layout, advanced layout. Includes: Schematic Editor, PCB Design Editor, IDF 3D-MCAD/ECAD Interface, Variant Manager, EMC Adviser, Length and delay-based routing ,Rules-by-Area, Constraint Browser ,Unlimited Place &Route Editor	
6	TEML 06	8Channel DSO (oscilloscope of 1 Ghz)	Mixed Signal Oscilloscope with below features- 1. 8 Analog Channel oscilloscope of 1 Ghz. Provision in oscilloscope should be there to use minim 32 digital channel also. 2. 12 Bit ADC 3. 60M points on all analog and digital channels simultaneously 4. 6GS/s sample rate on all analog and digital channels simultaneously 5. Protocol decode capabilities of I2C, SPI, I3C, RS-232/422/485/UART, SPMI,USB, Ethernet should be there 6. Non-Windows Operating system with Inbuild memory of minimum 60GB. 7. Spectrum analysis of all 8 channels simultaneously should be available 8. 50 MHz inbuild function generator should be there . 9. Every analog channel should be provided with 1 Ghz passive or active probe mandatory. Minimum one current probe of 1mA and 120Mhz should be provided.	

7	TEML 07	Spectrum Analyzer 13Ghz)	<p>Real time portable spectrum Analyzer of 13.6 Ghz with below specifications -</p> <ol style="list-style-type: none"> 1. 9 kHz to13.6 of frequency range 2. 40 MHz acquisition bandwidth 3. Mil-Std 28800 Class 2 environmental, shock and vibration specifications for use in harsh conditions 4. Internal battery for extended field operations should be provided. 5. Feature of Spectrum/Spectrogram to minimize time spent on transient and interference hunting 6. Instrument should have EMC/EMI pre-compliance and troubleshooting - CISPR detectors, predefined standards, limit lines, easy accessory setup, ambient capture, failure analysis, and report generation 7. POI of 15 us 8. Software should be provided for WLAN 802.11a/b/g/j/p measurement and Bluetooth measurement <p>LISn single phase Frequency Range : 9 kHz-30MHz AMN Impedance : (50 μH + 5 Ω) 50 Ω Continuous Load Current: 16A Curren Max-18 A Pre-Filter Choke : 250μH Max. Input Voltage : AC: 300 V, 50 / 60 Hz, DC: 600V Rotary switch for Line and Neutral Available with N connectore and Schuko socket with Transient Limiter with 10&20 Db attanuatore</p>	
8	TEML 08	Signal Source (Generator)	<p>Dual Channel Arbitary Function generator of 250 Mhz with following specifications</p> <ol style="list-style-type: none"> 1. 2 Output channels 2. Output amplitude range 1 mVP-P to 4 VP-P into 50 Ω loads 3. 2 GSa/s sample rates 4. 14-bit vertical resolution 5. Built-in waveforms include Arb,sine, square, ramp, pulse, noise, and other frequently used waveforms Sweep, Burst, and Modulation modes (AM, FM, PM, FSK, and PWM) 6. Advanced Sequence mode should be available 7. 16 Mpts arbitrary waveform memory on each channel 8. Up to 256 steps in sequence mode with loop jump 	

			<p>and wait events</p> <p>9. Minimum 9-inch capacitive touch screen with 800 * 480 resolutions</p> <p>10. Build in Arbitrary up to 120Mhz.</p>	
9	TEML 09	<p>SpO2, ECG respiration temperature iBP Simulator</p>	<p>Features Requirements -</p> <p>ECG 12 leads</p> <p>NSR 10 to 360 Bpm, step 1 bpm</p> <p>Accuracy 0.25 bpm</p> <p>Amplitude 0.05 to 5.5 mV</p> <p>Arryth. / Perf. / Pacer Yes</p> <p>Artifacts Yes</p> <p>Respiration</p> <p>Apneas 10 to 150 Brpm, step 1 Brpm</p> <p>Yes, 4 selections</p> <p>NIBP Adult Sim Yes</p> <p>Neonat Sim Yes</p> <p>Custom Curves Yes</p> <p>Number of curves Unlimited</p> <p>Manometer Max 400 mmHg, 0,5 mmHg</p> <p>Regulated pressure source Max 400 mmHg, 0,5 mmHg</p> <p>Over pressure and leak tests Max 400 mmHg, 0,5 mmHg</p> <p>Pressure units Multiple choice</p> <p>SPO2 from 30% to 100%, steps 1%</p> <p>Accuracy</p> <p>Masimo Rainbow 1%</p> <p>Yes, included Custom Curves Yes</p> <p>Pulse amplitude from 0% to 100%, step 1%</p> <p>Artifacts Yes, 4</p> <p>Alarm tests preset Yes, 5</p> <p>Temperature Simulations Accuracy YSI 400 / YSI 700</p> <p>20 to 42° C by step 0,5° C 0,03° C</p> <p>Features Requirements</p> <p>IBP</p> <p>Transducer sensitivity Static Dynamic Swan-Ganz</p> <p>Artifacts 2 channels</p> <p>5 μV and 40 μV / V / mmHg</p> <p>-10 to 400 mmHg, step 1mmHg</p> <p>10 simulations Yes</p> <p>ECG Fetal / IUP ECG Fetal static ECG Fetal dynamic</p> <p>IUP dynamic</p> <p>Transducer sensitivity Yes</p>	

			<p>60 to 240 bpm, step 1 bpm Yes Yes 5 μV and 40 μV / V / mmHg Cardiac Output Yes Rechargeable battery Battery life Bar code reader QR code reader User interface / display Pre-set Simulations Customs Sequences Memory for Results Port ComCarrying case Weight Software Lithium-ion, 200 Simulations 18 months Yes Andoid tablet 5" Yes, 12 Gb Yes, 12 Gb BT, Wifi, USB , SD Card To be supplied Less than 2Kg</p>	
10	TEML 10	Power Supply	<p>750VA programmable AC/DC power supply, 1-phase 0-400V,0- 7.5A, 16Hz-1200Hz with standard USB , RS232,LAN, Triple channel power supply, Maximum voltage per channel: \pm30V. Maximum current channel: 6 A (On two channels) and 3A on one channel. Maximum power: 180W each on first two channels and 15W on third channel. Power supply should support combination of channel for high voltage. Power supply should have remote sensing feature for accurate sourcing. Ripple: 4mV rms or better. Readback voltage accuracy: 0.03%,Readback current accuracy: 0.1% Meter Voltage resolution: 1 mV,Meter current resolution: 1mA. All channels voltage and current output should be displayed simultaneously. Internal memory to store set up to 30 configurations. All channels should be isolated, independently programmable. Power supply should have Rs 232, GPIB interface.</p>	
11	TEML 11	Bench Top Digital Multimeter	<p>System should have V/I digitizer with 1Ms/ sec sampling rate Resolution-6 1/2 bit Voltage ranges -100 mV to 1000V Voltage resolution-100 nV Resistance-1 - 100 MΩ Resistance resolution-1 $\mu\Omega$ Current ranges -10 μA- 10A</p>	

			<p>Current resolution-10 pA Capacitance ranges-10nF- 100 μF Max no of channels -80 channels (2 wire) No of channels required. -40 channels (2 wire) Scanner card should have capability of measurement voltage upto 300V Temperature measurement -Direct Thermocouple, RTD(2, 3, 4 wire), and thermistor temperature measurements communication interface-USB, LAN LXI, optional GPIB/RS232 Memory-7 million in standard mode Display-5' high resolution touch screen display</p>	
12	TEML 12	Medical Simulator manikins	<p>Completely functional CPR manikin with electronic connections includes: IV training arm Blood pressure arm Defibrillation chest skin Airway management trainer Ideal for ACLS, nursing, paramedic and EMT training at every level CPR: Palpable and visual landmarks Fully articulated head, neck and jaw Jaw thrust Airway management: Realistic anatomy of the mouth, tongue and pharynx, larynx, epiglottis, vocal cords, trachea and oesophagus Cricoid cartilage allows for practice of Sellick manoeuvre Separate left and right lungs for auscultation Oral, nasal and digital intubation capabilities Suctioning capabilities IV Arm: Articulated at biceps for antecubital and dorsal access Bony landmark at shoulder to identify muscle tissue for intramuscular injections Realistic flashback from a pressurised system Replaceable skin and veins</p>	
13	TEML 13	Power Quality	1. Four channels supporting single and three phase applications	

		Analyzer	<p>2. Instrument should have Complete solution for full compliance testing to IEC 62301 standby power requirements</p> <p>3. 1MHz bandwidth</p> <p>4. 1MS/s sampling rate</p> <p>5. 16 bit A/D</p> <p>6. Harmonic analysis to 100th order</p> <p>7. $\pm 0.04\%$ basic voltage and current accuracy</p> <p>8. Measurements to 30 Arms and 600 Vrms Cat II (2000 Vpk)</p> <p>9. USB and LAN interface standard</p> <p>10. Offline software should be Provided.</p> <p>11. Full color graphical display for intuitive readouts of measured values, waveforms, harmonics, and energy integration plots</p>	
14	TEML 14	ESD workstation	<p>ESD GUN 16KV.</p> <p>ESD bench with 4stool and two table and 5 wrist band and esd mate 4*7 foot</p>	
15	TEML 15	Vibrometer	<p>2xAA 1.5V (SMF,NiMH,LiFe)Battery condition indicated on meter display</p> <p>Weight 350g (with batteries)</p> <p>Stroboscope High intensity LED,10 - 18000 RPM (0.17-300Hz)</p> <p>Torch High intensity LED</p> <p>Operating temperature -5 to 50 Degree C</p> <p>Storage Tremperature -20 to 65 Degree C</p> <p>Dimensions 150mm (L) x 60mm (W) x 35mm (H)</p>	
16	TEML 16	Rotometer	Oxygen Regulator with Humidifier Bottle and Key for B and D Type Cylinders	
17	TEML 17	Digital Pressure Gauge	Measuring ranges up to 0 ... 10,000 bar (0 ... 150,000 psi), vacuum and absolute pressure ranges also available, Accuracy: up to 0.025 % (incl. calibration certificate), Intrinsically safe version, Logger function with up to 50 measured values per second	
18	TEML 18	Level Gauge	<p>Degree of Vial: 180 degree, 90 degree</p> <p>Length: 300 mm</p> <p>Model: BSL</p> <p>Number of Vials: 2</p>	
19	TEML 19	Thermo-Hygrometer	<p>Measuring range - 0 to +50 °C</p> <p>-20 to +50 °Ctd</p> <p>Accuracy- ± 0.5 °C (at +25 °C)</p> <p>Resolution0.1 °C</p> <p>Humidity - Capacitive</p>	

