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CENTRAL UNIVERSITY OF RAJASTHAN

Bandarsindri – 305817 Distt. Ajmer, Rajasthan



TENDER NOTICE & DOCUMENT FOR “ SUPPLY and INSTALLATION OF FABRICATION LABORATORY EQUIPMENT ON TURNKEY BASIS”

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1. Schedule of Tender:

Tender Document for the Supply and Installation of Fabrication Laboratory Equipment on Turnkey basis at CURAJ Incubation Foundation, Central University of Rajasthan.

Sealed tenders are invited from the reputed OEM/Channel partners/authorized dealers/firms etc. for **Supply and Installation of Fabrication Laboratory Equipment on Turnkey basis** with “Part A” as Technical Bids and “Part B” as Financial Bids. The details are as follows:

S. No.	Name of the Equipment	Quantity	Amount of E.M.D (Rs	Tender Fee
1.	Supply and Installation of Fabrication Laboratory Equipment on Turnkey basis	As per tender specifications	1,50,000/-	Rs.1000/

Tender Document upload (publish) date/time : 06/08/2024, up to 5.00 P.M.
Pre-Bid Meeting & Site Visiting : 14/08/2024, 11:30 AM onwards
Last Date of Submission of Tender : 26/08/2024 up to 02.00 P.M.
Date of opening of Tender (Technical Bid) : 26/08/2024 up to 03.00 P.M.

Type of Tender: Two Bid Systems. (Rule 163 GFR 2017)

2. Mode of EMD and Tender fee:

Bidders should send separate D.D. for Tender Fee (Nonrefundable) and EMD (Refundable without any Interest) in favor of CURAJ Incubation Foundation payable at Kishangarh/ Bandarsindri Distt. Ajmer. EMD to be submitted at the time of pre-bid meeting (see b. point above) and site visit, as site visit and presence in the pre-bid meeting is mandatory to understand and assess the requirements of the above project.

NOTE:

- 2.1 Tender number, its submission date and Name of the Equipment should be mentioned on the top of the Envelope of bid,
- 2.2 If the tender is not opened on the above notified date, (due to any unforeseen circumstances), then the next working day will be considered as tender opening date.
- 2.3 The bidders who fail to submit the required tender fee, (if applicable) and EMD, their bids will not be considered for opening.
- 2.4 Bidder or their authorized representatives may attend the pre-bid meeting and opening of the tender.

2. TENDER NOTICE

**राजस्थान केन्द्रीय विश्वविद्यालय में प्रयोगशाला उपकरण FABRICATION LABORATORY
EQUIPMENT ON TURNKEY BASIS की आपूर्ति एवं स्थापना के लिये निविदा सूचना।**

 <p style="text-align: center;">राजस्थानकेन्द्रीय विश्वविद्यालय राष्ट्रीय राजमार्ग 8, बांद्रासिंदरी किशनगढ़ जिलाअजमेर 305817 दूरभाष: 01463– 238755वेबसाइट www.curaj.ac.in</p>	
सी0यू0आर0ए0जे0 / क्र0य / टेण्डर / 2024/1553	दिनांक: 06-08-2024
निविदा सूचना	
<p>विश्वविद्यालय में प्रयोगशाला उपकरण FABRICATION LABORATORY EQUIPMENT ON TURNKEY BASIS, की आपूर्ति एवं स्थापना के लिये निर्माताओं/चैनल पार्टनर/अधिकृत विक्रेताओं/फर्मों से मुहर बंद निविदायें आमंत्रित की जाती हैं। इच्छुक निविदाकर्ता मुहर बंद लिफाफे में पूर्ण रूप से भरी हुई निविदा (तकनीकी और वित्तीय) अधोहस्ताक्षरकर्ता के कार्यालय में दिनांक 26-08-2024 को अपराह्न 02.00 बजे तक भेज सकते हैं। प्राप्त निविदायें उसी दिन अपराह्न 3.00 बजे उपस्थिति निविदाकर्ताओं के समक्ष (यदि उपस्थिति हों) खोली जायेंगी, निविदा सूचना एवं विस्तृत जानकारी विश्वविद्यालय वेबसाइट www.curaj.ac.in एवं CPP Portal https://eprocure.gov.in पर उपलब्ध है।</p>	
कुलसचिव	

**Tender Notice for SUPPLY and INSTALLATION OF
FABRICATION LABORATORY EQUIPMENT ON TURNKEY BASIS**

 <p style="text-align: center;">CURAJ INCUBATION FOUNDATION Central University of Rajasthan NH-8 Bandarsindri, Kishangarh, Distt-Ajmer-305817 Tel: 01463 – 257515 Website www.curaj.ac.in.</p>	
CURAJ/Purchase/Tender/2024/1553	Dt. 06.08.2024
TENDER NOTICE	
<p>Sealed quotations are invited from the Manufacturers, Authorized Channel Partners/ Dealers/Firms for SUPPLY and INSTALLATION OF FABRICATION LABORATORY EQUIPMENT ON TURNKEY BASIS, at Central University of Rajasthan. Quotations completed in all respects along with technical and price bids should reach the office of the undersigned on or before 26-08-2024 up to 02.00 P.M. Technical Bids will be opened on same day at 03.00 P.M. in the presence of available bidders, if any. For further details, please visit our website www.curaj.ac.in and CPP Portal i.e. https://eprocure.gov.in</p>	
Registrar	

3. Important Notes to the Bidder:

- 3.1 Central University of Rajasthan, Bandarsindri, invites tenders under “2 Bid system for” **SUPPLY and INSTALLATION OF FABRICATION LABORATORY EQUIPMENT ON TURNKEY BASIS**, as per the specifications given in the “**Annexure A**”.
- 3.2 Tender document can be downloaded from the University website at URL Link: <http://www.curaj.ac.in/tenders>. or Central Public Procurement Portal (CPPP) at www.eprocure.gov.in.
- 3.3 The bidders are requested to read the tender document carefully and ensure all the compliance with instructions there in. Non-compliance of the instructions contained in this document, may disqualify the bidders from the tender process.

All offers should be written in the English and price should be written in both, figures and words. The offer should be typed or written in pen ink or ball pen. Offer in pencil will be ignored. The tenderer shall certify that the rates being quoted are not higher than those quoted for any Govt. Deptt. or Institution or GEM or any organization and that if during the years at any time, the tenderer has quoted rates lower than those quoted against this tender, the University would be given the benefit of Lower rates by the tenderer. The relevant documents should be enclosed with technical bid.

The prescribed tender documents should be submitted in one sealed envelope duly super scribed with “**SUPPLY and INSTALLATION OF FABRICATION LABORATORY EQUIPMENT ON TURNKEY BASIS, at CURAJ Incubation Foundation, Central University of Rajasthan** address at Bandarsindri, Ajmer (Rajasthan). This sealed envelope should contain two sealed envelopes marked A & B, prescribed as under:

Envelope containing appropriate Earnest Money Deposit (EMD) in the form of Demand Draft in favor of **CURAJ Incubation Foundation** payable at Bandarsindri, Kishangarh/Madanganj, be submitted at the time of **Pre-bid meeting**. Tender shall be rejected if the Earnest money in the form of D.D.'s is not found in proper order.

- a) Envelop A containing the Technical Bid along with the supporting documents. (See Terms & Conditions for more details)
- b) Envelop B containing the Financial Bid.
The tender document should be sent to:
CURAJ INCUBATION FOUNDATION
Central University of Rajasthan
N.H.-8 Road, Jaipur-Ajmer Highway,
Bandarsindri, Kishangarh, Distt. Ajmer,
Rajasthan- 305817

1. The complete tender document is to be sealed and signed by authorized official of bidder on all pages & is to be placed in the separate envelope along with the necessary required documents.
2. Bidders are required to enclose photocopy of cheque & NEFT Bank Details with tender /quotation to enable us to making payment through on line transfer for refund of EMD.
3. All bids must be delivered to the above office up to the date and time indicated above. Bids will be opened in the presence of Bidders' authorized representatives who choose to attend to present on the specified date and time. In the event of the specified date for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be next working day or as announced by the University in the appropriate manner.
4. Any clarification regarding tender specification before submission of tender document can be discussed with the Officer Incharge 8890632934 or through email id is cif@curaj.ac.in.
5. Please Note that the tender document is subjected to verification with the original document, and if any discrepancy is found, the tender would be rejected. Tenders (Technical Bid) will be opened first in the presence of the attending vendors.

Director
CURAJ INCUBATION FOUNDATION
CENTRAL UNIVERSITY OF RAJASTHAN
Bandarsindri, Rajasthan

4. TERMS AND CONDITIONS OF THE TENDER:

1. All offers should be written in the English and price should be written in both, figures and words. The tenderer shall certify that the rates being quoted are not higher than those quoted for any Govt. Deptt. or Institution or any organization during last one year. If during the last one year at any time the tenderer has quoted rates lower than those quoted against this tender, the University would be given the benefit of Lower rates by the tenderer. The relevant documents should be enclosed with technical bid.
2. The duly constituted committee appointed by the competent authority of Central University of Rajasthan, Bandarsindri, reserves the right to select some items (in single or multiple units) and reject the others or all items mentioned in the Schedule. The same committee will also reserve the right to revise or alter the specifications before acceptance of any tender with prior notice on the University website and Central Public Procurement Portal (CPPP).
3. Incomplete bid, amendments and additions to bid after opening are liable to be ignored and rejected.
4. The Bid shall be treated as a 2 Bid System. Financial Bid shall be opened for those bidders who have qualified in Technical Evaluation.
5. **Changes/Amendment:** At any time prior to the deadline for submission of tender, the University may amend the tender documents issuing addendum/corrigendum. The University shall have the right at any time, by written notice, in the form of an amendment order, to make any changes, if deems necessary, including, but not limited to, changes in specifications, layout and design.
6. **Bid Validity-** Bids should be valid for a period of 90 days from the date of opening of Technical bid.
7. **Withdrawal of bids:** No bidder will be allowed to withdraw its bid in the interval between the deadline of submission of bids and expiration of period of bid validity. Withdrawal of bid during this period will result in forfeiture of the bidder's bid security (EMD) and other sanctions.
8. **OEM/Channel Partner/Authorized Dealer/agents of Supplier:** when a firm sends quotation for an item manufactured by some different company, the supplier should give warranty certificate from Principle Company and the dealer will endorse it and will be the point of contact. and also manufacturer's confirmation of extending the required warranty for that product.
9. **Agency Commission:** The amount of Agency Commission, in case of manufacturer/supplier is from the foreign country (normally not exceeding five percent) payable to the Indian Agent should not be more than what is specified in the Agency agreement (a certified copy should be submitted along with the bid) between the bidder and the Indian Agent. The Indian Agent will be required to submit a certificate along with their Agency Commission bill, confirming that the amount claimed as Agency Commission in the bill has been spent/will be spent, strictly to render services to the foreign Principal, in terms of the Agency Agreement. The Purchaser or their authorized agencies and/or any other authority of the Government of India shall have rights to examine the books of the Indian Agent and defects or misrepresentations in respect of the afore indicated confirmation coming to light during such examinations will make the foreign Principal (i.e. the Contractor) and their Indian Agent liable to be banned/ suspended from having business dealings with the Purchaser, following laid down procedures for such banning/suspension of business dealings.
10. **Conflict of Interest among Bidders/Agent:** The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:
 - a. they have controlling partner (s) in common; or
 - b. they receive or have received any direct or indirect subsidy/financial stake from any of them; or
 - c. they have the same legal representative/agent for purposes of this bid; or
 - d. they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder; or
 - e. bidder participates in more than one bid in this bidding process. Participation by a bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/sub-assembly/assemblies from one bidding manufacturer in more than one bid.

- f. in cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:
 - I. The principal manufacturer directly or through one Indian agent on his behalf; and
 - II. Indian/foreign agent on behalf of only one principal.
- g. a Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid;
- h. in case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/common business/ management units in same/similar line of business.

11. Bid Security: Bid Security should remain valid for a period of 45 (Forty Five) days beyond the final bid validity period. The Bid Security can be submitted in the form of an account payee demand draft, fixed deposit receipt, or banker's cheque. The MSEs are provided tender documents free of cost and are exempted from payment of earnest money, subject to furnishing of relevant valid certificate for claiming exemption. A bidder's Bid Security will be forfeited if the bidder withdraws or amends its/his tender or impairs or derogates from the tender in any respect within the period of validity of the tender or if the successful bidder fails to furnish the required Performance Security within the specified period. Bid securities of the unsuccessful bidders should be returned to them at the earliest after expiry of the final bid validity period and latest by the 30th day after the award of the contract. Bid Security should be refunded to the successful bidder on receipt of a performance security.