			<p>Measuring range-10 to 95 %RH Accuracy-±3 %RH (10 to 95 %RH) Resolution-0.1 %RH Measuring rate -18 s Housing-ABS Battery type-9V block battery, 6F22 Battery life-approx. 5 year Display type-LCD Display size-2 lines</p>	
20	TEML 20	O2 meter	<p>0.00 TO 45.00 mg/L (ppm) 0.0 to 300% saturation</p>	
21	TEML 21	Vernier Scale	<p>3.55 centimeters Item Volume 0.002 cubic_meters Item Weight 350.0 grams Length 44.95 centimeters</p>	
22	TEML 22	Micrometer	<p>Baked-enamel-finished frame Measuring faces: Carbide Equipped with ratchet stop for constant measuring force Range: 0-25 mm Graduation: 0.001mm Item Volume 0.001 cubic_meters Item Weight 180.0 grams Manufacturer Series Number Outside Micrometer</p>	
23	TEML 23	National Instruments Elvis	<p>1.25 MS/s NI ELVIS – The Virtual Instrumentation Suite (NI ELVIS) II is a modular engineering educational laboratory device developed specifically for academia. With its hands-on approach, educators can help students learn practical, experimental skills. NI ELVIS II features one compact form factor integrated with 12 of the most commonly used instruments in the laboratory, including an oscilloscope, digital multimeter, function generator, variable power supply, and Bode analyzer. You can connect the PC to these various measurements through USB plug-and-play capabilities and build circuits on a detachable protoboard.</p>	

24	TEML 24	Biomedical paramedical simulator	<p>Features Requirements</p> <p>ECG 12 leads NSR 10 to 360 Bpm, step 1 bpm Accuracy 0.25 bpm Amplitude 0.05 to 5.5 mV Arryth. / Perf. / Pacer Yes Artifacts Yes Respiration Apneas 10 to 150 Brpm, step 1 Brpm Yes, 4 selections NIBP Adult Sim Yes Neonat Sim Yes Custom Curves Yes Number of curves Unlimited Manometer Max 400 mmHg, 0,5 mmHg Regulated pressure source Max 400 mmHg, 0,5 mmHg Over pressure and leak tests Max 400 mmHg, 0,5 mmHg Pressure units Multiple choice SPO2 from 30% to 100%, steps 1% Accuracy Masimo Rainbow 1% Yes, included Custom Curves Yes Pulse amplitude from 0% to 100%, step 1% Artifacts Yes, 4 Alarm tests preset Yes, 5 Temperature Simulations Accuracy YSI 400 / YSI 700 20 to 42° C by step 0,5° C 0,03° C Features Requirements IBP Transducer sensitivity Static Dynamic Swan-Ganz Artifacts 2 channels 5 µV and 40 µV / V / mmHg -10 to 400 mmHg, step 1mmHg 10 simulations Yes ECG Fetal / IUP ECG Fetal static ECG Fetal dynamic</p>	
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			<p>IUP dynamic Transducer sensitivity Yes 60 to 240 bpm, step 1 bpm Yes 5 μV and 40 μV / V / mmHg Cardiac Output Yes Rechargeable battery Battery life Bar code reader QR code reader User interface / display Pre-set Simulations Customs Sequences Memory for Results Port Com Carrying case Weight Software Lithium-ion, 200 Simulations 18 months Yes Andoid tablet 5" Yes Yes, 12 Gb Yes, 12 Gb BT, Wifi, USB, SD Card To be supplied Less than 2Kg To be supplied</p>	
25	TEML 25	PCB Fabrication Lab	<p>EDA tool, with integrated schematic and PCB design solution for HDI and high-speed layout, advanced layout. Includes: Schemetic Editor,PCB Design Editor, IDF 3D-MCAD/ECAD Interfacem,Variant Manager,EMC Adviser,Length and delay-based routing ,Rules-by-Area, Constraint Browser,Unlimited Place &Route Editor BGA Rework Station Fully Automatic BGA rework station which is special used for mobile repairing and mother board rework with Placement accuracy: 0.01mm, BGA chip: 2*2~80*80mm and Dimension: 600x700x850mm Reflow Machine used primarily for reflow soldering of surface mount electronic components to printed</p>	

			<p>circuit boards with length of the heating zone: 960*300mm, speed of conveyer belt: 0-1600mm/ min and Heating up time: Around 15mins</p> <p>SMT Pick and place machine</p> <p>Machine for depositing solder paste on the printed wiring boards (PWBs) to establish electrical connections with Platform Size as 300*400mm PCB Size as 250*400mm Template Size as 370*470mm</p>	
26	TEML 26	3D printer and scanner	<ul style="list-style-type: none"> • Build volume 200mm x 200mm x 280mm cube. • TIOT SMART EXTRUDER Nozzle . • ABS, PLA, HIPS, Nylon, PVA, Flex,PET, wood and metal fill. • Connectivity with PC and SD card. • Layer resolution up to 65 microns. • Filament diameter 1.75mm • Formats for files: Obj, Stl and G-codes only • ECT Wifi controlled module for machine • ECT camera module for remote monitoring • Auto cooling for circuit box. • Scan Mode : Handheld HD scan/ Alignment • Scan Accuracy up to 0.05 mm • Scan speed up to 20 fps 100000 points/s 7 data capture lines • Point Distance 0.2mm - 2mm • Output Format OBJ , STL , ASC, PLY , P3 , 3MF • Supported OS Win 7, Win 8, Win 10 • Working Distance 400mm. • Data output export water tight 3d model directly to 3D printing 	
27	TEML 27	Vinyl cutter	<ul style="list-style-type: none"> • Cutter Pressure: 0-800g(digital adjustment) • Cutting Width: 711mm (or more) • Cutting Speed: Max 400mm/s • Driver: CD, High stepping motor, micro-step driver • Cutting Length: Max 20000mm<=20 • Repeat Cutting: Yes • Size: 1350mm • Item: vinyl cutter plotter • Control panel: over-head, 2*8LCD, 13-botton touch thin-film keyboard • Main board: 16-bit CPU, 1MB-4M High-speed CACHE memory • Max cutting thickness: 1mm • Knife press:0-800g(digital adjustment) 	

			<ul style="list-style-type: none"> • Type of tool: carbide blade 	
28	TEML 28	Laser Cutting Machine	<ul style="list-style-type: none"> • 110 W CO2 laser power source for easy cutting • 1220mm x 914mm work area for full length work. • Positional Accuracy of .05mm and 0.01 mm • File format BMP, JPEG, GIF , PLT, DXF , DWG etc • Schneider electrical system • Material support plexi glass, acrylic, leather, fabric, ceramics etc • Computer assisted control • Conic lens module 	

CATEGORY B: Test Equipments for IoT

Sr. no.	Item Code	Test Equipment	Specification	Remarks
1	EI 01	Power Quality Analyzer	<p>The offered equipment should have following features:</p> <p>a) Measure three phase & single phase balanced & unbalanced power in various motors drives, feeders of low and high voltages.</p> <p>b) The equipment should be able to monitor and record power quality.</p> <p>c) The equipment should be able to work on principle of single, two & three-wattmeter method as desired by user.</p> <p>d) The equipment should be able to read from direct ac inputs as well as inputs through CT/PT for low current/low voltage measurements.</p> <p>e) The equipment should be easily portable and should be supplied along with suitable carrying bag.</p> <p>f) Sampling rate should be minimum 256 samples/ cycles or better for RMS voltage and current, Sampling rate for transient should be 200kHz or more</p> <p>g) Should have feature for inrush studies for motor feeders</p> <p>h) Instrument should comply with IEC 61000-4-30(Class-A) EN50160.</p> <p>a. Transient voltage : 2 MHz sampling</p> <p>b. Frequency cycle : Calculated as one cycle, 40 to 70 Hz</p> <p>c. Voltage (1/2) RMS: one cycle calculation refreshed every half cycle and Current (1/2) RMS: half-cycle calculation</p> <p>d. Voltage swell, Voltage dips, Voltage interruption</p> <p>e. Inrush current</p> <p>f. Voltage waveform comparison</p> <p>g. Instantaneous flicker value: As per IEC61000-4-15</p> <p>h. 200 ms frequency: Calculated as 10 or 12 cycles, 40 to 70 Hz</p> <p>i. 10 sec frequency: Calculated as the whole-cycle time during the specified 10 s period, 40 to 70 Hz</p> <p>j. Voltage waveform peak, Current waveform peak</p> <p>k. Voltage, Current, Active power, Apparent power, Reactive</p>	

			<p>power, Active energy, Reactive energy, Power factor, Displacement power factor, Voltage unbalance factor, Current unbalance factor, and efficiency</p> <p>l. High-order harmonic component (voltage/ current): 2 kHz to 80 kHz</p> <p>m. Harmonic/ Harmonic phase angle (voltage/ current), Harmonic power: 0th to 50 th orders</p> <p>n. Harmonic voltage-current phase angle: 1th to 50 th orders</p> <p>o. Total harmonic distortion factor (voltage/ current)</p> <p>p. Inter harmonic (voltage/ current): 0.5 th to 49.5 th order</p> <p>q. K Factor (multiplication factor)</p> <p>r. IEC Flicker</p> <p>accuracy of +/- 0.1% or better and power accuracy of +/-0.2% or better (excluding clamp accuracy).</p> <p>Programming: - Programming for CT /PT ratio. The on-screen display of waveforms should be user programmable. The measuring and monitoring data should be user selectable.</p> <p>a. Suitable current probe set (set of four) of flexible current probes for current measurement of 5000 amp or more.</p> <p>b. Suitable 1 set of Voltage clips (set of four).</p> <p>c. Mains supply cable.</p> <p>d. USB/LAN cable for downloading data.</p> <p>e. Rechargeable Battery set with charger</p>	
2	EI 02	Clamp On power meter	<p>Measurement line Single-phase, Three-phase (balanced with no distortion)</p> <p>Measurement items Voltage, Current, Voltage/ current peak, Active/ reactive/ apparent power, Power factor, Phase angle *1, Frequency, Simple Active Energy Consumption (Single-phase) Voltage/ current harmonic levels</p> <p>AC voltage range [Measurement range] 80.0 V to 600.0 V, Single range,</p> <p>Basic accuracy 45 - 66 Hz: $\pm 0.7\%$ rdg. ± 3 dgt. (Frequency characteristics: 45 to 1 kHz, True RMS)</p> <p>AC current range [Measurement range] 0.060 A to 600.0 A, 3 range, Basic accuracy: $\pm 1.3\%$ rdg. ± 3 dgt. (Frequency characteristics: 45 to 1 kHz, True RMS)</p> <p>Power range [Single phase] 0.005 kW to 360.0 kW</p> <p>Basic accuracy: $\pm 2.0\%$ rdg. ± 7 dgt. (50/ 60 Hz, Power factor=1) [Balanced three-phase 3-wire] 0.020 kW to 623.5 kW</p> <p>Basic accuracy: $\pm 3.0\%$ rdg. ± 10 dgt. (50/ 60 Hz, Power factor=1) [Balanced three-phase 4-wire] 0.040 kW to 1080 kW</p> <p>Basic accuracy: $\pm 2.0\%$ rdg. ± 3 dgt. (50/ 60 Hz, Power factor=1)</p> <p>Harmonic levels (CM3286-01only *2) Voltage/ current harmonic levels up to 30th, Content factor, Total harmonic distortion ratio</p> <p>Other functions [Phase angle *1] lead -180.0° to lag 179.9°, [Power factor] -1.000 to 1.000 [Frequency] 45.0 Hz to 999.9 Hz, PEAK, Phase detection, Max / Min / Avg value display, Auto hold, electric meter comparison, unbalanced 3-phase power estimate display, etc.</p> <p>Dustproof and waterproof IP54 (EN60529) Grip, excluding lever</p>	

			<p>Risk of electric shock from measured conductors increases when wet</p> <p>Interface Bluetooth® 4.0LE, display measured values on an iOS or Android device</p> <p>Power supply LR03 SMF battery ×2, Continuous use: 25 hr (Backlight OFF)</p> <p>Core jaw dia. ϕ 46 mm (1.81 in)</p>	
3	EI 03	Bench Top Digital Multimeter	<p>System should have V/I digitizer with 1Ms/ sec sampling rate</p> <p>Resolution-7 ½ bit</p> <p>Voltage ranges -100 mV to 1000V</p> <p>Voltage resolution-10 nV</p> <p>Resistance-1 - 100 MΩ</p> <p>Resistance resolution-1$\mu\Omega$</p> <p>Current ranges -10 μA- 10A(dc) ,Current ranges -1mA- 10A(ac)@1nA resolution.</p> <p>Current resolution-1pA</p> <p>Capacitance ranges-1nF- 1000μF</p> <p>Temperature measurement -Direct Thermocouple, RTD(2, 3, 4 wire), and thermistor temperature measurements</p> <p>communication interface-USB, LAN LXI</p> <p>Memory-7 million in standard mode</p> <p>Display-5' high resolution touch screen display</p>	
4	EI 04	LCR Meter	<p>Measurement modes LCR (Measurement with single condition), Continuous testing (Continuous measurement under saved conditions)</p> <p>Measurement parameters Z, Y, θ, X, G, B, Q, Rdc (DC resistance), Rs (ESR), Rp, Ls, Lp, Cs, Cp, D (tanδ), σ, ϵ</p> <p>Measurable range 100 mΩ to 100 MΩ, 10 ranges (All parameters are determined according to Z)</p> <p>Display range Z: 0.00 m to 9.99999 GΩ, Y: 0.000 n to 9.99999 GS, θ: \pm (0.000° to 180.000°), Q: \pm (0.00 to 9999.99), Rdc: \pm (0.00 m to 9.99999 GΩ),</p> <p>D: \pm (0.00000 to 9.99999), Δ %: \pm (0.000 % to 999.999 %), or other</p> <p>Basic accuracy Z \pm0.05% rdg. θ: \pm0.03° (representative value, Measurable range: 1 mΩ to 200 MΩ)</p> <p>Measurement frequency 4 Hz to 8 MHz (5 digits setting resolution, minimum resolution 10 mHz)</p> <p>Measurement signal level [Normal mode: V mode/CV mode]</p> <p>4 Hz to 1.0000 MHz: 10 mV to 5 Vrms (maximum 50 mArms)</p> <p>1.0001 MHz to 8 MHz: 10 mV to 1 Vrms (maximum 10mArms)</p> <p>[Low impedance high accuracy mode: V mode/CV mode]</p> <p>4 Hz to 1.0000 MHz: 10 mV to 1 Vrms (maximum 100 mArms)</p> <p>[Normal mode: CC mode]</p> <p>4 Hz to 1.0000 MHz: 10 μA to 50 mArms (maximum 5 Vrms)</p> <p>1.0001 MHz to 8 MHz: 10 μA to 10 mArms (maximum 1 Vrms)</p> <p>[Low impedance high accuracy mode: CC mode]</p> <p>4 Hz to 1.0000 MHz: 10 μA to 100 mArms (maximum 1 Vrms)</p> <p>[DC resistance measurement]</p> <p>Measurement signal level: Fixed at 1 V</p> <p>DC bias measurement DC voltage 0 V to 5 V (10 mV resolution)</p> <p>Output impedance Normal mode: 100 Ω, Low impedance high</p>	

			<p>accuracy mode: 10 Ω</p> <p>Display 5.7-inch color TFT with touch panel</p> <p>Functions Comparator, BIN measurement (10 categories for 2 measurement parameters), Trigger function, Open/short compensation, Contact check, Panel loading/saving, Memory function</p> <p>Interfaces EXT. I/O (HANDLER), USB, USB flash drive, LAN, GP-IB, RS-232C, BCD</p> <p>Power supply 100 to 240 V AC, 50/60 Hz, 50 VA max.</p> <p>Dimensions and mass 330 mm (12.99 in) W \times 119 mm (4.69 in) H \times 230 mm (9.06 in) D, 4.2 kg (148.1 oz)</p> <p>Accessories Power cord \times1, Instruction manual \times1, LCR application disc (Communications user manual) \times1, Kelvin Test probe, Pincher cable, communication cable</p>	
5	EI 05	Soldering and rework station	<p>Rework Station is a 3-port station that enables you to convert the station into soldering, desoldering, and rework stations. These ports are simultaneously powered. Due to this, you can save a lot of bench space. Comes with hot air-type rework functions and expands the range of repair of SMD parts with hot air hand piece</p>	
6	EI 07	Spectrum Analyzer 13Ghz)	<p>Real time portable spectrum Analyzer of 13.6 Ghz with</p> <ol style="list-style-type: none"> 1. 9 kHz to 13.6 of frequency range 2. 40 MHz acquisition bandwidth 3. Mil-Std 28800 Class 2 environmental, shock and vibration specifications for use in harsh conditions 4. Internal battery for extended field operations should be provided with 4hr continuous operation. 5. Feature of Spectrum/Spectrogram to minimize time spent on transient and interference hunting 6. Instrument should have EMC/EMI pre-compliance and troubleshooting - CISPR detectors, predefined standards, limit lines, easy accessory setup, ambient capture, failure analysis, and report generation 7. RTSA, POI of 15 us, 10000 FFT per second 8. Software should be provided for WLAN 802.11a/b/g/j/p measurement and Bluetooth measurement 9. General-purpose modulation analysis (27 modulation types including 16/32/64/256 QAM, QPSK, O-QPSK, GMSK, FSK, APSK) <p>EMC/EMI analysis with CISPR peak, quasi-peak, and average detectors</p> <p>Bluetooth[®] analysis of Basic Rate, Low Energy, and Bluetooth 5. Some support of Enhanced Data Rate</p>	
7	EI 08	Network Analyzer	<p>6 Ghz Portable network Analyzer, 2-port, 2-path vector network analyzer with below specs</p> <ol style="list-style-type: none"> 1. 100 kHz to 6 GHz frequency range 2. >122 dB dynamic range, Built-in Bias Tee \pm 24 V, \pm 200 mA 3. Source Output Power 10MHz to 3GHz: -50 dBm to +8 dBm or better <p>3GHz to 6 GHz: -50 dBm to +7 dBm or better</p> <p>4. <0.008 dB RMS trace noise IF Bandwidth, 10 Hz to 300 KHz</p>	

			5. Sweep types-Frequency (linear or log),Segmented, Power, Channel/trace functions-Up to 16 traces/channel	
8	EI 09	RF Shield room	<ul style="list-style-type: none"> <input type="checkbox"/> Chamber Size (Ouer): 10 ft x 10 ft x 10 ft (LWH) <input type="checkbox"/> Chamber Size (Inner clearance): 9.5 ft x 9.5 ft x 9.5 ft (LWH) <input type="checkbox"/> Shielding effectiveness: -80 dB. <input type="checkbox"/> Modular Pan Bolted Self Supported Structure, Panels bolted with overlapping &gaskets between them. <input type="checkbox"/> One single leaf access door, Triple latch mechanism & standard Hardware's will be installed. Both sides (inside &outside) opening. Have Copper beryllium fingers on periphery of door frame to avoid any leakage. <input type="checkbox"/> Flat Sheet RF Absorber lining inside chamber to avoid reflections inside chamber. Lining will be done on all sides &roof except on floor. <p>Specs : Model - FC5 (Flat Type) - 610 x 610 x 10 mm (LWH) Working Frequency Range : 800 MHz to 18 GHz Reflectivity : -10 dB at 2 GHz Finish Colour : Sky Blue</p> <ul style="list-style-type: none"> <input type="checkbox"/> Antistatic Mat of thickness 3 mm will be layed on floor. <input type="checkbox"/> Maintenance Free Chemical Earthling will be provided connected to chamber at one point with Copper Stud &Strips. <input type="checkbox"/> EMI Free Lights (02 No's) will be provided inside the chamber for illumination. <input type="checkbox"/> Switch Board (Power socket &Switch) will be mounted inside for electrical connections. <input type="checkbox"/> All electrical connections will be through EMI filter single phase,230 VAC, 32 Amp which gets mounted on chamber panel. <p>Qty:01 No's</p> <ul style="list-style-type: none"> <input type="checkbox"/> Honey comb air vents for inlet &outlet of air for air ventilation inside chamber will be provided &mounted on Roof of chamber. <input type="checkbox"/> Optical filter will be mounted on chamber &cable runs along the test benches. Qty: 01 No's <input type="checkbox"/> Telephone filter will be mounted on chamber &cable runs along the test benches. Qty: 01 No's <input type="checkbox"/> Ethernet filter will be mounted on chamber &cable runs along the test benches. Qty: 01 No's <input type="checkbox"/> One access (penetration) panel will be provided on chamber which can be utilized while any adapters / connectors need to interface from inside to outside connectivity. Qty: 01 No's <input type="checkbox"/> Complied to application use - Medical equipment test facility 	