12. MSE Bidders:, if Micro and Small Enterprises (MSE) participating in tender & quoting price within price band of L1+15 (fifteen) per cent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE and such MSE shall be allowed to supply up to 20 (twenty) per cent of total tendered value. The 20 (twenty) per cent quantity is to be distributed proportionately among these bidders, in case there are more than one MSMEs within such price band. Within this 20% (Twenty) Percent quantity, a purchase preference of four per cent (that is, 20 (twenty) per cent out of 20 (twenty) per cent is reserved for MSEs owned by Scheduled Caste (SC)/Scheduled Tribe (ST) entrepreneurs (if they participate in the tender process and match the L1 price). Provided that, in event of failure of such SC/ST MSE to participate in tender process or meet tender requirements and L1 price, four per cent sub-target shall be met from other MSE. MSEs would be treated as owned by SC/ ST entrepreneurs:

- a) In case of proprietary MSE, proprietor(s) shall be SC /ST
- b) In case of partnership MSE, the SC/ST partners shall be holding at least 51% (fifty-one percent) shares in the unit
- c) In case of Private Limited Companies, at least 51% (fifty-one percent) share shall be held by SC/ST promoters.

13. Public Procurement (Preference to Make in India), Order 2017

As per Public Procurement (Preference to Make in India), revised Order 2017 the 'Class-I local supplier' will get preference over non local suppliers', as defined under the Order,

- I. **Class-I local supplier'** means a supplier or service provider, whose goods, services or works offered for procurement, has local content equal to or more than 50%, as defined under this Order.
- II. **Local content'** means the amount of value added in India which shall, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- III. **Purchase Preference:** Purchase preference shall be given to 'Class-I local supplier' in procurements in the manner specified here under.
 - a) If L1 bidder is not a 'Class-I local supplier', 50% of the order quantity shall be awarded to L1 bidder. Thereafter, the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price for the remaining 50% quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-I local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price or accepts less than the offered quantity,

- the next higher 'Class-I local supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly.
- b) In case some quantity is still left uncovered on Class-I local suppliers, then such balance quantity may also be ordered on the L1 bidder.
 - c) In the procurements of goods or works, which are not divisible in nature, and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:
 - I. Among all qualified bids, the lowest bid will be termed as L1. If L1 is 'Class-I local supplier', the contract will be awarded to L1.
 - II. If L1 bidder is not 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price.
 - III. In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price; the contract may be awarded to the L1 bidder.
 - d) "Class-II local supplier" will not get purchase preference in any procurement undertaken by procuring entities.
 - e) **Margin of Purchase Preference:** The margin of purchase preference shall be 20%.
 - f) **Exemption of small purchases:** procurements where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order.
 - g) **Verification of local content:**
 - a) The 'Class-I local supplier'/ 'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local supplier'/ 'Class-II local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made.
 - b) In cases of procurement for a value in excess of Rs. 10 crores, the 'Class-I local supplier'/ 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
 - c) False declarations will be in breach of the Code of Integrity under Rule 175 (1) (i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
 - d) A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment.

NOTE: In this regard, latest GOI guidelines on make in India and preference to MSME will be followed.

14. Restrictions for bidders from countries sharing land border in India

- i. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- ii. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint Venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- iii. "Bidder from a country which shares a land border with India" for the purpose of this Order means.
 - a. An entity incorporated, established or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in

such a country: or

- d. An entity whose *beneficial/ owner* is situated in such a country; or
- e. An Indian (or other) agent of such an entity; or
- f. A natural person who is a citizen of such a country; or
- g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

iv. The *beneficial owner* for the purpose of (iii) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

- a) “Controlling ownership interest” means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
 - b) “Control” shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

- v. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

Model Certificate for Tenders

“I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India, I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]”

Clause 12, 13 & 14 are subjected to amend as per Govt. of India orders issued from Time to Time

15. Performance Security: On receipt of notification of award from the University, the successful Bidder within 14 days shall furnish the performance security at 5% of the cost of the work order in the form of DD/FDR in favor of The Central University of Rajasthan or in the form of Bank Guarantee issued/confirmed from any of commercial bank in India in an acceptable form. Performance security should remain valid for a period of 60 days beyond the date of completion of all contractual obligation of the supplier, including warranty obligations. The Performance Security will be forfeited and credited to the University account in the event of a breach of contract by the contractor. It will be refunded to the contractor without interest, after he duly performs and completes the contract in all respects but not later than 60(sixty) days of completion of all such obligations including the warranty under the contract. Failure of the successful bidder to submit the performance security shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the University may make the award to the next lowest evaluated bidder on same rate or call for new bids.

16. Prices and Taxes: Prices quoted should be firm and shall remain firm until required deliveries have been completed unless otherwise expressly agreed to, in writing by both parties. The vendor agrees that

any price reduction made with respect to Material covered by this order subsequent to placement will be applied to the order.

- I. **Elements of Price:** Where the price has several components such as the price of the goods, cost of installation and commissioning, operators' training, and so on, bidders should furnish a cost break-up indicating the applicable prices and taxes for each of such components along with the overall price.
- II. **Currency:** domestic tenderers are to quote and accept their payment in Indian currency; Indian agents of foreign suppliers are to receive their agency commission in Indian currency; costs of imported goods, which are directly imported against the contract, may be quoted in foreign currency (currencies) and will be paid accordingly in that currency; and the portion of the allied work and services, which are to be undertaken in India (like installation and commissioning of equipment) are to be quoted and paid in Indian currency.

Prices should be FOR –Central University of Rajasthan and for imported equipment supplier will be responsible for custom clearance and forwarding the same up to university campus. Custom Duty will be reimbursed on actual basis, after submission of the evidence in original. All prices specified herein include all charges for, but not limited to, inspection, and packaging. Prices set forth shall be inclusive of applicable taxes until and unless specified in the schedule. This University is also registered with DSIR vide TU/V/RG-CDE(1115)/2018 dated 12-10-2018 for availing concessional Custom Duty.

17. **Price Fall Clause:-** If at any time prior to delivery of the equipment/stores, the bidder/supplier reduces the sale price of such equipment stores as covered under this tender enquiry, to any organization (including Central/State/Deemed university) at price lower than the price quoted under this contract, he shall forthwith reduce the price payable under this tender for the equipment/stores being supplied after the date of coming into force of such reduction, the price of equipment/stores shall stand corresponding reduced.

18. Terms of Payment:

a. Terms of payments for Domestic Goods:

- 50% against receipt of material at site based on the proof of the cost of the material.
- 30% against installation
- 20% against successful validation, certification and handing over the site.

For payment- detailed BOQ wise price or mile stone wise price break up should be submitted for the project after receipt of PO for approval.

b. Documents for Payments of Domestic Goods:

- i. Supplier's Invoice indicating, inter alia description and specification of the goods, quantity, unit price, total value;
- ii. Packing list;
- iii. Insurance certificate, if applicable;
- iv. Railway receipt/consignment note;
- v. Manufacturer's guarantee/warranty certificate;
- vi. Inspection and installation certificate duly signed by the service engineer and university official; and
- vii. Any other document(s) as and if required in terms of the contract.
- viii. Copy of cancelled check/NEFT detail for making online payment.

19. **Insurance:** Wherever necessary, the goods supplied under the contract, shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the contract. If considered necessary, insurance may cover "all risks" including war risks and strike clauses. The amount to be covered under insurance should be sufficient to take care of the overall expenditure to be incurred by the Procuring Entity for receiving the goods at the destination. Where delivery of imported goods is required by the purchaser on CIF/CIP basis, the supplier shall arrange and pay for marine/air insurance, making the purchaser beneficiary. Where delivery is on FOB/FAS basis, marine/air insurance shall be the responsibility of the purchaser.

20. **E-Payments:** Bidders are required to enclose photocopy of cheque & NEFT Bank Details with tender /quotation to enable purchaser to making payment through on line transfer.

- 21. Deduction of Income Tax, GST and so on, at source from payment to suppliers:** This will be done as per existing law in force during the currency of the contract.
- 22. Refund from Supplier:** if the supplier, after claiming and receiving reimbursements for GST, excise duty, custom duty, and so on, from the purchaser, applies to the concerned authorities for refunds, on genuine grounds, of certain portions of such duties and taxes paid by it and receives the allowable refunds. Such refunds contain the purchaser's share also (out of the payments already made by the purchaser to that supplier) should be refunded to the University.
- 23. Completion of work:** The supply, installation and commissioning of the facility equipment should be completed within a time period of 2 months from the date of award of work. Complete validation and certification should be completed within 3 months from the date of award of work.
If the vendor is unable to complete performance at the time specified for delivery, by reason of strikes, labour disputes, riot, war, fire or other causes beyond the Vendor's reasonable control, the university at its option, may elect to take delivery of material and to pay such proportion of the contract price as deemed reasonable by the university.
- 24. Rescheduling:** The University may without liability at least seven days prior to the scheduled delivery date appearing on the order, defer delivery on any or every item under said order by giving oral notice to the Vendor (confirmed in writing within seven working days) of any necessary rescheduling.
- 25. Shipping, Packaging and Labeling:** All Material purchased hereunder must be packed and packaged to ensure its safe delivery in accordance with good commercial practices and where incorporated, the University's packaging specification. The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit, including the final destination. The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in the contract and in any subsequent instructions ordered by the Purchaser. It is the sole responsibility of the vendor to provide/replace the item/goods, if it is lost or broken during the shipping or transportation due to whatever may be the reason. Vendor is responsible to ensure, by contacting the University, that the shipping has been properly done i.e., all the items/goods have properly reached the University.
- 26. Inspection and Acceptance:** Material procured from vendor shall be inspected and tested by the University or its designee at vendors cost. If deemed necessary by the University, the Vendor shall provide without charge, all reasonable facilities and assistance for such inspection and test. Any inspection records relating to Material covered by this agreement shall be made available to the University during the performance of the order.
- a. If any Material covered by this agreement is defective or otherwise not conforming to the requirements of this agreement, the University may, by written notice to the Vendor:
 - i. rescind the purchase/supply order as to such non-conforming Material;
 - ii. accept such material at an equitable reduction in price;
 - iii. reject such non-conforming material and require the delivery of suitable replacements
 - b. If the vendor fails to deliver suitable replacements promptly, the university, with notice of seven business days, may replace or correct such material and charge the vendor the additional cost occasioned thereby, or terminate this order for default.
 - c. No inspection (including source inspection) test, approval (including design approval) or acceptance of material shall relieve the Vendor from responsibility for defects or other failures to meet the requirements of this order. Rights granted to the University in this article entitled INSPECTION is in addition to any other rights or remedies provided elsewhere in this order or in Law.
- 27. Invoicing / Payments / Set-Offs:** After completion of supply against the purchase order, the Vendor shall send duplicate invoices including item number to the University's concern Department.

Payment of invoice shall not constitute acceptance of Material ordered and shall be subject to appropriate adjustment, if the Vendor failed to meet the requirements of this agreement. The University shall have right at any time to set-off any amounts due to the Vendor, (or any of its associated or affiliated companies) against any amounts owed by the university with respect to this agreement.

28. Selection of the Bidder: For the purpose of selection of the bidder, a two-stage bidding process will be followed. The response to the tender should be submitted in two parts viz. Technical Bid & Commercial Bid.

Note: The tendered facility is non-divisible and on Turnkey basis. Accordingly, the clauses relevant to such tender will be applicable.

a. Technical Bid: Technical bid should contain information regarding the company/firm registration details, Authorization letter, Client list (List of Users), Performance certificate from clients, self-declaration for not black listed, business turnover, experience and other details of the firm to judge the suitability of the bidder. Bidder must ensure the following conditions while going for the bidding:

- I. SPECIFICATIONS: Specifications are basic essence of the product/contract. It must be ensured that the offers must be strictly as per our specifications mentioned at **Annexure-A** at technical specification section. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet/literature of the quoted model of the item by the quoting party/manufacturer and the specifications mentioned in the quotation must be reflected /supported by the printed technical leaflet/literature. Therefore the model quoted invariably be highlighted in the leaflet/literature enclosed with the quotation.
- II. Non-compliance of the above shall be treated as incomplete/ambiguous and the offer can be ignored without giving an opportunity for clarification/negotiation etc. to the quoting party.
- III. OEM should be internationally/Nationally reputed Branded Company.
- IV. Copy of mandatory test reports, national testing/reliability and endurance test reports etc., certified or conducted at the manufacturing site, granted by the bureaus/quality control departments/national testing laboratories.
- V. A write up on service and maintenance capability, mitigation of risks or breakdown and replacement capability, with the escalation support matrix suggested for the University. Vendors must indicate their sales and support service center in India and their plan to address issues about services, maintaining minimum service inventory etc.
- VI. Signed & Stamped compliance sheet of the technical specification of the offered equipment with technical printed literature must be enclosed with the technical bid in the prescribed format.
- VII. **Prerequisite:**
 - Experience of having successfully completed similar work during the last 5 years ending one day previous to last date of submission of tenders should as following:
 - Minimum one fabrication laboratory work of not less than 90 lakhs or two orders of 50 lakhs each.
 - The bidder should not have been blacklisted, debarred or expelled by Union Government/State Governments/ PSU's etc. on the date of submission of Bid. The bidder should submit an undertaking for the same.
 - Should have bidding capacity equal to or more than the estimated cost of the work put to tender. The bidder should submit a self certified certificate for the same. The bidding capacity shall be worked out by the following formula:
Bidding Capacity = $\{[A \times N \times 1.5] - B\}$
Where,
A = Maximum turnover in works executed in any one year during the last seven years taking into account the completed as well as works in progress. The value of completed works shall be brought to current costing level by enhancing at a simple rate of 7% per annum.
N = Number of years prescribed for completion of work for which bids have been invited.
B = Value of existing commitments and ongoing works to be completed during the period of completion of work for which bids have been invited.