9	EI 10	DSO 500 Mhz, 4 Channels	Mixed Signal Oscilloscope with below features - 1. 4 Analog Channel oscilloscope of 500Mhz. Provision in oscilloscope should be there to use minimum 20 digital channels also. 2. 12 Bit ADC @ Sample rate of 3 GS/s of better 3. 60M points on all analog and digital channels simultaneously 4. 6GS/s sample rate on all analog and digital channels simultaneously 5. Protocol decode capabilities of I2C, SPI, I3C, RS-232/422/485/UART, SPMI, USB, Ethernet should be there 6. Non-Windows Operating system with Inbuilt memory of minimum 60GB. 7. Spectrum analysis of all 4 channels simutenosly should be available 8. 50 MHz inbuild function generator should be there. 9. Every analog channel should be provided with 500Mhz passive or active probe mandatory. Minimum one current probe of 1mA and 120Mhz should be provided.	
10	EI 11	Signal Source (Generator)	Frequency Range DC-6GHz Frequency Resolution 1uHz Analog Modulation AM, FM, ΦM, Pulse Internal Baseband generate or DAC rate 125MS/s Symbol rate 1 Hz to 6 MHz (1 μHz resolution) amplitude accuracy ≤±0.30 dB Digital Modulation Support - ASK(2,4,8,16), FSK(2,4,8,16), BPSK, QPSK, 8PSK, 16PSK, QAM (4,16,32,64,128,256), OQPSK, DQPSK, π/4DQPSK, 3π/8 8 PSK, CPM(2,4,8,16), VSB(8,16)external IQ modulation – 200 MHz bandwidth, I/Q modulation inputs (400 MHz RF bandwidth)	
11	EI 12	EFT/Burst, Surge tester (5.5KV)	IEC 61000-4-5(1.2/50μsec) Surge 5kV Output voltage 0.2 – 5.0 kV ±10% Output current 0.1 – 2.5 kA ±10% Voltage rise time 1.2 μs ±30% Current rise time 8 μs ±20% Voltage duration 50 μs ±20% Current duration 20 μs ±20% Polarity positive / negative / alternate Integrated single phase CDN 264 V AC / 16 A 220 V DC / 10 A Output impedance 2 Ohm / 12 Ohms Max 15% Residual Phase sync 0 – 359° with 1° steps or asynchronous mode Impulse trigger automatic 2 s – 100 min manual Counter preselect 1 – 1'000 / infinite external trigger input Counter 100'000 Peak voltage monitor BNC output: 1000:1 display: 3 digits Peak current monitor BNC output: 1 kA/V display: 3 digits System should be upgradable for IEC 61000-4-11 &IEC 61000-4-29 , IEC 61000-4-4 EFT/B 5kV,IEC 61000-4-9 Pulse Magnetic Field	

12	EI 13	Safety analyzer	<p>Testing Parameter Leakage current , Insulation, Withstanding, Protective grounding Standard IEC 60601-1 + am1 + am2 IEC 60601-1 + am1 + am2 (as per medical international Std.) Specifications: Leakage Current tester: A. measurement Method: Measurement of voltage drop across body simulated resistance points, Calculation and display of current values, True rms measurement, Measurement unit floats relative to instrument ground. B. Meas. Modes: Leak current measurement, voltage measurement, safety conductor current measurement C. Types of Meas.: Ground leak current, 3 types of contact current, 7 types of patient leak current, patient measurement current, 4 types of total patient leak current, free current measurement, 3 types of enclosure leak current D. Current Form: DC, AC (true rms, 0.1 Hz to 1 MHz), AC+DC (true rms, 0.1 Hz to 1 MHz), AC peak (15 Hz to 1 MHz) E. Meas. Range: DC / AC / AC+DC mode: 50.00 mA/ 5.000 mA/ 500.0 μA/ 50.00 μA , AC peak mode: 75.0 mA/ 10.00 mA/ 1.000 mA/ 500.0 μA F. Meas. Accuracy: DC measurement: $\pm 2.0\%$ rdg. ± 6 dgt. (typ.), AC / AC+DC measurement: $\pm 2.0\%$ rdg. ± 6 dgt. (15 Hz to 100 kHz, typ.), AC peak measurement: $\pm 2.0\%$ rdg. ± 6 dgt. (15 Hz to 10 kHz, typ.) G. target device supply power input: 100 to 250 V AC, 50/60 Hz Rated current input from terminal block: 20 A H. target device supply power output: Output from terminal block: 20 A Output from outlet: 15 A</p> <p>Insulation tester: A. Rated Testing Voltage: 50 to 1,200 V DC (in 1 V steps) B. Rated Testing Current: 1 mA, Short-circuit current: 200 mA or less C. Measurement range/accuracy: 0.10 to 9999 MΩ, 4 ranges, $\pm 4\%$ rdg. (representative values for 0.5 MΩ to 1,000 MΩ) D. Decision Method: Window comparison (digital settings)</p> <p>Withstanding Tester: A. Testing Voltage AC/DC: 0.2 kV to 5.00 kV AC, 500 VA (max. 30 minutes), 0.2 kV to 5.00 kV DC, 50 VA (continuance) B. Voltage Setting: Digital setting (0.01 kV setting resolution) C. Wave from/ Frequency: Sine wave (5% or less distortion, unloaded), 50/60 Hz selectable D. Current Measurement: 0.01 mA to 100.0 mA, Average rectified display (Digital) E. Meas. Range: 10 mA (0.01 mA resolution), 100 mA (0.1 mA resolution) F. Volt meter: Digital: accuracy $\pm 1.5\%$ f.s. (f.s.=5.00 kV) (Average rectified display)</p> <p>Protective Grounding Testing: A. Basic Function: AC 4-terminal method resistance measurement B. Current Setting Range: 3.0 A to 31.0 A AC (0.1 A resolution), into 0.1Ω load</p>
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			<p>C. Open terminal Voltage: Max. 6 V AC D. Generator Frequency: 50 Hz or 60 Hz sine wave (selectable) E. Resistance Measurement: 0 to 1.800 Ω (0.001 Ω resolutions), Accuracy: $\pm 2\%$ rdg. ± 4 dgt. after zero-adjust F. Voltage Meas.: 0 to 6.00 V AC (single range 0.01 V resolution), Accuracy: (1 % rdg. +5 dgt.) G. Monitor Function: 0 to 35.0 A AC/ 0 to 6 V AC, Refresh rate: 2 times/s Software & PC Connectivity: all the data should be able to analyze in PC using relevant software. Communication RS232/USB/GPIB/LAN/preferable Accessories all the relevant probes should be provided for all the measurement</p>	
13	EI 14	Multi Meter	<p>DC Voltage range 60.000 mV to 1000.0 V, 6 ranges, Basic accuracy: $\pm 0.025\%$ rdg. ± 2 dgt. AC Voltage* range 60.000 mV to 1000.0 V, 6 ranges, Frequency characteristics: 20 Hz - 100 kHz Basic accuracy 45 - 65 Hz : $\pm 0.2\%$ rdg. ± 25 dgt. (True RMS, crest factor 3) DC + AC Voltage* range 6.0000 V to 1000.0 V, 4 ranges, Frequency characteristics: 20 Hz - 100 kHz Basic accuracy 45 - 65 Hz : $\pm 0.3\%$ rdg. ± 30 dgt. (True RMS, crest factor 3) Resistance range 60.000 Ω to 600.0 MΩ, 8 ranges, (Conductance: 600.00 nS, DT4282 only) Basic accuracy: $\pm 0.03\%$ rdg. ± 2 dgt. DC Current range 600.00 μA to 10.000 A, 6 ranges, Basic accuracy: $\pm 0.05\%$ rdg. ± 5 dgt. AC Current* range 600.00 μA to 10.000 A, 6 ranges, Basic accuracy 45 - 65 Hz : $\pm 0.6\%$ rdg. ± 5 dgt. (True RMS, crest factor 3) Frequency characteristics: 20 Hz - 20 kHz (at 600 μA to 600 mA range) Capacitance range 1.000 nF to 100.0 mF, 9 ranges, Basic accuracy: $\pm 1.0\%$ rdg. ± 5 dgt. Continuity Check Continuity threshold: 20/50/100/500 Ω, Response time: 10 ms or more Diode test Open terminal voltage: 4.5 V or less, Testing current 1.2 mA or less, Threshold of forward voltage: 0.15 V to 3 V, seven stages Frequency range AC V, DC+AC V, AC A measurement, at pulse width 1 μs or more (50 % duty ratio) 99.999 Hz (0.5 Hz or more) to 500.00 kHz, 5 ranges, $\pm 0.005\%$ rdg. ± 3 dgt. dB conversion Standard impedance setting (dBm), 4 Ω to 1200 Ω, 20 stages Display dB conversion value of AC voltage (dBV) Temperature (thermocouples) K: -40.0 $^{\circ}$C to 800.0 $^{\circ}$C (-40.0 $^{\circ}$F to 1472.0 $^{\circ}$F) Add accuracy of the Thermocouple probe to main unit accuracy: $\pm 0.5\%$ rdg. ± 3 $^{\circ}$C Other functions Filter function (Remove harmonic noise, use only at 600 VAC, 1000 VAC ranges), Display value hold, Auto</p>	

			hold, Max/Min value display, Sampling select, Relative display, Measurement memory (400 data), Auto-power save, USB communication (option), 4-20 mA % conversion Display Main and Sub displays: 5-digits LCD, max. 60000 digits Display refresh rates 5 times/s (Capacitance measurement: 0.05 to 2 times/s, depending on measured value, Temperature: 1 time/s) Power supply LR6 (AA) SMF batteries ×4, Continuous use: 100 hours	
14	EI 15	Electronic Load	1. Input Voltage 0- 120V 2. Input Current 0-60A 3 Input Power 250W 4. Constant Voltage Mode 0-120V 5. Resolution 10mV 6. Constant Current Mode 0-60A 7. Resolution 1mA Protection 8. Over power (260W) 9. Over current (66A) 10. Over Voltage (130V) 11. Over Temp (85 deg) 12. Memory Capacity 100 sets of measurements and selectable parameters. 13. I/O ports USB, GPIB, RS232 14. Power Consumption 40VA	
15	EI 16	Sensor Sample Kit/IOT Kit	IOT Development KIT Evaluation Board/Development Kit At mega based IoT kit with LoR communication to learn various aspect of IoT system consisting of two end node, one gateway and six sensor/actuator modules with required acc. Water Proof Deployable End Node Evaluation Board/Development Kit STM32 Cortex M0 based IoT end node with 23 various IO for sensor interfacing implementing communication IO Controller Evaluation Board/Development Kit based IoT end node with voltage input, current input, relay interface and digital IO for controlling GP Tracker Evaluation Board/Development Kit based IoT end node with GPS tracker embedded Multi channel Gateway with 3G/4G Connectivity Evaluation Board/Development Kit WAN gateway with multiple channels for communicating with WAN based IoT end nodes having 3G/4G internet connectivity option for communicating with cloud	
16	EI 17	Evaluation Boards	LPC1760 EVAL BOARD with U-LINK ME (Jtag debugger for Source level debugging)	
17	EI 18	Cortex M3 Based Evaluation Board	M3 Based EVAL BOARD with U-LINK ME (Jtag debugger for Source level debugging).M4 EVAL BOARD with U-LINK ME (Jtag debugger for Source level debugging).ST Micro electronics STM32 based Eval Board with U-LINK ME (Jtag debugger for Source level debugging)	
18	EI 19	RF	RF, Antenna, Communication System, Instrument Control,	

		Modelling and Simulation Tools	Robotics, Signal Processing, Coder and Compiler Toolboxes	
19	EI 20	CAN Based Datalogger	Single tool to perform diagnostics, node/ECU simulation, data acquisition, automated testing, memory edit/calibration, and vehicle network bus monitoring.	
20	EI 21	Compilers for ARM7/9 and Cortex Family.	IDE with Pack Installer, CMSIS RTX5 RTOS with source code,C/C++ Arm Compiler, Middleware: IPv4 Network, USB Device, File System, Graphics,Arm processor supportCortex-M0/M0+/M3/M4/M7,Cortex-M23/M33,ARM7, ARM9, Cortex-R4, SecurCore SC000, SC300 ,ARMv8-M architecture Software: MDK-ARM Microcontroller Development Kit, Professional Edition - Node locked Perpetual license Electronic Delivery Only. No of Users: One (1)	
21	EI 22	Software: IDE for PIC controllers	ANSI C compiler for PIC devices from Microchip. Solution for developing code for PIC devices. intuitive IDE, powerful compiler with advanced optimizations, lots of hardware and software libraries,	
22	EI 23	PCB Design Software	EDA tool, with integrated schematic and PCB design solution for HDI and high-speed layout, advanced layout .Includes: Schematic Editor, PCB Design Editor, IDF 3D-MCAD/ECAD Interface, Variant Manager, EMC Adviser, Length and delay-based routing ,Rules-by-Area, Constraint Browser, Unlimited Place &Route Editor	
23	EI 24	Programming and automation Software	NI Graphical programming platform for system/ equipment / measurement integration.	
24	EI 25	FPGA Design Suite	software suite produced by for synthesis and analysis of HDL designs, superseding Xilinx ISE with additional features for system on a chip development and high-level Synthesis, EVAL S board for PARTAN 6 SP601,Xilinx : EK-S6-SP605-G Spartan-6 FPGASP601Evaluation Kit	
25	EI 26	Simulator	Electronics Simulation Software Integrated circuits, Signal integrity, cooling, RF, Electromechanical and High performance computing	
26	EI 27	Power Metre	Measurement line type Single-phase 2-wire, single-phase 3-wire, three-phase 3-wire, three-phase 4-wire, Voltage 4 channels, Current 4 channels, Isolated between each channel Measurement items Frequency, RMS voltage, voltage mean value rectification RMS equivalent, voltage AC component, voltage simple average, voltage fundamental wave component, voltage waveform peak +, voltage waveform peak -, voltage total harmonic distortion, voltage ripple factor, voltage unbalance factor, RMS current, current mean value rectification RMS equivalent, current AC component, current simple average, current fundamental wave component, current waveform peak +, current waveform peak -, current total harmonic distortion, current ripple factor, current unbalance factor, active power, apparent power, reactive power, power factor, voltage phase angle current phase angle, power phase angle, positive-direction	

			<p>current magnitude, negative-direction current magnitude, sum of positive- and negative-direction current magnitude, positive-direction power magnitude, negative-direction power magnitude, sum of positive- and negative-direction power magnitude, efficiency, loss</p> <p>Current integration, active power integration</p> <p>Harmonic measurement Input: 4 ch, Synchronization frequency range: 0.5 Hz to 5 kHz,</p> <p>Number of harmonic orders: Max. 100th order</p> <p>Noise measurement Number of channels: 1 ch (select one channel from CH1 to CH4),</p> <p>Maximum analysis frequency: 200 k/ 50 k/ 20 k/ 10 k/ 5 k/ 2 kHz</p> <p>Measurement range Voltage range: 15 to 1500 V, 7 ranges Current range: 0.1 A to 70A</p> <p>Effective measuring power range 0.0150 W to 39.600 MW (determined automatically by the combination of voltage range, current range, and measurement line)</p> <p>Basic accuracy (45 to 66 Hz) Voltage: $\pm 0.04\%$ rdg. $\pm 0.05\%$ f.s. Current: $\pm 0.04\%$ rdg. $\pm 0.05\%$ f.s. + current sensor accuracy Active power: $\pm 0.04\%$ rdg. $\pm 0.05\%$ f.s. + current sensor accuracy</p> <p>Synchronization frequency range 0.5 Hz to 4.7 kHz</p> <p>Frequency band DC, 0.5 Hz to 200 kHz</p> <p>Data update rate 50 ms (For harmonic/frequency measurement, depends on the synchronization frequency when less than 45 Hz)</p> <p>Display refresh rate 200 ms (Independent of internal data update rate; waveform and FFT depend on the screen)</p> <p>Auto-Save Functions Each value is stored to CF card during every measurement interval (not available for USB storage), OFF, 50 msec to 500 msec, 1 sec to 30 sec, 1 minute to 60 minutes, 15 settings</p> <p>External interfaces LAN, USB (for communication/ memory), RS-232C, CF card, Synchronization control, External Control</p> <p>Logger connectivity Sends measured values wirelessly to logger by using a Bluetooth® wireless technology serial conversion adapter.</p> <p>Power supply 100 to 240 V AC, 50/60 Hz, 140 VA max.</p> <p>Other Features Vector Display, X-Y Graph, FFT Analysis Function, Harmonics Measurement Function, Phase Shift Function</p> <p>Power Accuracy At 50Hz: 0.04%rdg. + 0.05%rng., At 1KHz: 0.1%rdg. + 0.1%rng., At 10KHz: 0.2%rdg. + 0.1%rng., At 100KHz: 1.5%rdg. + 0.5%rng.</p> <p>Display 9-inch TFT color LCD</p> <p>Accessories Instruction Manual $\times 1$, Power cord $\times 1$, Measurement Guide $\times 1$, USB cable $\times 1$, Input cord label $\times 2$, voltage probe, AC/DC Current sensor (70A, 200KHz) $\times 4$</p>	
27	EI 28	Power Supply	<p>Programmable DC PS, 80V, 13.5A, 360W, variable slew rate control, with LAN and USB for programming Interface ,programming and Read back accuracy :0.1% + 10 mV ; 0.1% +</p>	

		<p>10 mA, Programming and Measurement resolution : 2mV,1mA Input: Standard Indian Three phase mains, Star / Delta, 400VL-L $\pm 10\%$ Input side power factor: ≥ 0.95 Output Voltage Ranges: Dual Range-Single Phase & 3 Phase (user selectable through built in control) Range 1: Variable from 0 to 156 Vph (L-N) Range 2: Variable from 0 to 312 Vph (L-N) Voltage Programming Accuracy: at least $\pm(0.1\%$ of actual + 0.2% of full-scale) Voltage Programming & Digital Meter read back resolution: at least 50 mV Output Current (maximum): In Voltage range 1: at least 21A (per phase) @ 90 Vph (L-N) In Voltage range 2: at least 10A (per phase) @ 180 Vph (L-N) Current Programming Accuracy: at least $\pm(0.3\%$ of actual + 0.5% of full-scale) The unit shall be capable of measuring inrush currents taken by load, as well as normal RMS current amplitude Total Power: at least 6 kVA (2kVA per each phase) The phase angles between each phase should be programmable, independently, such that imbalance & phase reversal conditions can be simulated Crest Factor: at least 5:1 (Peak current / RMS current) Output Frequency: Variable from 20 Hz to 500Hz Frequency resolution: at least 0.1 Hz Frequency accuracy: output frequency to be maintained at $\pm 0.04\%$ during all load conditions Load regulation: better than $\pm 0.03\%$ Voltage Distortion: not more than 0.5% Output voltage stability: better than $\pm 0.2\%$ of full-scale over 8 hours Line regulation: 0.02 % max for $\pm 10\%$ line variation Efficiency: at least 75% at full load Noise Level: shall not exceed 750Mv Remote communication interfaces: LAN, RS232 and USB</p>	
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28	EI 29	SMU	<p>1) System should be capable of sourcing/ measuring voltage or current on both channels.</p> <p>2) System should have at least source and measure resolution of 6 ½ digit.</p> <p>3) Max Voltage capability: ± 200V.</p> <p>4) Voltage measurement resolution: 100 nV.</p> <p>5) Max Current capability: ± 1.5A DC and 10 A pulses.</p> <p>6) System should have lowest current range of 100 nA or better.</p> <p>7) System should have current measurement resolution of 100 fA or better.</p> <p>8) System should be capable of providing 10A pulse on both channels simultaneously.</p> <p>9) System should able have GPIB, Ethernet, RS 232 communication.</p> <p>10) System should have 16 MB internal memory for stand-alone operation.</p> <p>11) System should be provided with GPIB to USB adaptor.</p> <p>12) Software should have functions like voltage/current sweep/ steps, should able to store the data and graphs.</p> <p>System should have capability to future upgrade channels to more than 12 units.</p>	
29	EI 30	Battery Simulator	<p>Battery Simulator with below specs</p> <p>1. Voltage and Current ratings: - 0 to 20V and 0 to 6 A</p> <p>2. Voltage accuracy: - ± (0.02% + 3 mV).</p> <p>3. Voltage Resolution: - 1mV</p> <p>4. Load and Line regulation: - ±(0.01% + 2 mV) &±(0.01% + 1 mV).</p> <p>5. Output Ripple and Noise:- <1 mV RMS, <6 mV p-p</p> <p>6. Overvoltage Protection setting accuracy: - ±(0.25% + 0.25 V).</p> <p>7. Over current Protection (OCP) setting accuracy:- ±(0.25% + 0.10 A)</p> <p>8. Common mode current :- <6 µA peak-peak</p> <p>9. Instrument should be provided with battery simulation model for battery like-AA, AAA, CR123, 10NI mh battery, coin cell,</p> <p>10 . Display for live battery SOC, VOC,</p> <p>11. GPIB, USB, and LAN interface</p>	

CATEGORY C: Consumables Items

Sr. no.	Item Code	Test Equipment	Remarks
1	CI 01	840 Hole Solder less Breadboard 175x67x9mm	
2	CI 02	30 Pcs Double Sided PCB Board Kit different Sizes Circuit Board with 20 Pcs 40 Pin 2.54mm Header Connector for DIY(Bonus: 10 Pcs Screw Terminal Blocks	
3	CI 03	Capacitor Kit-1206 Capacitors Kit, values From 0.5PF to 1UF(1MF), Qty. per value: 100pcs, No. of values: 84	