(Note: Supporting document to be enclosed to determine the bidding capacity).

- VIII. The Bidder shall have an average annual turnover of minimum Rs. 3.00 Crore in the last 3 financial years (i.e., F/Y 2021-22 & 2022-23, 2023-24.). Copy of Audited Balance Sheets for all the three financial years shall be submitted.
 - IX. Self-attested photocopy of annual turnover, IT clearance Certificate, Audited Balance Sheet, etc. for last three years.
 - X. The bidder/OEM self-declaration stating that he/she is not banned/debarred or black listed by any Central/State Govt. of India/PSU/Organizations/Institutes in India or abroad in prescribed format.
 - XI. DD for EMD amount as applicable.
 - XII. University reserves the right to carry out a technical inspection and performance evaluation (benchmarking) of the offers, made by shortlisted vendors. The shortlisted vendors may be asked to come and give out presentation / demonstration.
- b. Short listing of Bidder:** CURAJ Incubation Foundation will shortlist bidders, who found technically qualifying and the financial bid of only these bidders will be opened. University reserves the right to decide whether the items being quoted are as per the requirement of the University and are of standard/leading brands in the market. University reserves the right to decide which offer best suits the requirement of the university. Further, after opening financial bids of the short-listed bidders, if there is a discrepancy between word and figure, the amount indicated in words will prevail.
- c. Price Bid/ Financial Bid:** Financial bid should contain price of the material required to be supplied as per Price Schedule **Annexure-B** as supplied by the University along with tender form, duly filled and signed by the authorized person.
- 29. Installation and Commissioning:** Free of cost at university. The Bidder / OEM must ensure timely installation of the complete unit with necessary support to the purchasers, as per details and lists to be made available to the Stores Section or the purchasing Departments/Centre/Schools.
- 30. Conditional Offer** will not be accepted.
- 31. Rejection of Bids:**
- a. If bidders give wrong information in their bid, University reserves the right to reject such bids at any stage and forfeit the Earnest Money Deposit / Performance Bank Guarantee and cancel the order, if awarded.
 - b. If the technical offer contains any price information the offer will be summarily rejected.
 - c. Canvassing in any form in connection with the tender is strictly prohibited and the bids submitted by the bidder who resort to canvassing are liable for rejection.
 - d. Unsigned tenders/bids, unattested corrections and over writing by bidders are also liable for rejection.
 - e. Bids submitted without supporting documents as mentioned or required to submit with bids are liable to be rejected.
 - f. The Tenderers must confirm in their bid acceptance in full of the terms and conditions in this enquiry. Any non-acceptance or deviations from the terms and conditions must be clearly brought out. However, tenderers must note carefully that any conditional offer or any deviation from the terms and conditions of this enquiry may render /liable the Quotation for rejection.
- 32. Liquidated damages for delayed supply:** If vendor fails to deliver any of or all products or does not perform the services within the period specified in the contract, the University reserves the right to, without prejudice to its other remedies under the contract, deduct from the bill, a sum equivalent to 1% of the price of undelivered stores at the agreed price for each week to maximum limit of 15% of the value of stores so undelivered. Once maximum is reached, the second party may consider termination of contract.
- 33. Assignment / Subcontracting /sublet:** The Vendor shall not assign the order received, any rights under this agreement or to become due hereunder neither delegated nor subcontracted /sublet any obligations or work hereunder without the prior written consent of the University.
- 34. Cancellations of tender:** The University reserves Right to Accept any Bid and to Reject any Or all Bids: The Purchaser also reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

The University may cancel agreement entered with vendor in whole or in part, for no cause, upon written email to the Vendor, effective when sent, provided such notice is sent ten (10) days prior to the delivery date, specified on the face of this order, in the event that the vendor:

- a. fails to comply with any term or condition of this order including, but not limited to, delivery terms; or
- b. appoints a receiver, liquidator or trustee in bankruptcy or other similar officer over any or all of its property or assets; or
- c. files a voluntary petition in bankruptcy; or
- d. has had filed against it an involuntary petition in bankruptcy which remains in effect for thirty (30) days; or
- e. voluntarily ceases trading; or
- f. merges with or is acquired by a third party; or
- g. Assigns any of its rights or obligations under the Order to a third party without the university's prior written consent.

Upon the occasion of any one of the aforesaid and in addition to any remedies which the university may have in Law or in Equity, the university may also cancel this order or any outstanding deliveries hereunder by notifying the Vendor in writing of such cancellation and the Vendor shall thereupon transfer title and deliver to the university such work in progress or completed material as may be requested by the university. The University shall have no liability to the Vendor beyond payment of any balance owing for Material purchased hereunder and delivered to and accepted by the university prior to the Vendor's receipt of the notice of termination, and for work in progress requested for delivery to the university.

35. Warranty: -

- a. **As mentioned in the Technical specification** with the statement of availability of spares, Hardware, Consumables, Electronic Boards etc. for at 10 year from the date of the installation of equipment, against any manufacturing defects and also give the warranty declaration that everything to be supplied by us hereunder shall be free from all defects and faults in material, workmanship, transportation hazards, and shall be of the highest quality and material of the type ordered, shall be in full conformity with the specifications. During the warranty period, replacement of any part of equipment's or rectification of defects of works will be free of cost.
- b. Any deviation in the material and the specifications from the accepted terms may liable to be rejected and the bidders need to supply all the goods in the specified form to the satisfaction / specifications specified in the order / contract and demonstrate at their own cost. The payments shall be made only after receiving the material in the required specifications and quality to the satisfaction of the University authorities.
- c. Downtime: During warranty period not more than 5% downtime will be permissible. For downtime exceeding penalty equivalent to 0.50% of the F.O.R. value of the equipment for every week or part thereof may be imposed. Downtime will be counted from the date and time of the filing of complaints within the business hours of the tenderer.
- d. The Vendor shall warrant that any Material supplied hereunder shall conform to the generally recognized manufacturing and safety standards of the Vendor's industry or as per Indian Standard Institution (ISI) or similar standard. The Vendor's specifications on performance as detailed in the Vendor's brochures, sales literature and other specifications as may be available to the university.
- e. Vendor should provide insurance up to the delivery point (on-site and not up to the nearest international airport) and until the time of installation.
- f. Vendor shall provide at least one preventive maintenance service per year during the warranty period.
- g. In addition to any other express or implied warranties, the Vendor warrants that the material furnished pursuant to this order will be
 - (i) Free from defects in design except to the extent that such items comply with detailed designs provided by the university; of merchantable quality and suitable for the purposes, if any, which are stated in the tender/quotation.
 - (ii) This warranty provision shall survive any inspection, delivery, acceptance, payment, expiration or earlier termination of this order and such warranties shall be extended to the

employees, students, and users of the material. Nothing herein, however, shall limit the University's rights in law or equity for damages resulting from delivery of defective goods or damage caused during the delivery of goods or provision of services.

(iii) Rights granted to the University in this article entitled WARRANTIES are in addition to any other rights or remedies provided elsewhere in this order or in Law.

36. Consumables/spares: All hardware & software including drivers, device interface cards/network adaptor card must be pre-installed & pre-configured in the computer /equipment provided. Licensed version of system software should be provided in CD (with up-gradable version). if such system is also a part of supply.

Manual - Hard copies of instruction/operation/service manuals should be supplied. List of important Consumable/ Spares and parts having sufficient shelf life for trouble free operation of one years should also be provided.

37. Training/installation:

a. Installation testing: suppliers of the instrument must provide free installation, commissioning and testing of the equipment in the laboratory of the Central University of Rajasthan & training is to be provided as mentioned in technical specifications section.

38. C.M.C.: A separate annual maintenance contract will be executed after completion of the warranty period. Hence, bidders must quote price of CMC for next three year (year wise) after the expiry of warranty period. **While evaluating the offers, the cost component towards maintenance of the goods for specified number of years (i.e. three year) may also be added in the evaluated tender value on overall basis to decide the inter se ranking of the responsive tenderers.** On execution of the C.M.C. contract, performance security will be returned to the first party.

39. Patent Indemnity: The Vendor shall have to indemnify, hold harmless and defend the University, its employees, and students with respect to all claims, suits, actions and proceedings of actual or alleged infringements of any Letter, Patent, Registered or Industrial Design, Trademark or Trade Name, Trade Secret, Copyright or other protected right in any country resulting from any sale, use or manufacture of any Material delivered hereunder and to pay and discharge all judgments, decrees, and awards rendered therein or by reason thereof and bear all expenses and legal fees (including the University's) associated herewith. The university reserves the right to be represented in any such action by its own counsel at its own expense.

40. Compliance with Laws: After acceptance of tender, successful bidder shall have to comply with the requirements of all the existing laws. The Vendor shall also have to comply with the Fair Labour Standards Act and the Occupational Safety and Health Act, and all other applicable laws, ordinances, regulations and codes in the Vendor's performance hereunder. The Vendor will have to indemnify and hold the University and its customers harmless from any loss or damage that may be sustained by the University, by reason of the Vendor's failure to comply with any laws, ordinance, regulations and codes.

41. Law of the Contract: The agreement entered with vendor shall be governed by and interpreted in accordance with the laws in existence and the Jurisdiction of Rajasthan.

42. Site preparation: The supplier shall inform the University about the site preparation, if any, needed for installation, immediately after receipt of the supply order. Suppliers must provide complete details regarding space and all infrastructural requirements needed for the equipment, which University should arrange before the arrival of equipment to ensure its early installation and smooth operation thereafter. The supplier may offer his advice and render assistance to University in the preparation of the site and other pre-installation requirements.

43. One-time shifting and re-installation: Instrument may need shifting and reinstallation. If needed one-time shifting and re-installation is to be done free of cost.

44. The Bidder / OEM (Original Equipment Manufacturer) should be an ISO-9000 or ISO-14001 certified company with due credits to energy conservation and green earth compliance. While the above procedures lay down the overall guidelines, Central University of Rajasthan reserves the right to select the vendor based on other parameters, at its discretion.

45. Delivery and Opening of Tender: All tender documents should be sent through courier, speed post, registered post or by person. Telegraphic / fax offer will not be considered and ignored straightway. All tender documents received after the specified date and time shall not be considered.

The completed tender should be delivered at the Inward Section of the Administrative building of the Central University of Rajasthan, Bandarsindri, Ajmer, Rajasthan-305817.
The Technical Bid will be opened on **26/08/2024**.

I/We have read all the enclosed Terms and Conditions carefully and ready to accept and according to that I/We are submitting herewith the tender.

Seal & Signature of Vendor

5. TECHNICAL SPECIFICATIONS SECTION:

Technical Specifications: The tenderer shall meet the respective minimum technical specifications for the item that is being bid for. Any additional features or specifications in excess of these minimum specifications will be appreciated. A set of desired additional features are mentioned along with the minimum technical specifications, wherever appropriate.

I / We the undersigned am / are ready to supply & install the following facility and instruments along with all other accessories complete as mentioned below with accepting the terms and conditions which are enclosed with this order form and quote for the same

The technical specifications for the Instrument are being placed under this tender have been detailed in the "**Annexure A**". This will also include all the components of the particular instrument / equipment that are being tendered for.

S. No.	Instrument/Equipment	Quantity
1.	SUPPLY and INSTALLATION OF FABRICATION LABORATORY EQUIPMENT ON TURNKEY BASIS	As per tender specifications

Technical Specification Sheet

Sr. No.	Feature	Description/ Specification	Qty. Nos
01	3D Printer	<ul style="list-style-type: none"> • Fundamental Technology: The system should utilize masked stereolithography or a comparable 3D printing technology. • Type of Technology: The system should employ low force stereolithography (LFS) or equivalent. • Resolution: The system must have an XY resolution of up to 25 microns or better • Laser Spot Size: The system should have a laser spot size of approximately 85 microns or better • Layer Thickness: The system should be capable of producing layer thicknesses ranging from 25 to 300 microns or more • Material Compatibility: The system must support a variety of resin materials, but not limited to, grey, white, clear, tough, durable, elastic, flexible, high-temperature resistant, rigid, and flame-retardant resins. • Build Volume: The printable build volume should be 14 × 14× 18cm or better • Laser Heads: The system should be equipped with a 405 nm optical wavelength and 16 mW/cm² optical power or better. • Software Included: The system should include slicing software at no additional cost. • Cloud Connection: The system should support premium integration with preform cloud-based platforms. • Resin Loading: The system should have an automatic refill system for resin loading. • Post-Processing Equipment: The system should require a form wash UV-curing unit with heating capabilities for post-processing. • Operating Temperature: The system should operate efficiently within a temperature range of 18 to 28°C or better • Tool Kit and Accessories: The system should come with a complete tool kit and necessary accessories. • Operating System: The system should be compatible with Windows 10 (64-bit) or better, as well as Mac OS X 10.12 and Better. • Certifications: The system should comply with ISO 9001:2015, ISO 14001:2015, UL E File #: E477754 certifications, EN 60950-1 #: US- 33763-UL. • Resin Cartridges: The system should support a single resin cartridge. • Supports: The system should have auto-generated and Light-Touch Removal supports for printing. • Internal Temperature: The system should have an auto-heating capability up to 45°C. • Temperature Control: The system should include an High speed conduction resin heating with infrared temperature sensing. • Camera: Printer should have integrated camera of 5MP or better resolution for remote monitoring. • Alerts: The system should provide touchscreen alerts, SMS/email notifications, LED status indicators, and audio alerts. • File Formats: The system should support input file formats such as .STL and .OBJ, and output in .Form file format. • Training: The supplier should provide at least one day of training and installation. • Print Setup Features: The system should offer features like one-click print, adaptive layer thickness, remote print, auto-orientation, auto-mesh repair, and more. • Printer Management: The system should include a dashboard for managing prints and printers via the cloud, tracking resin and tank usage, and providing SMS and email alerts. Additional Accessories: • Resin: The system should include at least 1 kg compatible of resin or more. 	01