4	CI 04	Thermocouple Wire	
5	CI 05	AWG 22 or 24 wires (FLRYB)	
6	CI 06	8AWG Cable-Red	
7	CI 07	8AWG Cable-Black	
8	CI 08	Solder Wick	
9	CI 09	Solder wire- Lead Free	
10	CI 10	Electrobot EBRT02 50 Value Resistor Kit (Pack of 1000)	
11	CI 11	Electrobot Labeled 18 Values Ultimate Capacitor Kit (Pack of 555)	
12	CI 12	37 in 1 Sensor Kit compatible with Arduino Ultimate Sensor Module kit for UNO R3, MEGA, NANO boards Sensor kit for DIY projects	
13	CI 13	DB9 Male connector	
14	CI 14	DB9 Female Connector	
15	CI 15	Glue Gun	
16	CI 16	Glue Sticks	
17	CI 17	paper tape	
18	CI 18	Double Side Tape	
19	CI 19	Single side Insulation Tapes	
20	CI 20	Masking Tape	
21	CI 21	Single strand wire	
22	CI 22	10k Pot- PCB mount	
23	CI 23	100k Pot- PCB mount	
24	CI 24	1M Pot- PCB mount	
25	CI 25	Hand gloves	
26	CI 26	Banana Connectors-Male	
27	CI 27	Banana Connectors-Female	
28	CI 28	240pcs Breadboard Jumper Wires Ribbon Cables Kit Multi-coloured 80 Pin M/M + 80 Pin M/F + 80 Pin F/F (10cm/20cm)	
29	CI 29	Digital Vernier Caliper (Heavy Duty & Heavy Body) Size (6"/150mm)	
30	CI 30	SURGICAL Micrometer Screw Gauge 25 mm S.S. Thread In Velvet Box	
31	CI 31	Ribbon Cables- 2mm or 2.54mm	
32	CI 32	ESD Safe Magnifier: L104ESD, L104EVDX	
33	CI 33	Red LEDS-5mm	
34	CI 34	500 LED Diode Lights, 5 Colors×100pcs 5mm Light Emitting Diodes LED Assortment Kit Electronics Components, Diffused Round Light Bulb for Arduino, White Red Orange Green Blue	
35	CI 35	Precision Dial Pocket Flat Head Thickness Gauge Gage Measuring Tool	
36	CI 36	Through hole Resistor Box	

37	CI 37	Plastic Cable ties(Different Length)	
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Note:

- All the measuring equipment is required to be communicating through suitable ports. The equipment supplied should have the communication and interfacing possibilities in the Graphical Programming Tool supplied/ suggested by the vendors.
- The software licenses or related software graphical packages are assumed to be bundled in every case.
- The above specifications are the minimum required specifications; the bidders may quote equipment with better specifications.
- Equipment should have interfaces with USB (2.0/3.0) and LAN (CAT 5/CAT 6) or as per latest technology.
- All the units in this list are supplied as independent / stand-alone units and not as modules to be mounted on separate racks.

ANNEXURE-II

FORMAT OF TECHNICAL COMPLIANCE

To be printed on Company Letter Head

Tender Inviting Authority	:	The Officer-In-Charge, Software Technology Parks of India, Lucknow
Work/Tender Title:	:	Supply, Installation, Testing and Commissioning of Lab Equipment for "MedTech-CoE" with warranty support for 5 years.
Tender No	:	STPIL/GEN/COE/714/2020-21/01 Dated: 12.06.2021
Name Of Bidder Company	:

(i) - Technical Compliance

S. No.	Category of BoM, as per Annexure-I	Compliance (Yes or No)	Remarks, (in any)
1	Category A: Equipments for Medi Electronics		
2	Category B: Equipments for IoT		
3	Category C: Consumables Items		

Note: The bidder is required to write "YES" under Compliance Column for the category(A, B & C) for Bill of material, as mentioned in Annexure-I.

(ii) Checklist of Submitted Document in Technical Bid

S. No.	List of Submitted Document	Compliance (Yes or No)	Remarks, (in any)
1	Copy of certificate of incorporation/ registration of the company, firm, proprietorship, etc.		
2	CA certified copy/ copies of annual turnover of the bidder for FY 2017-18 , 2018-19 &2019-20.		
3	Copies of minimum two purchase orders of similar nature, executed by the bidder during FY 2017-18 , 2018-19 &2019-20. The submitted copies of work order should not be altered, redacted or tempered with in any manner. The copies must clearly mention description and scope of order, name of client, order number and date, order amount, delivery period, etc.		
4	Copy of letter of authorization (on company letter) to signatory, issued by the bidder		

	company, firm, etc.		
5	Copy of Authorized Partnership/distributorship certificate, issued by OEM to bidder.		
6	Copy of the PAN Card and GST Registration certificates.		
7	Duly Filled and signed Technical Compliance Sheet as per Annexure-'II'.		
8	Bid Security Declaration certificate as per Annexure-V		
9	Tender Acceptance Letter As per Annexure -VI		

I/We hereby certify that

- I/We have read the complete bid document and corrigendum, if any, complete and understood and accept the complete scope of work and terms and conditions.
- I/We also have the complete capability to carry out the complete work, defined in this bid document under the mentioned terms and conditions.
- I/we/our company/firm/organization has/have not been barred/blacklisted by any Government/Public Sector/Private Company, firm or organization.
- I/We understand that in case any deviation is found in the above statement at any stage, I/we/our company/firm/organization will be blacklisted and will not be permitted to have any dealing with the STPI in future.

Name:

Signature of Authorized Person

Designation:

Date:

Place:

Company Seal

ANNEXURE-III

FORMAT OF COMMERCIAL PROPOSAL

Tender Inviting Authority: The officer-In-Charge, Software Technology Parks of India, Lucknow

Name of Work: Supply, Installation, Testing and Commissioning of Lab Equipment for “MedTech-CoE” with warranty support for 5 years

Contract No: STPIL/GEN/COE/714/2020-21/01 Dated 12 June 2021

Name of the Bidder/ Bidding Firm / Company :

PRICE SCHEDULE

(DOMESTIC TENDERS - RATES ARE TO GIVEN IN RUPEES (INR) ONLY)

(This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)

- 1. The supplied equipment should carry a warranty support of 05 (five) years from the date of acceptance sign-off on its hardware and associated software.**
- 2. Category C Consumables Items value will remain the same for a year. For the next four years, there will be a 10% increase in value every year from the last year. If new product required, quote will be as per actual at the time of procurement.**
- 3. All the prices mentioned above are fixed, firm, final, complete and inclusive of all applicable taxes, charges, etc. for complete scope of work, defined in this bid document for all the items listed above.**
- 4. The validity of the bid is 180 days from last date of bid submission**

NUMBER #	TEXT #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER	NUMBER	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Item Code / Make	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P	GST Amount in INR Rs. P	AMC Charges of relevant Items Rs. P	TOTAL AMOUNT Without Taxes col (13) = (4) x (7) in Rs. P	TOTAL AMOUNT With Taxes col (14) = sum (8) to (13) in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	7	9	10	13	14	15
1	Test Equipment for MediElectronics Lab									
1.01	Multisim	TEML01	1.00	License				0.00	0.00	INR Zero Only
1.02	Ansys Simulation Software	TEML02	1.00	License				0.00	0.00	INR Zero Only

1.03	Labview Software	TEML 03	1.00	License				0.00	0.00	INR Zero Only
1.04	Signal Acquisition Software	TEML 04	1.00	License				0.00	0.00	INR Zero Only
1.05	AutoCAD Fusion 360 Ultimate	TEML 05	1.00	License				0.00	0.00	INR Zero Only
1.06	8Channel DSO (oscilloscope of 1 Ghz)	TEML 06	1.00	set				0.00	0.00	INR Zero Only
1.07	Spectrum Analyzer 13Ghz)	TEML 07	1.00	set				0.00	0.00	INR Zero Only
1.08	Signal Source (Generator)	TEML 08	1.00	set				0.00	0.00	INR Zero Only
1.09	SpO2, ECG respiration temperature iBP Simulator	TEML 09	1.00	set				0.00	0.00	INR Zero Only
1.1	Power Supply	TEML 10	1.00	set				0.00	0.00	INR Zero Only
1.11	Bench Top Digital Multimeter	TEML 11	1.00	set				0.00	0.00	INR Zero Only
1.12	Medical Simulator manikins	TEML 12	1.00	set				0.00	0.00	INR Zero Only
1.13	Power Quality Analyzer	TEML 13	1.00	set				0.00	0.00	INR Zero Only
1.14	ESD workstation	TEML 14	1.00	set				0.00	0.00	INR Zero Only
1.15	Vibrometer	TEML 15	1.00	set				0.00	0.00	INR Zero Only
1.16	Rotometer	TEML 16	1.00	set				0.00	0.00	INR Zero Only
1.17	Digital Pressure Gauge	TEML 17	1.00	set				0.00	0.00	INR Zero Only
1.18	Level Gauge	TEML 18	1.00	set				0.00	0.00	INR Zero Only
1.19	Thermo-Hygrrometer	TEML 19	1.00	set				0.00	0.00	INR Zero Only
1.2	O2 meter	TEML 20	1.00	set				0.00	0.00	INR Zero Only
1.21	Vernier Scale	TEML 21	1.00	set				0.00	0.00	INR Zero Only

1.22	Micrometer	TEML 22	1.00	set				0.00	0.00	INR Zero Only
1.23	National Instruments Elvis	TEML 23	1.00	set				0.00	0.00	INR Zero Only
1.24	Biomedical paramedical simulator	TEML 24	1.00	set				0.00	0.00	INR Zero Only
1.25	PCB Fabrication Lab	TEML 25	1.00	set				0.00	0.00	INR Zero Only
1.26	3D printer and scanner	TEML 26	1.00	set				0.00	0.00	INR Zero Only
1.27	Vinyl cutter	TEML 27	1.00	set				0.00	0.00	INR Zero Only
1.28	Laser Cutting Machine	TEML 28	1.00	set				0.00	0.00	INR Zero Only
2	Test Equipment for IoT Lab									
2.01	Power Quality Analyzer	E1 01	1.00	set				0.00	0.00	INR Zero Only
2.02	Clamp On power meter	E1 02	1.00	set				0.00	0.00	INR Zero Only
2.03	Bench Top Digital Multimeter	E1 03	1.00	set				0.00	0.00	INR Zero Only
2.04	LCR Meter	E1 04	1.00	set				0.00	0.00	INR Zero Only
2.05	Soldering and rework station	E1 05	1.00	set				0.00	0.00	INR Zero Only
2.06	Spectrum Analyzer (3Ghz)	E1 06	1.00	set				0.00	0.00	INR Zero Only
2.07	Network Analyzer	E1 07	1.00	set				0.00	0.00	INR Zero Only
2.08	RF Shield room	E1 08	1.00	set				0.00	0.00	INR Zero Only
2.09	DSO 500 Mhz, 4 Channels	E1 09	1.00	set				0.00	0.00	INR Zero Only
2.1	Signal Source (Generator)	E1 10	1.00	set				0.00	0.00	INR Zero Only
2.11	EFT/Burst, Surge tester (5.5KV)	E1 11	1.00	set				0.00	0.00	INR Zero Only

3.01	840 Hole Solderless BreadBoard 175x67x9mm	CI 01	20.00	Nos				0.00	0.00	INR Zero Only
3.02	30 Pcs Double Sided PCB Board Kit different Sizes Circuit Board with 20 Pcs 40 Pin 2.54mm Header Connector for DIY(Bonus: 10 Pcs Screw Terminal Blocks	CI 02	2.00	Nos				0.00	0.00	INR Zero Only
3.03	Capacitor Kit-1206 Capacitors Kit, values From 0.5PF to 1UF(1MF), Qty per value: 100pcs, No.of values: 84	CI 03	1.00	Nos				0.00	0.00	INR Zero Only
3.04	Thermocouple Wire	CI 04	100.00	Meters				0.00	0.00	INR Zero Only
3.05	AWG 22 or 24 wires (FLRYB)	CI 05	20.00	Meters				0.00	0.00	INR Zero Only
3.06	8AWG Cable-Red	CI 06	10.00	Meters				0.00	0.00	INR Zero Only
3.07	8AWG Cable-Black	CI 07	10.00	Meters				0.00	0.00	INR Zero Only
3.08	Solder Wick	CI 08	10.00	Nos				0.00	0.00	INR Zero Only
3.09	Solder wire- Lead Free	CI 09	10.00	Nos				0.00	0.00	INR Zero Only
3.1	Electrobot EBRTH02 50 Value Resistor Kit (Pack of 1000)	CI 10	2.00	Nos				0.00	0.00	INR Zero Only
3.11	Electrobot Labeled 18 Values Ultimate Capacitor Kit (Pack of 555)	CI 11	2.00	Nos				0.00	0.00	INR Zero Only
3.12	37 in 1 Sensor Kit compatible with Arduino Ultimate Sensor Module kit for UNO R3, MEGA, NANO boards Sensor kit for DIY projects	CI 12	2.00	Nos				0.00	0.00	INR Zero Only
3.13	DB9 Male connector	CI 13	20.00	Nos				0.00	0.00	INR Zero Only
3.14	DB9 Female Connector	CI 14	20.00	Nos				0.00	0.00	INR Zero Only
3.15	Glue Gun	CI 15	1.00	Nos				0.00	0.00	INR Zero Only

3.16	Glue Sticks	CI 16	10.00	Nos				0.00	0.00	INR Zero Only
3.17	paper tape	CI 17	5.00	Nos				0.00	0.00	INR Zero Only
3.18	Double Side Tape	CI 18	10.00	Nos				0.00	0.00	INR Zero Only
3.19	Single side Insulation Tapes	CI 19	10.00	Nos				0.00	0.00	INR Zero Only
3.2	Masking Tape	CI 20	10.00	Nos				0.00	0.00	INR Zero Only
3.21	Single strand wire	CI 21	100.00	Meters				0.00	0.00	INR Zero Only
3.22	10k Pot- PCB mount	CI 22	40.00	Nos				0.00	0.00	INR Zero Only
3.23	100k Pot- PCB mount	CI 23	10.00	Nos				0.00	0.00	INR Zero Only
3.24	1M Pot- PCB mount	CI 24	10.00	Nos				0.00	0.00	INR Zero Only
3.25	Hand gloves	CI 25	10.00	set				0.00	0.00	INR Zero Only
3.26	Banana Connectors-Male	CI 26	20.00	Nos				0.00	0.00	INR Zero Only
3.27	Banana Connectors-Female	CI 27	20.00	Nos				0.00	0.00	INR Zero Only
3.28	240pcs Breadboard Jumper Wires Ribbon Cables Kit Multicolored 80 Pin M/M + 80 Pin M/F + 80 Pin F/F (10cm/20cm	CI 28	2.00	Nos				0.00	0.00	INR Zero Only
3.29	Digital Vernier Caliper (Heavy Duty & Heavy Body) Size (6"/150mm)	CI 29	5.00	Nos				0.00	0.00	INR Zero Only
3.3	SURGICAL Micrometer Screw Gauge 25 mm S.S. Thread In Velvet Box	CI 30	5.00	Nos				0.00	0.00	INR Zero Only
3.31	Ribbon Cables- 2mm or 2.54mm	CI 31	3.00	Meters				0.00	0.00	INR Zero Only
3.32	ESD Safe Magnifier: L104ESD, L104EVDX	CI 32	4.00	Nos				0.00	0.00	INR Zero Only

3.33	Red LEDS-5mm	CI 33	20.00	Nos				0.00	0.00	INR Zero Only
3.34	500 LED Diode Lights, 5 Colors×100pcs 5mm Light Emitting Diodes LED Assortment Kit Electronics Components, Diffused Round Light Bulb for Arduino, White Red Orange Green Blue	CI 34	1.00	Nos				0.00	0.00	INR Zero Only
3.35	Precision Dial Pocket Flat Head Thickness Gauge Gage Measuring Tool	CI 35	2.00	Nos				0.00	0.00	INR Zero Only
3.36	Through hole Resistor Box	CI 36	2.00	Nos				0.00	0.00	INR Zero Only
3.37	Plastic Cable ties(Different Length)	CI 37	50.00	Nos				0.00	0.00	INR Zero Only
Total in Figures								0.00	0.00	INR Zero Only
Quoted Rate in Words	INR Zero Only									

Remarks: The above format is for indication only. Bidders are required to fill the BOQ. XLS in the Tender & submit the BOQ in commercial bid. Please do not fill and upload this sheet in technical bid.

ANNEXURE-IV

SERVICE LEVEL AGREEMENT

After commissioning & acceptance, during warranty support, the supplier shall be responsible for the uptime of the equipment and shall enter into a contract with an SLA of maintaining the setup for 95% uptime on 24x7 basis.

The Supplier would need to provide resolution to the fault in the equipment within 48 hours of its reporting. The penal provisions would become applicable on violation of the SLA terms three times in an individual year. Reporting of the same fault again, not attended within the SLA norms mentioned above, would be counted as the 2nd incident of the equipment fault.

Penalty clause for non-conformance to above SLA:

- The penal provisions would be applicable in case of non-adherence to the SLA Agreement.
- The penal provisions would be applicable if the SLA norms are not met from the reporting of the 4th incident of the equipment fault.
- The penal charges applicable would be Rs 10000/- per hour of downtime at a stretch or in parts up to total down time of 20 hours. This down time shall be calculated over and above the total hours of downtime permissible. Beyond 20 hours of down time, the Performance Bank Guarantee submitted by the Supplier to "MedTech-CoE" shall be forfeited. Any payments (payable to Supplier) shall also not be made. This will be deemed to be an event of default and "MedTech-CoE" may terminate the contract.
- "MedTech-CoE" can relax the penal provisions on case to case basis.

SLA Terms

- The supplier will carry out the work at user locations as specified by "MedTech-CoE" and will be responsible for total integration and execution of project as per the satisfaction of "MedTech-CoE".
- The bidder will carry out warranty site survey; prepare the necessary drawings, equipment layout plan, power estimation and distribution, power cabling from equipment to the power outlet, power and communication cabling plan, equipment's rack placement, etc. for the "MedTech-CoE" & other infrastructure in consultation with the "MedTech-CoE".
- The supplier will design, supply, install, commission, integrate and maintain the equipment supplied "MedTech-CoE" as per the requirement in conformity as per the Technical Specifications and terms & conditions of the proposal. The supplier will ensure to install the supplied systems and make it operational on the premise and provide maintenance for Five years from the date of successful

installation and commissioning.

- The supplier shall deliver and implement the technologies in conjunction with a set of best practices guidelines & global industry standards.
- The supplier will ensure smooth integration of the offered equipment with any existing equipment/network at the site.
- The supplier will provide user manual to end-user detailing operations of the equipment and on-site user level training at the time of installation.
- The supplier will submit project plan after consultation with “*MedTech-CoE*” within one week from the date of purchase order.
- The supplier has to ensure that during the execution of the project they do not damage or disrupt the existing services under and above the ground.
- The Supplier has to comply with the security policy of the “*MedTech-CoE*” End-user and Non-Disclosure Agreement (NDA).
- The supplier shall organize technical training on the operations of all the equipment after installation and commissioning has been completed. 15 days (twice in year) onsite/offsite training about the working, operations and routine maintenance for all the equipment and /or tools as may be required for its safe and normal operations. The supplier must provide all the training material in both hard and soft copies (10 sets each).
- The supplier will ensure the availability of services from professionally qualified team during implementation of the project and to provide the required on-site warranty support & maintenance for a period of five years.
- The Supplier will be liable for any hardware and software up-gradation for maintenance without any extra cost during warranty support period.
- On completion of the work the supplier shall submit the detailed diagram/drawings & documentation of the project to the “*MedTech-CoE*” and obtain a certificate.

WARRANTY SUPPORT

Warranty support shall include free maintenance of the whole equipment supplied including free replacement of hardware parts, free software/firmware upgrades/updates/ renewals. The defects, if any shall be attended to on immediate basis but in no case any defect should prolong for more than 48 hours. The onsite warranty support shall be for a period of FIVE YEARS from the date of acceptance of the equipment by "MedTech-CoE". The Warranty includes onsite warranty support with parts and software updates/upgrades/renewals. **The Proposals received without FIVE YEARS of Warranty support would be out rightly rejected.**

In WITNESS WHEREOF THE parties hereto signed these presents on the date, month and year written above.

Witness
01.

Witness
02.

Name:
Designation:
Date:
Place:

Signature of Authorized Person

Company Seal

Annexure V

(BID SECURITY DECLARATION)

**To,
Officer In charge
Software Technology Parks of India,
Lucknow –226010, Uttar Pradesh**

Reference: (1) Tender No. **STPIL/GEN/COE/714/2020-21/01 Dated: 12.06.2021**
(2) Our Bid No. _____ dt.