		<ul style="list-style-type: none"> • Printing Tray : 3 	
02	3D printer-II	<ol style="list-style-type: none"> 1. Print Technology: The system should utilize Fused Filament Fabrication (FFF) or Fused Deposition Modelling (FDM) technology or better. 2. Printable Area: The minimum printable area should be at least 250mm x 250mm x 300mm or more. 3. Filament Diameter: The system should support a filament diameter of 1.75 mm or better. 4. Extruder Specifications: <ul style="list-style-type: none"> • Diameter: The extruder diameter should range between 0.25 mm and 0.6 mm • Temperature: The extruder should be capable of reaching temperatures up to 290°C ± 10°C. • Number of Extruders: The system should be equipped with one extruder or more 5. Recommended Materials: The system should be compatible with PLA, ABS, and flexible filaments. 6. Layer Resolution: The system should offer a layer resolution between 20 to 450 microns. 7. Build Speed: The system should support a build speed of up to 100 mm/s or more. 8. Heated Bed: The system should include a heated bed. 9. Bed Temperature: The heated bed should be capable of reaching temperatures up to 120°C ± 10°C. 10. LCD Support: The system should include an LCD interface for user interaction. 11. Connectivity: The system should support Bluetooth, Wi-Fi, USB, and LAN connectivity options or more. 12. Enclosure Type: The system should be constructed with a powder-coated galvanized steel enclosure or equivalent material. 13. Software: The required software should be provided with the machine. 14. Additional Accessories: <ul style="list-style-type: none"> • Nozzle: One 0.4 mm nozzle or compatible to the system/machine • Surface Built Plate: One surface build plate. • Filament: one kilogram of filament or more • PLA Filament: 5 kg • ABS Filament: 5 kg 	01

03	Laser Cutter & Engraver Machine	<ol style="list-style-type: none"> 1. Laser Type: The system should utilize a 10.6-micron CO2 DC Glass laser. 2. Laser Power: The system should have a laser power of 100 W or better one. 3. Cooling: The laser system should be water-cooled or better technology or better 4. Working Area: <ul style="list-style-type: none"> • XY Axis: The minimum working area for the XY axis should be 1200 mm x 1200 mm or more • Z Axis: The Z axis should be automatic and capable of moving up to 100 mm or more 5. Repositioning Accuracy: The system should have a repositioning accuracy of 0.1 mm or better. 6. Speed Specifications: <ul style="list-style-type: none"> • Cutting Speed: The system should support a cutting speed range of 0 to 30 meters per minute or better. • Engraving Speed: The system should support an engraving speed range of 0 to 64 meters per minute or better. 7. Acceleration: The system should have an acceleration capability of 1g. 8. Cooling Method: The system should be water-cooled. 9. Voltage Requirements: The system should operate at 230V ± 20V, 50 Hz ± 5 Hz power. 10. Working Environment: <ul style="list-style-type: none"> • Temperature: The system should function efficiently within a temperature range of 0°C to 45°C ± 10°C. • Humidity: The system should operate in environments with 5% to 95% ± 5% humidity. 11. Supported Graphics Files: The system should support the following graphics file formats: PLT, CDR, AL, DWG, DST, DXF, BMP, JPEG, TIFF, GIF, and PCX. 12. Additional Accessories: <ul style="list-style-type: none"> • CO2 Focus Lens: One CO2 focus lens. • Mirrors: Three mirrors (25mm). • Acetone: one 400 ml bottle of acetone. • Acrylic Sheets: Two acrylic sheets measuring 1200 mm x 1200 mm x 3 mm or more. • Glass slides: 10 Pkt 	01
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04	Desktop Milling Machine (PCB Machine)	<ol style="list-style-type: none"> 1. Cuttable Material: The system should be capable of cutting materials such as modeling wax, chemical wood, foam, acrylic, poly acetate, ABS, and PC board. 2. Operation Strokes: <ul style="list-style-type: none"> • X-Axis: Minimum 200 mm or more • Y-Axis: Minimum 150 mm or more • Z-Axis: Minimum 60 mm or more 3. Workpiece Table Size: The workpiece table should have a minimum size of 230 mm (X) x 150 mm (Y) or more. 4. Distance from Collet Tip to Table: The minimum distance should be 130 mm or more 5. Loadable Workpiece Weight: The system should support workpieces weighing up to 2 kg or more. 6. Operating Speed: The operating speed should range from 6 to 1800 mm/min (0.24 to 70.87 inches/min). 7. Drive System: The X, Y, and Z axes should be driven by stepper motors. 8. Spindle Rotation: The spindle should rotate at a maximum speed of 7000 to 20000 rpm and variable 9. Cutting Tool Chuck: The system should utilize the collet method for holding cutting tools. 10. Software Resolution: <ul style="list-style-type: none"> • RML-1: 0.000039 inches/step, 0.01 mm/step OR equivalent • NC Code: 0.000039 inches/step, 0.001 mm/step 11. Power Consumption: Approximately 55W± 10W or more energy efficient 12. Power Requirements: 13. Additional Accessories: <ul style="list-style-type: none"> • Collet 3mm: 1 unit • End Mills: <ul style="list-style-type: none"> ○ 0.4 mm: 2 units ○ 0.8 mm: 2 units ○ 1 mm: 1 unit ○ 3 mm: 1 unit ○ 6 mm: 1 unit • Ball Mills: <ul style="list-style-type: none"> ○ 1 mm: 1 unit ○ 6 mm: 1 unit • Engraving Bits: 10 units • Copper Cam Software with Installation: 1 unit • Resin Wood (200mm x 150mm): 5 units • Copper Clad Plate Laminate Double-Sided PCB (6 x 4 inches) or better: 5 units • Copper Clad Plate Laminate Single-Sided PCB (6 x 4 inches) or better: 5 units • Double-Sided Tape: 2 rolls • Cut and Drill Lubricant: 1 Gallon • Drill Bits 0.5mm: 10 • Drill Bits 0.6mm: 10 • Drill Bits 0.8mm: 10 • Drill Bits 0.9mm: 10 • Drill Bits 1.2mm: 10 • Drill Bits 1.5mm: 10 • Drill Bits 2.0mm: 10 • Drill Bits 2.5mm: 10 • Drill Bits 3.0mm: 10 • Drill Bits 4.0mm: 10 • Drill Bits 5.0mm: 10 	01
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05	PCB Printing Machine	<p>Drilling Specifications:</p> <ul style="list-style-type: none"> • Spindle Speed: The system should support a maximum spindle speed of 13000 rpm \pm 2000 rpm. • Power: The drilling system should operate at 12 V \pm 5 V, 25 W \pm 10 W. • Runout (TIR): The system should have a runout tolerance of 0.07 mm- 0.08 mm. • Shank Diameter: The shank diameter for drill bits should be 3.1-3.2 mm. • Supplied Substrate Material: The system should include FR1 substrate material. • Bit Diameter: The system should support a maximum bit diameter of 2 mm. • Bit Length: The system should accommodate drill bits with a maximum length of 39 mm. <p>Software Requirements:</p> <ul style="list-style-type: none"> • Operating Systems: The system should be compatible with Windows 7, 8, 10 (64-bit), and OSX 10.11 or Better. • File Format: The system should support Gerber file format. • Connection Type: The system should at least use a wired USB 2.0 connection and additional suitable advanced connection type may be provided. <p>Printing Specifications:</p> <ul style="list-style-type: none"> • Minimum Trace Width: The system should support a minimum trace width of 0.2 mm or better • Minimum Passive Size: The system should support a minimum passive component size of 01005 or better. • Minimum Pin-to-Pin Pitch: The system should support a minimum pin-to-pin pitch of 0.6-0.7 mm. • Resistivity: The system should have a resistivity of 12 mΩ/Sq at 70 μm height. • Supplied Substrate Material: The system should include FR4 substrate material. • Maximum Board Thickness: The system should support a maximum board thickness of 3 mm. <p>Soldering Specifications:</p> <ul style="list-style-type: none"> • Minimum Passive Size: The system should support a minimum passive component size of 01005. • Minimum Pin-to-Pin Pitch: The system should support a minimum pin-to-pin pitch of 0.5 mm or better. • Solder Paste Alloy: The system should use Sn42/Bi57.6/Ag0.4 solder paste alloy. • Solder Wire Alloy: The system should use SnBiAg1 solder wire alloy. • Soldering Iron Temperature: The soldering iron should operate at a temperature range of 180-200°C \pm 20°C. <p>Footprint & Print Bed Specifications:</p> <ul style="list-style-type: none"> • Dimensions (L \times W \times H): The maximum dimensions of the system should be 400 mm \times 260 mm \times 210 mm or better. • Print Area: The minimum print area should be 120 mm x 110 mm or more. • Maximum Heated Bed Temperature: The heated bed should reach a maximum temperature of 240°C. <p>Additional Features:</p> <ul style="list-style-type: none"> • Pick & Place: The system should include a vacuum-operated pick & place mechanism. • Automated Drilling: The system should have an automated drilling attachment. <p>Additional Accessories:</p> <ul style="list-style-type: none"> • Power User Bundle: One unit should be included. 	01
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		<ul style="list-style-type: none"> • Mini Refrigerator: One unit should be included. • Liquid Photo Resist E-1020: 5 Ltr • Liquid Photo Resist Thinner: 2 Ltr • Photoresist Dye Blue: 1kg • Photosensitive Dry Film: 10 pcs • Thermal Laminator Machine: 1 • Negative Film: 5x7 inches, 25 sheets • Negative developer: 1 kg • Negative Fixer: 1 kg • Sodium bi Carbonate: 1 kg • Hydrogen Peroxide petals: 1 kg • FeCl3: 5 kg • 5 in 1 Stainless Steel Tweezer Set: 1 • Borosil Glass Bowl (150x75mm): 2 • Copper PCB- Single Sided: 50 • Double Sided: 50 	
06	Vinyl Printing and Cutting Machine	<ol style="list-style-type: none"> 1. Printing Method: The system should use piezoelectric inkjet technology. 2. Cutting Method: The system should utilize a grit roller feed mechanism. 3. Acceptable Media: <ul style="list-style-type: none"> • Width: The system should support media widths ranging from 5.9 to 20.3 inches (150 to 515 mm) or better. • Thickness: <ul style="list-style-type: none"> ○ Printing: The maximum thickness with liner should be 39 mil (1.0 mm). ○ Cutting: The maximum thickness with liner should be 16 mil (0.4 mm). • Roll Weight: The system should support rolls weighing up to 13.2 lbs (6 kg) ± 1kg. • Roll Outer Diameter: The maximum roll outer diameter should be 5.9 inches (150 mm). • Core Diameter: The system should support 2-inch (50.8 mm) or 3-inch (76.2 mm) cores. 4. Printing/Cutting Width: The maximum printing/cutting width should be 25 inches (480 mm). 5. Ink Cartridges: <ul style="list-style-type: none"> • Type & Capacity: The system should use ECO-SOL MAX 2 ink cartridges with a capacity of 220 ml or more. • Colours: The system should support 4 colours - Cyan (C), Magenta (M), Yellow (Y), and Black (K) or more color options. 6. Printing Resolution: The system should support a maximum printing resolution of 1440 dpi or higher 7. Cutting Blade: The system should use CAMM-1 series cutter blades. 8. Cutting Speed: The system should support cutting speeds ranging from 0.4 inches/second (10 mm/second) to 6 inches/second (150 mm/second ± 50 mm/second). 9. Blade Force: The blade force should be adjustable between 30 to 300 ± 20 grams-force (gf). 10. Software Resolution (When Cutting): The system should have a software resolution of 0.000984 inches/step (0.025 mm/step). 11. Distance Accuracy: <ul style="list-style-type: none"> • When Printing: Error of less than ± 0.3% of distance travelled, or ± 0.3 mm (0.012 inches), whichever is greater. • When Cutting: Error of less than ± 0.4% of distance travelled, or ± 0.3 mm (0.012 inches), whichever is greater. 12. Repetition Accuracy (When Cutting): ± 0.004 inches (± 0.1 mm) or less. 13. Alignment Accuracy for Printing and Cutting: ± 0.020 inches (± 0.5 mm) or less. 14. Alignment Accuracy for Printing and Cutting When Reloading Media: Error of less than ± 0.5% of distance travelled, or ± 0.012 inches (3 mm), whichever is 	01

		<p>greater.</p> <p>15. Print Heater Temperature: Fixed at 95°F (35°C) or better.</p> <p>16. Connectivity: The system should support USB 2.0 connectivity.</p> <p>17. Power-Saving Function: The system should include an automatic sleep feature and operate on AC 100 to 240V ± 10%, 1.0 A, 50/60 Hz.</p> <p>18. Power Consumption:</p> <ul style="list-style-type: none"> • During Operation: Approximately 90W ± 20W. • Sleep Mode: Approximately 5- 10 W. <p>19. Operating Conditions:</p> <ul style="list-style-type: none"> • Power On: Temperature range should be 68°F to 90°F (20°C to 32°C), with humidity between 35% and 80% RH (non-condensing). • Power Off: Temperature range should be 41°F to 104°F (5°C to 40°C), with humidity between 20% and 80% RH (non-condensing). <p>20. Other Items: The system should include a power cord, USB cable, blade, blade holder, downloadable software and manual library.</p> <p>21. Additional Accessories:</p> <ul style="list-style-type: none"> • Vinyl Roll (1.5 x 25 ft) or better: One unit. • Waste Ink Cartridge: Two units • Blade: 10 nos • Glossy Paper: 4 Pkt • Transparent Sheet: 4 Pkt 	
07	3D Scanner	<p>Accuracy and Scan Volume:</p> <ul style="list-style-type: none"> • Single Shot Accuracy: The system should have an accuracy of ≤ 0.05 mm. • Maximum Scan Volume: <ul style="list-style-type: none"> ○ Minimum: 3 x 3 x 3 cm ○ Maximum: 20 x 20 x 20 cm • Range of Single Capture: The system should have a capture range of 200 x 150 mm or more <p>Scan Speed:</p> <ul style="list-style-type: none"> • Single Scan: Less than 1 second. • Turntable: Less than 40-50 seconds. <p>Point Distance: The point distance should range from 0.1 mm to 0.2 mm.</p> <p>Texture: The system should support texture scanning.</p> <p>File Formats: The system should support OBJ, STL, ASC, and PLY file formats.</p> <p>Camera Resolution: The camera resolution should be 1to 2 megapixels or better.</p> <p>Light Source: The system should use white light as the light source or better.</p> <p>Stand-off Distance: The system should support a stand-off distance range of 290 to 500 mm.</p> <p>Computer Requirements: USB: 1 x USB 2.0 or 3.0</p> <p>Operating System: Windows 10 or windows 11 or better (64-bit)</p> <p>CPU: Dual core i5</p>	01

		<p>RAM: 8 GB</p> <p>Graphics Card: Nvidia series</p> <p>Dimensions: The maximum dimensions should be 600 x 250 x 250 mm or better.</p> <p>Power Supply: The system should have a power supply of 40 W ± 10W.</p> <p>Additional Features:</p> <ul style="list-style-type: none"> • Calibration Board: The system should include an HD calibration board. • Turntable: The system should include a turntable with coded targets. • Load Capacity of Turntable: The turntable should support a load capacity of 5 kg ± 2 kg or better 	
08	Vacuum Forming Machine	<ul style="list-style-type: none"> • Height: Minimum 310 mm or higher • Length (with handles): Minimum 460 mm or higher • Width: Minimum 270 mm or higher • Forming Bed: Minimum 200 x 200 mm or better • Draw Depth: Minimum 130 mm or better <ul style="list-style-type: none"> • The system should have a built-in ceramic heater with a temperature range of 160°C to 350°C. • The system should be available in 110V 5A 1000W and 240V 5A 1000W models depending on the region or better. • The system should support a maximum power-through of 2000W for the vacuum cleaner port. • Recommended Operating Temperature: 15°C to 30°C ± 5°C • Humidity: 30% to 50% RH • Recommended Storage Temperature: 10°C to 35°C ± 5°C • Humidity: 20% to 90% RH <p>Regulatory Compliance:</p> <ul style="list-style-type: none"> • The system should comply with the following standards: CE, PSE, FCC, RoHS, IC, and SAA. <p>Sheet Materials:</p> <ul style="list-style-type: none"> • The system should work with thermoplastic sheets between 0.2 mm and 1.5 mm in thickness. <p>Compatible Sheet Materials:</p> <ul style="list-style-type: none"> • The system should be compatible with PETg, HIPS, ABS, Polystyrene, Polypropylene, Polycarbonate, Polyethylene, and Acrylic PMMA sheets. <p>Compatible Template Materials:</p> <ul style="list-style-type: none"> • The system should support the use of the following template materials: <ul style="list-style-type: none"> ○ 3D printed FDM PLA, ABS, Nylon ○ Most 3D printed SLA and SLS materials ○ Steel, Aluminium ○ Plaster, Polyurethane tooling foam, Hardened clays ○ Wood, Silicone ○ Milled and injection-moulded plastics such as ABS or nylon ○ Paper and card plastics 	01

		<ul style="list-style-type: none"> ○ Toughened glass <p>Compatible Casting Materials:</p> <ul style="list-style-type: none"> • The system should support casting with the following materials: <ul style="list-style-type: none"> ○ Concrete, Silicone, Chocolate, Resin, Water, Jello, Foam, Jesmonite, Plaster <p>Additional Accessories:</p> <ul style="list-style-type: none"> • Cast Sheet (PVC): 30 pieces • Form Sheet (PET sheet): 30 pieces 	
09	Manual Lathe Machine	<ul style="list-style-type: none"> • Swing Over Bed: Minimum 85 mm or better • Distance Between Centers: 400 mm • Spindle Bore: 20 to 21 mm • Spindle Speed Range: 80-2800 ±200 rpm • Longitudinal: 0.05 to 1 mm/rev • Cross: 0.025 to 1 mm • Lead Screw: 12 x 1.5 mm or better • Thread Cutting Range: <ul style="list-style-type: none"> • Metric: 0.2 – 3 mm • Inch: 10-48 TPI • Cross Slide Travel: 85 mm to 90 mm • Top Slide Travel: 52 mm to 60 mm • Tool Shank Size: 10 x 10 mm • Sleeve Travel: 40 mm • Sleeve Diameter: 24 mm • Power of Main Motor: Minimum 870 W ± 50 W • Power Output: Minimum 550 W ± 50W • Frequency: 50 Hz ± 10Hz • Connection Voltage: 220-240 V ± 20 V • Machine Size (L x W x H): Minimum 900 x 400 x 300 mm or better • Accessories: <ul style="list-style-type: none"> • Operating Tool Kit: Required accessories should be provided. • Connecting Cables: Should be included. • Splash Guard and Chip Collecting Tray: 1 unit • Cutter Set with Tungsten Inserts: 1 set • Tungsten Disposable Tips (Ten Piece Set): 1 set • Sample Workpieces: Nylon Rod, Aluminium Rod 	01
10	CNC Router	<ul style="list-style-type: none"> • X, Y, Z Working Area: Minimum 1300 x 2500 x 250 mm or better • Resolution: ± 0.03/300 mm • Repeatability: ± 0.03 mm • Spindle Specifications: <ul style="list-style-type: none"> • CNC Spindle: 5 to 6 KW Power Spindle with Water Cooling Mechanism • Max RPM: 0-24000 rpm • Max Working Speed: 0-18000 mm/min • Max Power Consumption: 5.5 KW • Structural Specifications: <ul style="list-style-type: none"> • Lathe Structure: Welding Steel Structure • X, Y, Z Structure: Rack Pinion and Ball Screw linear Rails • AC 220V ± 50V, 50/60 Hz, Single Phase • AC 415V ± 50V, 50/60 Hz, Three Phase • The system should support both Stepper and Servo motors. • Table Type: T-slot • Linear Guide: Hg 20 for X, Y, and Z axes • Command Code: The system should support G Code formats (*nc, *mmg, *plt, *cnc). • Operating System: DSP Control System • Memory: 128 MB or support for Flash Drive 	01

		<ul style="list-style-type: none"> Dust Collector: The system should include a dust collector hood. 																																			
11	Soldering Station	<table border="1"> <tr> <td>Dimensions L x W x H (mm)</td> <td>Min. 150 x 120 x 98 or better</td> </tr> <tr> <td>Display</td> <td>Digital LC Display</td> </tr> <tr> <td>ESD Safe</td> <td>Yes</td> </tr> <tr> <td>Channels</td> <td>1</td> </tr> <tr> <td>Temperature range (depends on tool) °C</td> <td>100 – 450 ± 100</td> </tr> <tr> <td>Temperature range (depends on tool) °F</td> <td>200 – 850 ± 100</td> </tr> <tr> <td>Temperature accuracy °C</td> <td>Average tip temperature can be "offset" to +/- 5°C at idle with no load</td> </tr> <tr> <td>Temperature accuracy °F</td> <td>Average tip temperature can be "offset" to +/- 9°F at idle with no load</td> </tr> <tr> <td>Temperature stability °C</td> <td>± 6</td> </tr> <tr> <td>Temperature stability °F</td> <td>± 10</td> </tr> <tr> <td>Heating time (approx.) in seconds (50–350 °C/120–660 °F)</td> <td>28 sec or less than this.</td> </tr> <tr> <td>Power</td> <td>85 W ± 20 W</td> </tr> <tr> <td>Voltage</td> <td>120 V ± 20 V</td> </tr> </table>	Dimensions L x W x H (mm)	Min. 150 x 120 x 98 or better	Display	Digital LC Display	ESD Safe	Yes	Channels	1	Temperature range (depends on tool) °C	100 – 450 ± 100	Temperature range (depends on tool) °F	200 – 850 ± 100	Temperature accuracy °C	Average tip temperature can be "offset" to +/- 5°C at idle with no load	Temperature accuracy °F	Average tip temperature can be "offset" to +/- 9°F at idle with no load	Temperature stability °C	± 6	Temperature stability °F	± 10	Heating time (approx.) in seconds (50–350 °C/120–660 °F)	28 sec or less than this.	Power	85 W ± 20 W	Voltage	120 V ± 20 V	01								
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Standard accessories	User manual, Power cord & test leads 4 nos.																																											

15	Function Generator	<ul style="list-style-type: none"> • Output Function: Sine, Square, Triangle, TTL • Frequency Range (For Sine, Square): 0.1Hz ~ 3MHz • Frequency Range (For Triangle): 0.1Hz ~ 1MHz • Resolution: 0.1Hz maximum • Stability: ± 20ppm • Accuracy: ± 20ppm • Aging: Not more than 5 ppm per year • Amplitude Range: 10Vp-p (into 50 load) • Amplitude Accuracy: $\pm 20\%$ at maximum position • Impedance: $50\Omega \pm 10\%$ • Attenuator: $-40\text{dB} \pm 1\text{dB} \times 1$ • Display: Min. 6-digit LED display or better • Output Control: ON/OFF selector • Power source: AC 240V, 220V, 110V 10%, 50/60Hz • Ambient Temperature 0 ~ 40 °C • Dimension: Max 255(W) x 95(H) x 295(D) mm 	01																																														
16	Tabletop Multimeter	<table border="1"> <tr> <td colspan="2" style="text-align: center;">DC VOLTAGE</td> </tr> <tr> <td>Range</td> <td>500mV, 5V, 50V, 500V, 1000V 5 ranges</td> </tr> <tr> <td>Accuracy</td> <td>$\pm(0.03\% \text{ rdg} + 4 \text{ digits})$</td> </tr> <tr> <td>Input Impedance</td> <td>10MΩ</td> </tr> <tr> <td colspan="2" style="text-align: center;">AC VOLTAGE True RMS (AC or AC+DC True RMS)</td> </tr> <tr> <td>Range</td> <td>500mV, 5V, 50V, 500V, 1000V 5 ranges</td> </tr> <tr> <td>Accuracy</td> <td>500mV ~ 50V 3 ranges: 20Hz ~ 45Hz: $\pm(1\% \text{ rdg} + 15 \text{ digits})$ 45Hz ~ 2kHz: $\pm(0.5\% \text{ rdg} + 15 \text{ digits})$ 2kHz ~ 10kHz: $\pm(1\% \text{ rdg} + 15 \text{ digits})$ 10kHz ~ 20kHz: $\pm(2\% \text{ rdg} + 30 \text{ digits})$ 20kHz ~ 50kHz: $\pm(5\% \text{ rdg} + 30 \text{ digits})$ 500V, 1000V 2 ranges: 45Hz ~ 1kHz: $\pm(0.5\% \text{ rdg} + 15 \text{ digits})$</td> </tr> <tr> <td>Input Impedance</td> <td>10MΩ</td> </tr> <tr> <td colspan="2" style="text-align: center;">DC CURRENT</td> </tr> <tr> <td>Range</td> <td>500μA, 5mA, 50mA, 500mA, 2A, 20A 6 ranges</td> </tr> <tr> <td>Accuracy</td> <td>500μA ~ 500mA 4 ranges : $\pm(0.02\% \text{ rdg} + 2 \text{ digits})$ 2A ~ 20A 2 ranges : $\pm(0.3\% \text{ rdg} + 2 \text{ digits})$</td> </tr> <tr> <td colspan="2" style="text-align: center;">AC CURRENT True RMS (AC or AC+DC True RMS)</td> </tr> <tr> <td>Range</td> <td>500μA, 5mA, 50mA, 500mA, 2A, 20A 6 ranges</td> </tr> <tr> <td>Accuracy</td> <td>500μA ~ 20A 6 ranges 20Hz ~ 45Hz: $\pm(1\% \text{ rdg} + 15 \text{ digits})$ 45Hz ~ 2kHz: $\pm(0.5\% \text{ rdg} + 15 \text{ digits})$ 500μA ~ 50mA 3 ranges 2kHz ~ 10kHz: $\pm(1\% \text{ rdg} + 15 \text{ digits})$ 10kHz ~ 20kHz: $\pm(2\% \text{ rdg} + 15 \text{ digits})$</td> </tr> <tr> <td colspan="2" style="text-align: center;">RESISTANCE</td> </tr> <tr> <td>Range</td> <td>500Ω, 5kΩ, 50kΩ, 500kΩ, 5MΩ, 20MΩ 6 ranges</td> </tr> <tr> <td>Accuracy</td> <td>500Ω range : $\pm(0.1\% \text{ rdg} + 4 \text{ digits})$ 5kΩ ~ 500kΩ 3 ranges : $\pm(0.1\% \text{ rdg} + 2 \text{ digits})$ 5MΩ range : $\pm(0.2\% \text{ rdg} + 2 \text{ digits})$ 20MΩ range : $\pm(0.3\% \text{ rdg} + 2 \text{ digits})$</td> </tr> <tr> <td>DIODE TEST</td> <td>Maximum forward voltage 1.5V, open voltage 2.8V</td> </tr> <tr> <td colspan="2" style="text-align: center;">CAPACITANCE</td> </tr> <tr> <td>Range</td> <td>5nF, 50nF, 500nF, 5μF, 50μF 5 ranges</td> </tr> <tr> <td>Accuracy</td> <td>$\pm(2\% \text{ rdg} + 4 \text{ digits})$</td> </tr> <tr> <td colspan="2" style="text-align: center;">FREQUENCY</td> </tr> <tr> <td>Input Level (Sine Wave)</td> <td>mV range : 10Hz ~ 50kHz >120mV 50kHz ~ 150kHz >200mV 5V ~ 50V range : 10Hz ~ 200kHz >1.2V 500V range : 20Hz ~ 1kHz >12V</td> </tr> </table>	DC VOLTAGE		Range	500mV, 5V, 50V, 500V, 1000V 5 ranges	Accuracy	$\pm(0.03\% \text{ rdg} + 4 \text{ digits})$	Input Impedance	10M Ω	AC VOLTAGE True RMS (AC or AC+DC True RMS)		Range	500mV, 5V, 50V, 500V, 1000V 5 ranges	Accuracy	500mV ~ 50V 3 ranges: 20Hz ~ 45Hz: $\pm(1\% \text{ rdg} + 15 \text{ digits})$ 45Hz ~ 2kHz: $\pm(0.5\% \text{ rdg} + 15 \text{ digits})$ 2kHz ~ 10kHz: $\pm(1\% \text{ rdg} + 15 \text{ digits})$ 10kHz ~ 20kHz: $\pm(2\% \text{ rdg} + 30 \text{ digits})$ 20kHz ~ 50kHz: $\pm(5\% \text{ rdg} + 30 \text{ digits})$ 500V, 1000V 2 ranges: 45Hz ~ 1kHz: $\pm(0.5\% \text{ rdg} + 15 \text{ digits})$	Input Impedance	10M Ω	DC CURRENT		Range	500 μ A, 5mA, 50mA, 500mA, 2A, 20A 6 ranges	Accuracy	500 μ A ~ 500mA 4 ranges : $\pm(0.02\% \text{ rdg} + 2 \text{ digits})$ 2A ~ 20A 2 ranges : $\pm(0.3\% \text{ rdg} + 2 \text{ digits})$	AC CURRENT True RMS (AC or AC+DC True RMS)		Range	500 μ A, 5mA, 50mA, 500mA, 2A, 20A 6 ranges	Accuracy	500 μ A ~ 20A 6 ranges 20Hz ~ 45Hz: $\pm(1\% \text{ rdg} + 15 \text{ digits})$ 45Hz ~ 2kHz: $\pm(0.5\% \text{ rdg} + 15 \text{ digits})$ 500 μ A ~ 50mA 3 ranges 2kHz ~ 10kHz: $\pm(1\% \text{ rdg} + 15 \text{ digits})$ 10kHz ~ 20kHz: $\pm(2\% \text{ rdg} + 15 \text{ digits})$	RESISTANCE		Range	500 Ω , 5k Ω , 50k Ω , 500k Ω , 5M Ω , 20M Ω 6 ranges	Accuracy	500 Ω range : $\pm(0.1\% \text{ rdg} + 4 \text{ digits})$ 5k Ω ~ 500k Ω 3 ranges : $\pm(0.1\% \text{ rdg} + 2 \text{ digits})$ 5M Ω range : $\pm(0.2\% \text{ rdg} + 2 \text{ digits})$ 20M Ω range : $\pm(0.3\% \text{ rdg} + 2 \text{ digits})$	DIODE TEST	Maximum forward voltage 1.5V, open voltage 2.8V	CAPACITANCE		Range	5nF, 50nF, 500nF, 5 μ F, 50 μ F 5 ranges	Accuracy	$\pm(2\% \text{ rdg} + 4 \text{ digits})$	FREQUENCY		Input Level (Sine Wave)	mV range : 10Hz ~ 50kHz >120mV 50kHz ~ 150kHz >200mV 5V ~ 50V range : 10Hz ~ 200kHz >1.2V 500V range : 20Hz ~ 1kHz >12V	01
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18	Hot Air Gun	<table border="1"> <tr> <td>Rated Input Power</td> <td>1,800 W ± 500 W</td> </tr> <tr> <td>Voltage, electrical</td> <td>230 V ± 20 V</td> </tr> <tr> <td>Sound power level</td> <td>70 dB(A)</td> </tr> <tr> <td>Working temperature</td> <td>60 – 550°C</td> </tr> <tr> <td>Airflow</td> <td>350 – 550 l/min</td> </tr> <tr> <td>Heat-up time</td> <td>1 Sec or better</td> </tr> <tr> <td>Control, airflow</td> <td>3-stage</td> </tr> </table>	Rated Input Power	1,800 W ± 500 W	Voltage, electrical	230 V ± 20 V	Sound power level	70 dB(A)	Working temperature	60 – 550°C	Airflow	350 – 550 l/min	Heat-up time	1 Sec or better	Control, airflow	3-stage	01										
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19	Table Saw	<table border="1"> <tr> <td>Rated input power</td> <td>1800 W ± 200 W</td> </tr> <tr> <td>Incline setting</td> <td>47 ° L / 0 ° R</td> </tr> <tr> <td>Table size</td> <td>Up to 555 x 555 mm</td> </tr> <tr> <td>Saw blade diameter</td> <td>Min 254 mm or better</td> </tr> <tr> <td>Cutting height 90°</td> <td>80 to 100 mm</td> </tr> <tr> <td>Cutting height 45°</td> <td>55 mm</td> </tr> <tr> <td>Saw blade bore diameter</td> <td>30 mm</td> </tr> <tr> <td>No-load speed*</td> <td>4300 rpm</td> </tr> <tr> <td>Tool dimensions (Width x Length x Height)</td> <td>Max 690 x 620 x 1000 mm</td> </tr> <tr> <td>Max. cutting capacity on the right</td> <td>545 mm</td> </tr> <tr> <td>Cutting height 90°</td> <td>80 mm</td> </tr> <tr> <td>Cutting height 45°</td> <td>55 mm</td> </tr> </table>	Rated input power	1800 W ± 200 W	Incline setting	47 ° L / 0 ° R	Table size	Up to 555 x 555 mm	Saw blade diameter	Min 254 mm or better	Cutting height 90°	80 to 100 mm	Cutting height 45°	55 mm	Saw blade bore diameter	30 mm	No-load speed*	4300 rpm	Tool dimensions (Width x Length x Height)	Max 690 x 620 x 1000 mm	Max. cutting capacity on the right	545 mm	Cutting height 90°	80 mm	Cutting height 45°	55 mm	01
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20	Vacuum Cleaner	<table border="1"> <tr> <td>Container volume, net</td> <td>10 l</td> </tr> <tr> <td>Rated input power</td> <td>Approx. 1,100 W</td> </tr> <tr> <td>Container volume, gross</td> <td>15 l</td> </tr> <tr> <td>Container volume, net, water</td> <td>8 l</td> </tr> <tr> <td>Tool dimensions (length)</td> <td>Max 440 mm or better</td> </tr> <tr> <td>Tool dimensions (height)</td> <td>Max 440 mm or better</td> </tr> <tr> <td>Filter surface area</td> <td>2.300 cm²</td> </tr> <tr> <td>Max. airflow rate (turbine)</td> <td>53 l/sec</td> </tr> <tr> <td>Max. vacuum pressure (turbine)</td> <td>270 mbar</td> </tr> <tr> <td>Wheel</td> <td>4</td> </tr> <tr> <td>Voltage, electrical</td> <td>230V</td> </tr> </table>	Container volume, net	10 l	Rated input power	Approx. 1,100 W	Container volume, gross	15 l	Container volume, net, water	8 l	Tool dimensions (length)	Max 440 mm or better	Tool dimensions (height)	Max 440 mm or better	Filter surface area	2.300 cm ²	Max. airflow rate (turbine)	53 l/sec	Max. vacuum pressure (turbine)	270 mbar	Wheel	4	Voltage, electrical	230V	01
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21	Rotary Tool Kit	<table border="1"> <tr> <td>Cord Length</td> <td>6ft</td> </tr> <tr> <td>Speed</td> <td>5,000 to 35,000 RPM</td> </tr> <tr> <td>Tool Level</td> <td>1 - Corded – variable speed high</td> </tr> </table>	Cord Length	6ft	Speed	5,000 to 35,000 RPM	Tool Level	1 - Corded – variable speed high	01																
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22	Rubber Grip Hacksaw	<table border="1"> <tr> <td>Depth of Throat</td> <td>3 inch or higher</td> </tr> <tr> <td>Blade Length</td> <td>254mm / 10 Inch</td> </tr> </table>	Depth of Throat	3 inch or higher	Blade Length	254mm / 10 Inch	02																		
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23	Junior Hacksaw	<table border="1"> <tr> <td>Blade Length</td> <td>150mm/6 inch</td> </tr> </table>	Blade Length	150mm/6 inch	02																				
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24	Hacksaw Mini	<table border="1"> <tr> <td>Blade Length (in)</td> <td>10 in or higher</td> </tr> <tr> <td>Handle Material</td> <td>Metal</td> </tr> <tr> <td>Overall Length (in)</td> <td>11 in</td> </tr> </table>	Blade Length (in)	10 in or higher	Handle Material	Metal	Overall Length (in)	11 in	02																
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25	Claw Hammer Steel Shaft	<table border="1"> <tr> <td>Dimensions</td> <td>27.8 x 12.4 x 3.6 cm</td> </tr> </table>	Dimensions	27.8 x 12.4 x 3.6 cm	02																				
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26	Ball Pein Hammer	<table border="1"> <tr> <td>Weight</td> <td>110 ± 20 gms</td> </tr> <tr> <td>Dimensions</td> <td>32.6 x 10 x 2 cm or better</td> </tr> </table>	Weight	110 ± 20 gms	Dimensions	32.6 x 10 x 2 cm or better	02																		
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27	Rubber Mallet	<table border="1"> <tr> <td>Dimensions</td> <td>33.6 x 9.6 x 6.2 cm or better</td> </tr> </table>	Dimensions	33.6 x 9.6 x 6.2 cm or better	02																				
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28	Ring spanner set 12Pcs	<table border="1"> <tr> <td>Pc/Set</td> <td>12 pcs</td> </tr> <tr> <td>Size</td> <td>6mm to 32mm</td> </tr> </table>	Pc/Set	12 pcs	Size	6mm to 32mm	01																		
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29	Open end spanner set 12pcs	<table border="1"> <tr> <td>Weight</td> <td>1 to 2.0 Kg</td> </tr> <tr> <td>Pc/Set</td> <td>12 pcs</td> </tr> <tr> <td>Size</td> <td>6mm to 32mm</td> </tr> </table>	Weight	1 to 2.0 Kg	Pc/Set	12 pcs	Size	6mm to 32mm	01																
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30	Combination Spanner set 8 Pcs	Weight	600-700 g	01
		Pc/Set	8 pcs	
31	Allen Hex Key 10pcs	Hex Key Size	1.5mm, 2mm, 2.5mm, 3mm ,4mm, 5mm, 5.5mm, 6mm, 8mm, 10mm	02
		Pc/Set	10pcs	
32	Allen key 12pcs ball type	Ball Key Size	1/16",5/64",3/32",7/64",1/8",9/64", >5/32",3/16",7/32",1/4",5/16",3/8"	02
		Pc/Set	12pcs	
33	Combination pliers	weight	400-450 g	02
		Size	8" / 200 mm or more	
34	Long Nose plier	weight	400-450 g	02
		Size	180mm / 6"	
35	Circlip bent	weight	400-450 g	02
		Size	130mm / 5"	
36	Circlip Straight	weight	400-450 g	02
		Size	130mm / 5"	
37	Diagonal Cutting Pliers	weight	250-300 g	02
		Size	180mm / 7"	
38	Wire stripper	Weight	250-300 g	02
		Size	130mm	
39	Adjustable Spanner	Size	150mm	02
40	Pipe Wrench	Size	300mm	01
41	C-Clamp	Size	75 mm	02
42	C-Clamp	Size	150mm	02
43	Snap-off Knife	Size	18 mm	02
44	16pcs screwdriver set	Pieces per set	16 Pcs	01

45	6pcs precision screw driver set	<table border="1"> <tr> <td>Pieces per set</td> <td>6 Pcs</td> </tr> </table>	Pieces per set	6 Pcs	02						
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46	Max steel snip cutter	<table border="1"> <tr> <td>Length</td> <td>250 mm</td> </tr> </table>	Length	250 mm	02						
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47	PVC Pipe cutter	<table border="1"> <tr> <td>Overall Length</td> <td>42 mm</td> </tr> </table>	Overall Length	42 mm	02						
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48	Hot glue gun	<table border="1"> <tr> <td>Power</td> <td>40W ± 10 W</td> </tr> <tr> <td>Weight</td> <td>350-400 g</td> </tr> </table>	Power	40W ± 10 W	Weight	350-400 g	04				
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49	Tool Kit 126pieces	<table border="1"> <tr> <td>Weight</td> <td>2-3 Kg</td> </tr> </table>	Weight	2-3 Kg	01						
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50	Small file set	<table border="1"> <tr> <td>Length</td> <td>160 mm</td> </tr> </table>	Length	160 mm	02						
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51	Big file set	<table border="1"> <tr> <td>Length</td> <td>200 mm</td> </tr> </table>	Length	200 mm	02						
Length	200 mm										
52	Punch set	<table border="1"> <tr> <td>Weigh</td> <td>350-450 g</td> </tr> </table>	Weigh	350-450 g	02						
Weigh	350-450 g										
53	Bench Wise	<table border="1"> <tr> <td>Base Type</td> <td>Fixed</td> </tr> <tr> <td>Size</td> <td>2-3 ^{1/2} Inch</td> </tr> <tr> <td>Jaw Width</td> <td>60mm</td> </tr> </table>	Base Type	Fixed	Size	2-3 ^{1/2} Inch	Jaw Width	60mm	02		
Base Type	Fixed										
Size	2-3 ^{1/2} Inch										
Jaw Width	60mm										
54	Drill bit set	<table border="1"> <tr> <td>Width Across Flat (mm)</td> <td>1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13</td> </tr> <tr> <td>Weight kg</td> <td>1-2</td> </tr> <tr> <td>Size (mm)</td> <td>205x115x55</td> </tr> </table>	Width Across Flat (mm)	1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13	Weight kg	1-2	Size (mm)	205x115x55	02		
Width Across Flat (mm)	1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5, 9, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13										
Weight kg	1-2										
Size (mm)	205x115x55										
55	Baby wise	<table border="1"> <tr> <td>Vice Type</td> <td>Bench</td> </tr> <tr> <td>Size</td> <td>2 Inch</td> </tr> <tr> <td>Jaw Width</td> <td>50 mm</td> </tr> </table>	Vice Type	Bench	Size	2 Inch	Jaw Width	50 mm	02		
Vice Type	Bench										
Size	2 Inch										
Jaw Width	50 mm										
56	Digital Vernier Calliper	<table border="1"> <tr> <td>Type of Product</td> <td>Digital Calliper</td> </tr> <tr> <td>Measuring Range (mm)</td> <td>0-150 mm</td> </tr> <tr> <td>Resolution (mm)</td> <td>0.01 mm</td> </tr> <tr> <td>Measuring Range (Inch)</td> <td>0-6 Inch</td> </tr> </table>	Type of Product	Digital Calliper	Measuring Range (mm)	0-150 mm	Resolution (mm)	0.01 mm	Measuring Range (Inch)	0-6 Inch	05
Type of Product	Digital Calliper										
Measuring Range (mm)	0-150 mm										
Resolution (mm)	0.01 mm										
Measuring Range (Inch)	0-6 Inch										
57	Micrometer	<table border="1"> <tr> <td>Resolution</td> <td>0.001mm/0.00005''</td> </tr> <tr> <td>Measuring Range</td> <td>0-25mm / 0-1''</td> </tr> </table>	Resolution	0.001mm/0.00005''	Measuring Range	0-25mm / 0-1''	02				
Resolution	0.001mm/0.00005''										
Measuring Range	0-25mm / 0-1''										
58	Steel Rule	<table border="1"> <tr> <td>Type of Product</td> <td>Steel Rule</td> </tr> <tr> <td>Size Of Scale / Gage in (Inch)</td> <td>12 Inch/300mm</td> </tr> <tr> <td>Material</td> <td>Stainless Steel</td> </tr> </table>	Type of Product	Steel Rule	Size Of Scale / Gage in (Inch)	12 Inch/300mm	Material	Stainless Steel	05		
Type of Product	Steel Rule										
Size Of Scale / Gage in (Inch)	12 Inch/300mm										
Material	Stainless Steel										

59	Steel Rule			05									
			<table border="1"> <tr> <td>Type of Product</td> <td>Steel Rule</td> </tr> <tr> <td>Size Of Scale / Gage in (Inch)</td> <td>24 Inch/600mm</td> </tr> <tr> <td>Material</td> <td>Stainless Steel</td> </tr> </table>	Type of Product	Steel Rule	Size Of Scale / Gage in (Inch)	24 Inch/600mm	Material	Stainless Steel				
		Type of Product	Steel Rule										
		Size Of Scale / Gage in (Inch)	24 Inch/600mm										
Material	Stainless Steel												
60	Degree Protector		<table border="1"> <tr> <td>Range</td> <td>360^o</td> </tr> </table>	Range	360 ^o	02							
Range	360 ^o												
61	Inside calliper			02									
			<table border="1"> <tr> <td>Material</td> <td>Carbon Steel</td> </tr> <tr> <td>Measuring Range (mm)</td> <td>20-170 mm</td> </tr> <tr> <td>Jaw Length (mm)</td> <td>150mm</td> </tr> </table>		Material	Carbon Steel	Measuring Range (mm)	20-170 mm	Jaw Length (mm)	150mm			
		Material	Carbon Steel										
		Measuring Range (mm)	20-170 mm										
Jaw Length (mm)	150mm												
62	Outside calliper			02									
			<table border="1"> <tr> <td>Material</td> <td>Carbon Steel</td> </tr> <tr> <td>Measuring Range (mm)</td> <td>0-140 mm</td> </tr> <tr> <td>Jaw Length (mm)</td> <td>155 mm</td> </tr> </table>		Material	Carbon Steel	Measuring Range (mm)	0-140 mm	Jaw Length (mm)	155 mm			
		Material	Carbon Steel										
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Jaw Length (mm)	155 mm												
63	Engineering Square			02									
			<table border="1"> <tr> <td>Size (mm)</td> <td>150*80 mm or better</td> </tr> <tr> <td>Material</td> <td>Carbon Steel</td> </tr> </table>		Size (mm)	150*80 mm or better	Material	Carbon Steel					
		Size (mm)	150*80 mm or better										
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64	Meter Tape	Length: 30 meters		01									
65	Measuring Tape	Length: 3 meters		05									
66	Measuring Tape	Length: 5 meters		05									
67	Spirit Level			03									
			<table border="1"> <tr> <td>Number Of Vials</td> <td>3</td> </tr> <tr> <td>Level Accuracy</td> <td>0.5 mm/m</td> </tr> <tr> <td>Length (mm)</td> <td>300 mm</td> </tr> <tr> <td>Type of Product</td> <td>Level</td> </tr> </table>		Number Of Vials	3	Level Accuracy	0.5 mm/m	Length (mm)	300 mm	Type of Product	Level	
		Number Of Vials	3										
		Level Accuracy	0.5 mm/m										
		Length (mm)	300 mm										
Type of Product	Level												
68	Goggle	Goggle – Industrial Standard Make		05									
69	Apron	Apron – Industrial Standard Make		05									
70	Earmuff	Earmuff - Industrial Standard Make		05									
71	Mask	Mask - Industrial Standard Make		50									
72	Fire Extinguisher	Fire Extinguisher – ABC Type		05									
73	First aid kit	First aid kit		01									
74	Hand Gloves	Hand Gloves - Industrial Standard Make		10									
75	License	Autodesk fusion 360 - 3years License		02									
76	Desktop			05									
			<table border="1"> <tr> <td>Core i7 10th Gen or equivalent processor</td> </tr> <tr> <td>16 GB RAM / Graphics card 2 GB</td> </tr> <tr> <td>512 GB SSD</td> </tr> <tr> <td>21-inch screen</td> </tr> <tr> <td>Windows 10 or better, Home operating system, 3-year licence</td> </tr> </table>		Core i7 10th Gen or equivalent processor	16 GB RAM / Graphics card 2 GB	512 GB SSD	21-inch screen	Windows 10 or better, Home operating system, 3-year licence				
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77	A3 Laser Printer	<table border="1"> <tr> <td>Functions</td> <td>Print, Copy, Scan (no fax)</td> </tr> <tr> <td>Input capacity</td> <td>Up to 150 sheets or more</td> </tr> <tr> <td>Output capacity</td> <td>Up to 50 sheets or more</td> </tr> <tr> <td>Print technology</td> <td>Laser</td> </tr> <tr> <td>Print Speed</td> <td>Up to 18 ppm (black), Up to 4 ppm (color)</td> </tr> <tr> <td>Print Resolution</td> <td>Up to 600 x 600 dpi</td> </tr> <tr> <td>Printer smart software features</td> <td>Manual duplex and booklet print, N-up printing, skip blank pages, poster print, watermarks</td> </tr> <tr> <td>Scan technology</td> <td>Contact Image Sensor (CIS)</td> </tr> <tr> <td>Scan resolution, hardware</td> <td>Up to 4,800 x 4,800 dpi</td> </tr> <tr> <td>Maximum flatbed scan size (metric)</td> <td>216 x 297 mm</td> </tr> <tr> <td>Bit Dept</td> <td>10-bit (color)</td> </tr> <tr> <td>Twain version</td> <td>Version 1.9 or better</td> </tr> <tr> <td>Connectivity</td> <td>USB, Wi-Fi, Wi-Fi Direct, Lan connect</td> </tr> <tr> <td>Monthly Duty Cycle</td> <td>Up to 20,000 pages</td> </tr> <tr> <td>Maximum print area (metric)</td> <td>216 x 356 mm</td> </tr> <tr> <td>Maximum Memory</td> <td>128MB or more</td> </tr> <tr> <td>Power Supply</td> <td>110-volt input voltage: 110 to 127 VAC, 50/60 Hz and 220-volt input voltage: 220 to 240 VAC, 50/60 Hz</td> </tr> <tr> <td>Power Consumption</td> <td>300 watts (Active Printing), 38 watts (Ready), 1.9 watts (Sleep), 0.2 watts (Manual off); 0.2 watts (Auto off/Manual on)</td> </tr> <tr> <td>Minimum system requirements for Windows</td> <td>Windows 7 or newer, Intel® Pentium® IV 1 GHz 32-bit or 64-bit processor or higher, 1 GB RAM, 16 GB HDD or better</td> </tr> <tr> <td>Safety</td> <td>IEC 60950-1: 2005 +A1: 2009 +A2 2013 (International); EN 60950-1: 2006 +A11: 2009 +A1: 2010 +A12: 2011 +A2: 2013 (EU); IEC/EN 60825-1: 2014 (Class 1 Laser Product); EN 62479: 2010 /IEC 62749: 2010; Low Voltage Directive 2006/95/EC with CE Mark (Europe); GS Certificate (Germany, Europe); UL/cUL Listed and UC CoC (US/Canada); CAN/CSA C22.2 No. 60950-1-07 2nd Ed. 2014-10; Compliance with Laser safety standards 21 CFR 1002.10 and 1002.11 except for deviations pursuant to Laser notice No. 50, Dated June 24, 2007; Other safety approvals as required by individual countries</td> </tr> <tr> <td>Number of print cartridges</td> <td>4 (1 each black, cyan, magenta, yellow)</td> </tr> </table>	Functions	Print, Copy, Scan (no fax)	Input capacity	Up to 150 sheets or more	Output capacity	Up to 50 sheets or more	Print technology	Laser	Print Speed	Up to 18 ppm (black), Up to 4 ppm (color)	Print Resolution	Up to 600 x 600 dpi	Printer smart software features	Manual duplex and booklet print, N-up printing, skip blank pages, poster print, watermarks	Scan technology	Contact Image Sensor (CIS)	Scan resolution, hardware	Up to 4,800 x 4,800 dpi	Maximum flatbed scan size (metric)	216 x 297 mm	Bit Dept	10-bit (color)	Twain version	Version 1.9 or better	Connectivity	USB, Wi-Fi, Wi-Fi Direct, Lan connect	Monthly Duty Cycle	Up to 20,000 pages	Maximum print area (metric)	216 x 356 mm	Maximum Memory	128MB or more	Power Supply	110-volt input voltage: 110 to 127 VAC, 50/60 Hz and 220-volt input voltage: 220 to 240 VAC, 50/60 Hz	Power Consumption	300 watts (Active Printing), 38 watts (Ready), 1.9 watts (Sleep), 0.2 watts (Manual off); 0.2 watts (Auto off/Manual on)	Minimum system requirements for Windows	Windows 7 or newer, Intel® Pentium® IV 1 GHz 32-bit or 64-bit processor or higher, 1 GB RAM, 16 GB HDD or better	Safety	IEC 60950-1: 2005 +A1: 2009 +A2 2013 (International); EN 60950-1: 2006 +A11: 2009 +A1: 2010 +A12: 2011 +A2: 2013 (EU); IEC/EN 60825-1: 2014 (Class 1 Laser Product); EN 62479: 2010 /IEC 62749: 2010; Low Voltage Directive 2006/95/EC with CE Mark (Europe); GS Certificate (Germany, Europe); UL/cUL Listed and UC CoC (US/Canada); CAN/CSA C22.2 No. 60950-1-07 2nd Ed. 2014-10; Compliance with Laser safety standards 21 CFR 1002.10 and 1002.11 except for deviations pursuant to Laser notice No. 50, Dated June 24, 2007; Other safety approvals as required by individual countries	Number of print cartridges	4 (1 each black, cyan, magenta, yellow)	01
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Number of print cartridges	4 (1 each black, cyan, magenta, yellow)																																												
78	Vacuum Oven	<ul style="list-style-type: none"> • Temperature Range: RT +10 °C to 200 °C • Display Resolution: Upto 0.1 °C • Temperature Stability: ±1 °C • Vacuum Degree: 133 Pa • Chamber Material: Stainless Steel • Aluminium Shelves: Max 2 • Ambient Temperature: +5 - 40 °C • Power Consumption: Max 1450 W • Power Supply: 220-240 Volt, 50 Hz Single Phase • Interior Dimension (WxDxH): Max 420 x 375 x 350 mm • Exterior Dimension (WxDxH): Max 735 x 565 x 555 mm 	01																																										

79	Spin Coating System	<ul style="list-style-type: none"> • Based on a Glass Substrate of Dimension 38 mm (L) X 25 mm (W) & Thickness 1 mm or better. <ul style="list-style-type: none"> ➤ Programmable Speed Range: 100-10,000 R.P.M ➤ Programmable Acceleration Period: 1-250 Seconds ➤ Programmable Acceleration Range: 40-5,000 R.P.M/sec • Programmable Model ideal for Scientific Research Works • PTFE coated SS Working Chamber Diameter: Min 200 mm or better • Programmable Controlling Duration Range: 1-9,999 sec/step • Real-time Display of R.P.M vs. Time in 4 Line LCD Display • 2 User Programs • 10 Steps/Program • Warm-up Option • Calibration Option • Spill Drainage Facility • High-speed DC Motor for Fast Speed Reaching • Non-volatile Program Memory • User-friendly Firmware Interface • N₂ & other Inert Gas Purging Port • Integrated Power On/Off Switch • Integrated Vacuum Release Switch • Transparent Photo-resist Acrylic Safety Lid • Input & Controlling through Key-pad • Delrin Substrate Holder • Standard Oil-free Vacuum Pump <ul style="list-style-type: none"> ➤ Vacuum: Max. 550 mm/Hg ➤ Flow Rate: Upto 15 l/min ➤ Operating Pressure: Max 25 psi ➤ Power: 1/20 HP ➤ Dimension: Max 155 mm x 115 mm x 145 mm ➤ No Lubrication required ➤ Noiseless ➤ Portable Machine ➤ All Parts made from Special Graded Aluminium die-cast Material for Light Weight & Good Strength ➤ Diaphragms are made of Special Type Polynylon & Reinforced Neoprene Rubber ➤ Built-in Micro-suction Filter ➤ Extra-large Bearings for Trouble-free & Smooth Running 	01
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Infrastructure

Sr. No.	Feature	Description/ Specification	Qty. (Nos)
80	ESD Workstation	<p>Size: 1200(L)mm x 600(W)mm x 1800(750) (H)mm</p> <p>The working surface should have a resistance around 100 Ω. Surface resistivity of the ESD mat should be 1 to 100 MΩ. The workbench should be completely ground and static safe dissipative with laminated tabletop. The workbench should include: ESD Workstation in 40 x 80 Al with ESD Powder Coating 18mm thk ESD laminated post formed MDF Tabletop.</p> <p>A working surface mat with grounding cord, An Earth bonding point (EBP) plug, An ESD wrist strap, An EBP bar, Foot grounders (or ESD shoes) Electrical per table: 16A MCB, Ind, 6/16 Amp Sw+Skt - 4 nos.4 ft 20W LED Tube light</p>	01

Material of Construction	Heavy duty welded construction with components made in 22 to 18 +gauge MS Sheet.
Sheets Brand	Tata/ Jindal/ POSCO (certificate provided)
Weight capacity of workstation	Upto 500 kg UDL
Above Worktop Accessories	
Worktop	Particle Board core with plastic laminated top and sides 1 4/9" with waterfall front edge (in light grey color)
Dimension of worktop	60" L x 36" D x 1 4/9" H
Dimensions of Rubber Mat	60" L X 36" D X 6" H or better.
Link Upright (Stater Set)	Frames are sturdy, heavy gauge steel, and are notched front and back at 1" increments for mounting accessories. Starter frames consist of 2 upright posts and a horizontal rail. The footplate is 3 1/2" X 4".
Dimensions of link upright	48"H X 48" W or better
Horizontal power Rail	Horizontal power rail with 2 switches & sockets includes outlets of 15 amps, on/off switch, power cord & socket. Power rail pivots on axis, providing full horizontal adjustability.
Dimension of Horizontal power rail	48" W or better
Adjustable Shelf	Adjustable, heavy gauge steel shelves can be mounted parallel to the work surface or at a 15° angle for easy, ergonomic access. They have a weight capacity of 45-50 kg or more for evenly distributed loads. Shelves are reversible, with the lip either at the front or at the rear to act as a back stop. Supports are attached through a simple double-notch system into slots on the uprights.
Dimensions of Adjustable Shelf	48" W X 15"D or better
Overhead light fixtures	Fluorescent fixture of 2 bulb of 44" length. Tilts up or down 10 degree. Kit includes switch and 8' grounded electrical cord, support track, standard acrylic diffuser and T8 bulbs.
Pegboard Panel & Accessories	The pegboard panel accepts all standard pegging devices like the Spanner tray, Screwdriver holder, Hooks, and Allen key holder. Ideal for placement of commonly used tools.
Dimensions of Pegboard Panel	18"H X 48" W or better
Medium slotted hook	Metal hooks which 1 7/8" from the face of the panel.
Below Worktop Accessories	
Panel Legs	2" X 2" tube leg pair with a formed panel welded in place with cross piece. Legs include glides for leveling on uneven surfaces.
Top Support Rail	Pair of rails support front & back of worksurface to protect integrity of top.
Bottom Shelf	Telescoping heavy gauge steel shelf, 12" deep for use as storage or footrest. 80 ± 20 Kg weight capacity for evenly distributed loads, expect as noted.
Privacy panel	Steel panel attaches to leg or cabinet and runs full length of worksurface. 22 3/4" high.
Hanging Cabinet Specification	
Number of Hanging Cabinet	1 Nos (3 Drawer)
Dimensions of Cabinet	14.06"H X 16.75" W X 19.25" D or better

		<table border="1"> <tr> <td>Drawer</td> <td>2 Nos. of the drawer with 2.75”H & 1 Nos of drawer with 5.75”H</td> </tr> <tr> <td>Centre Locking System</td> <td>Yes</td> </tr> </table>	Drawer	2 Nos. of the drawer with 2.75”H & 1 Nos of drawer with 5.75”H	Centre Locking System	Yes					
Drawer	2 Nos. of the drawer with 2.75”H & 1 Nos of drawer with 5.75”H										
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82	Storage Unit	<table border="1"> <tr> <td>Size</td> <td>300 x 900 x 1800 mm</td> </tr> <tr> <td>Number of Shelves</td> <td>5</td> </tr> <tr> <td>Capacity</td> <td>300 Kg</td> </tr> <tr> <td colspan="2"> <ul style="list-style-type: none"> • Shelves are Adjustable • Optionally Door with Lock Available. • Dust Free Storage • Space Saving • Lockable Bins with Strippers • Powder Coated • Add-On Shelving Systems are possible </td> </tr> </table>	Size	300 x 900 x 1800 mm	Number of Shelves	5	Capacity	300 Kg	<ul style="list-style-type: none"> • Shelves are Adjustable • Optionally Door with Lock Available. • Dust Free Storage • Space Saving • Lockable Bins with Strippers • Powder Coated • Add-On Shelving Systems are possible 		02
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83	Component Organizer	<ul style="list-style-type: none"> • Cabinet Size: 40 x 25 x 16 cms or better • Drawer Size: 15 x 7.5 x 3.5 cms or better • Suitable for homes, workshops and factories Comes with clear visibility through plastic drawers 	02								
84	Electronic Dry Cabinet with Humidity Controller	<ul style="list-style-type: none"> • Dry Cabinet should have thermoelectric cooling technology (also referred as semiconductor) which is quick, quiet, heatless and therefore protects your items from moisture, moth, mildew, rust, dust, mold, fungus, rust, oxidation, warping and etc. • This camera lens storage is one of the safest dry boxes available - it has safe direct current input therefore there are no leakage risks and potential fire danger. • Our dry cabinet has a humidity sensor which offers accurate humidity control with plus/minus 5 percent differ, you can control the relative humidity level inside this lens storage in the range of 25 to 60 percent. • This dry dehumidification cabinet box begins to work the same second the power is supplied. It has adjustable shelves for easy storage and retrieval. • This dry storage box has wide applications as it may help you to preserve items such as: paintings, paper money, stamps, old books, leather, antiques, musical instruments, camera lenses, cameras, teas, tobacco, precious metals, jewelry, electrical components and etc. • Simply place your valuables in the cabinet and set at the correct humidity level. • Outer Size WxDxH: Max 380 x 390 x 100 mm • Material: Metal 	01								
85	Tool Trolley	<ul style="list-style-type: none"> • Size: Min 740 x 515 x 890 mm • No. of drawers: 5 Nos. • Product: 5 Drawers Closed Tool Trolley • Technical Specifications: Wheels with: Brake, • Handle: Ergonomic, Latches for the Drawers, • Capacities: 3 Drawers Support 15 kg, 2 	01								

86	White Board	<ul style="list-style-type: none"> • Size: 60*90 cm or better • Material: Prime Quality CRCA Tubular Steel, Alloy Aluminium 6063-T6, High Impact Virgin ABS, Paper HC Core and Pragati Systems' Signature Resin Magnetic Writing Grade Sheets 	01
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Appropriate number of tables of adequate size and strength should be provided for placing the benchtop equipment.

Optional Items (to be quoted separately)

01	UV Exposure Machine	<ul style="list-style-type: none"> • Single and double sided exposure. Each side radiated by a 594LEDs / 30W UV LED panel (The unit has a total of 1188 LEDs providing 60W of LED light) or better. • The light panels can be calibrated to give even exposure on both sides. • Built-in vacuum pump for laminating artwork and copper-clad. <ul style="list-style-type: none"> ○ The user can define 2-18 speed steps for the vacuum pump. ○ The vacuum pump can be set to automatically turn off a specified time after the radiation finish. • Advanced programmable timer / power control for the light panels with 8 persistent presets. • Audible alarm when radiation is complete. • User input through a rotary knob that also act like a push button plus 15 standalone push buttons. • Tracking of runtime. The total on time is tracked. And the runtime of the two light panels and the vacuum pump are tracked with two values each.
02	PCB DIP Coating Machine	<ul style="list-style-type: none"> • A single operation unit designed for coating of photo resist laminate on copper clad. • The machine ensure uniform controlled thickness of Photo resist on copper clad. • Maximum Board size : • Tank Capacity : 1.5 liters or better • Dips one PCB at a time. • Motorised lead screw system. • Micro switch to prevent motor from getting damage.
03	Oil Free Sound Less Air Compressor	<ul style="list-style-type: none"> • Product Type : Sound Less Air Compressor • Power : 2.2 HP or better • Exhaust Volume : 330 LPM or better • Tank Capacity : 70-100 Liters
04	CMC Mill	<ol style="list-style-type: none"> 1. Acceptable Materials: The system should support resins such as chemical wood and modeling wax. Metal materials are not supported. 2. Operating Range: X-Axis: Upto 410 mm or better Y-Axis: Upto 310 mm or better Z-Axis: Upto 140 mm or better 3. Table Size: Width: Upto 410 mm or better Depth: Upto 310 mm or better 4. Loadable Workpiece Size: X-Axis: Min 400 mm or better Y-Axis: Min 305 mm or better Z-Axis: Min 100 mm or better

		<ol style="list-style-type: none"> 5. Axis Drive: The system should utilize a stepper motor. 6. Feed Rate: XY-Axis: 0.3 in to 141.7 in/min (7 to 3600 mm/min) Z-Axis: 0.3 in to 118.1 in/min (7 to 3000 mm/min) 7. Tool Shank Diameter: The system should support tool shank diameters of 6.35 mm and 3.175 mm or equivalent. 8. Spindle Rotation Speed: The spindle rotation speed should range from 4500 to 15000 rpm. 