I/We , irrevocably declare as under: I/We understand that, as per Clauseof Tender/bid conditions, bids must be supported by a Bid Security Declaration in lieu of Earnest Money Deposit. I/We hereby accept that I/We may be disqualified from bidding for any contract with you for a period of Three years from the date of disqualification as may be notified by you (without prejudice to STPI’s rights to claim damages or any other legal recourse) if,

- 1) I am /we are in a breach of any of the obligations under the bid conditions,
- 2) I/We have withdrawn or unilaterally modified/amended/revise, my/our Bid during the bid validity period specified in the form of Bid or extended period, if any.
- 3) On acceptance of our bid by STPI, I/we failed to deposit the prescribed Security Deposit or fail to execute the agreement or fail to commence the execution of the work in accordance with the terms and conditions and within the specified time.

Signature: Name & designation of the authorized person signing the Bid-Securing Declaration Form:

Duly authorized to sign the bid for and on behalf of: _____
(complete name of Bidder)

Dated on _____ day of _____ month, _____ year.

(Note: In case of a Joint Venture, the Bid Security Declaration must be in the name of all partners to the Joint Venture that submits the bid).

Tender Acceptance Letter

To be printed on Company letter head

Ref. No.-.....

Date:.....

To,

**The Officer-In-Charge,
Software Technology Parks of India
STP Complex, Near Gomti Barriage
Gomti Nagar, Lucknow-226010**

Sub: Tender Acceptance letter

Ref: Tender No..... Dated.

Sir,

With reference to above tender for Supply, Installation, Testing and Commissioning of Lab Equipment for "MedTech-CoE" at SGPGI Lucknow, with total warranty support for 5 years, I/we hereby certify that,

- I/We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/Work' from the website <https://eprocure.gov.in/eprocure/app>, <http://www.medtech.stpi.in> or <http://www.noida.stpi.in>
- I/We hereby certify that I/we have read all the terms and conditions of tender document from Page No. 1 to 65 (including all Annexure(s)/Para's, etc., which shall form part of the contract agreement and I/we shall abide hereby by all the terms & conditions contained therein.
- The corrigendum(s) issued from time to time by your department/organization too has also been taken into consideration, while submitting this acceptance letter.
- I/ We hereby unconditionally accept all the terms and conditions of above-mentioned tender document and corrigendum(s) as applicable.
- In case any provisions of this tender are found violated, then your department/organization shall without prejudice to any other right or remedy be at liberty to reject my bid.
- I/ We confirm that our bid shall be valid up to 180 days from the date of opening of Commercial Bid.

- I/ We hereby certify that all the statements made and information supplied in the enclosed Annexures/Para's etc. furnished herewith is true and correct.
- I/ We have furnished all information and details necessary for demonstrating our qualification and have no further prominent information to supply.
- I/ We understand that you are not bound to accept the lowest or any bid you may receive.
- I/ We certify/ confirm that we comply with the eligibility requirements as per Bid documents.

Name:

Signature of Authorized Person

Designation:

Date:

Place:

Company Seal

Annexure -VII
NON-DISCLOSURE AGREEMENT

To be printed on Non-judicial stamp paper

THIS AGREEMENT is valid till 5 years from the date of work order, and is made by and between STPI, an autonomous body under Ministry of Electronics & Information Technology, Govt. of India herein referred to as 'DISCLOSING PARTY' whose address is C/o STPI, Ground Floor, Electronics Niketan, 6, CGO Complex, Lodhi Road, New Delhi-110003 and

M/s.

.....
.....

Both the parties shall mean and include their successors at Office from time to time, legal representatives, administrators, executors and assigns, etc.

This agreement shall govern the conditions of disclosure by disclosing party to Recipient of certain confidential and proprietary information that is oral, written, or in computer file format. Examples of Confidential Information include the identities of companies, consultants and other service providers used by disclosing party, both foreign and domestic, in connection with disclosing party's business, supplier lists, supplier information, computer databases containing customer, product and vendor information, designs, drawings, specifications, techniques, models, documentation, diagrams, flow charts, research and development process and procedures, 'know-how', new product or new technology information, financial, marketing and sales information and projections, product pricing, profitability, marketing techniques and materials, marketing timetables, strategies and development plans, trade names and trademarks not yet disclosed to the public, business methods and trade secrets, and personnel information.

- **Purpose of Disclosure:** Disclosing party is disclosing the Confidential Information to Recipient in order for Recipient to evaluate the possibility of using disclosing party's services like Call Centers/Contact Centers Projects, Business Process Outsourcing covering all different kind of Verticals, Information Technology Services, Back and Transaction Processing Services, Business Analysis, Business Process Re-engineering, Data Analysis, Quality Analysis and the Statutory & Datacom services etc.
- Confidentiality Obligations of Recipient. Recipient hereby agrees:
 - Recipient will hold the Confidential Information in complete confidence and not to disclose the Confidential Information to any other person or entity, or

otherwise transfer, publish, reveal, or permit access to the Confidential Information without the express prior written consent of Disclosing Party.

- Recipient will not copy, photograph, modify, disassemble, reverse engineer, decompile, or in any other manner reproduce the Confidential Information without the express prior written consent of disclosing party.

If any Confidential Information is delivered to Recipient in physical form, such as data files or hard copies, recipient will return the Confidential Information, together with any copies thereof, promptly after the purpose for which they were furnished has been accomplished, or upon the request of disclosing party. In addition, upon request off disclosing party in writing/email Recipient will destroy materials prepared by Recipient that contain Confidential Information.

- Recipient shall use Confidential Information only for the purpose of evaluating Recipient's interest in using disclosing party's services, and for no other purpose. Without limiting the generality of the previous sentence, Recipient specifically agrees not to sell, rent, or otherwise disclose any of disclosing party's Confidential Information either in full or part to any competitor of disclosing party, nor will Recipient use the Confidential Information to directly or indirectly contact or contract with any of disclosing party's employees, vendors, contractors and agents who carry out or otherwise fulfil the services on behalf of disclosing party (its 'Affiliates'). Recipient shall promptly notify disclosing party of any disclosure or use of Confidential Information in violation of this Agreement for which disclosing party shall indemnify the Recipient for that part.
- **Exclusions.** None of the following shall be considered to be 'Confidential Information':
 - Information which was in the lawful and unrestricted possession of Recipient prior to its disclosure by disclosing party;
 - Information which is readily ascertainable from sources of information freely/easily available in the general public;
 - Information which is obtained by Recipient from a third party who did not derive such information from disclosing party.
- **Remedies.** Recipient acknowledges that disclosing party's Confidential Information has been developed or obtained by the investment of significant time, effort and expense and provides disclosing party with a significant competitive advantage in its business, and that if Recipient breaches its obligations hereunder, disclosing party will suffer immediate, irreparable harm

for which monetary damages will provide inadequate compensation. Accordingly, the disclosing party will be entitled, in addition to any other remedies available at law in equity, to injunctive relief to specifically enforce the terms of this Agreement. Recipient agrees to indemnify disclosing party against any losses sustained by disclosing party, including reasonable attorney's fees, by reason of the breach of any provision of this Agreement by Recipient. Recipient further acknowledges that disclosing party's business would be severely hurt if Recipient were to directly contract with its Affiliates without the participation of disclosing party. Therefore, if Recipient directly or indirectly contracts with any of disclosing party's Affiliates whose identity and/or particulars are disclosed to Recipient pursuant to this Agreement (Except Affiliates with whom Recipient had a demonstrable prior existing business relationship). In the event of circumvention, by the Recipient whether directly or indirectly, the disclosing party shall be entitled to a legal monetary penalty award, equal to the maximum consulting service/consulting fee, commission/profit originally expected or contemplated to be realized from such transaction(s). This payment levied against and paid immediately by the party engaged in circumvention and also in addition includes all legal expenses in the recovery of these funds if collected through legal action by either party. This penalty shall not apply when the alleged Circumvention does not result in a transaction being concluded. The parties acknowledge it would be extremely difficult or impossible to accurately it would be extremely difficult or impossible to accurately fix the actual damages that disclosing party would suffer in the event of a breach of the aforementioned obligations, and that the liquidated damages provided for herein are a reasonable estimate of disclosing party's actual damages, which shall be fixed by the arbitrator who shall also be in the same business.

- No Rights Granted to Recipient. Recipient further acknowledges and agrees that the furnishing of Confidential Information to Recipient by disclosing party shall not constitute any grant or license to Recipient under any legal rights now or hereinafter held by disclosing party.
- **Miscellaneous Provisions:**
 - This Agreement sets forth the entire understanding and Agreement between the parties with respect to the subject matter hereof and supersedes all other oral or written representations and understanding. This Agreement may only be amended or modified by a writing signed by both parties.
 - If any provision of the Agreement is held to be illegal, invalid or unenforceable, the legality, validity and enforce ability of the remaining

provisions will not be affected or impaired.

- This Agreement is binding upon the successors, assigns and legal representatives the parties hereto, and is intended to protect Confidential Information of any successors or assign of disclosing party.
- Each Provision of this Agreement is intended to be valid and enforceable to the fullest extent permitted by law. If any provision of this Agreement is determined by any court of competent jurisdiction or arbitrator to be invalid, illegal, or enforceable to any extent, that provision shall, if possible, be construed as though more narrowly drawn, if a narrower construction would avoid such invalidity, illegality, or unenforceability, be served, and the remaining provisions of this Agreement shall remain in effect/force.
- The terms and conditions governing the provision of the agreement shall be governed by and construed in accordance with laws of the union of India and shall be subject to the exclusive Jurisdiction of the courts of New Delhi.
 - Any or all disputes arising out or in connection with this agreement shall so far as may be possible to settle amicably between the parties within a period of thirty days from such dispute(s) arising.
 - In the event of any queries, dispute or difference arising out of the agreement or in connection there-with (except as to the matters, the decision to which is specifically provided under this agreement), the same shall be referred to arbitration of a sole arbitrator to be appointed by the Director General, STPI.
 - The provisions of the Arbitration and Conciliation Act, 1996 shall be applicable and the award made there under shall be final and binding upon the parties hereto, subject to legal remedies available under the law. Such differences shall be deemed to be a submission to arbitration under the Indian Arbitration and Conciliation Act, 1996, or of any modifications, Rules or re-enactments thereof.
 - The parties shall mutually ensure and co-operate with each other in the arbitral proceedings, so that the same can be concluded and awarded within a period of six months from the date of commencement of the arbitral proceedings.
 - The arbitral proceedings shall be conducted in English, both parties shall be bound by the award passed and delivered by the arbitral tribunal and shall not attempt to challenge the authenticity of the award, before any authority or courts or any other statutory body.
 - The venue of arbitration shall be in New Delhi.

- If any litigation is brought by either party regarding the interpretation or enforcement of this Agreement, the prevailing party will recover from the other all costs, attorney's fees and other expenses incurred by the prevailing party from the other party.

Signed on behalf of

Signed on Behalf of

Software Technology Parks of India Lucknow /

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Signature:

Signature:

Name:

Name:

Designation:

Designation:

Date:

Date: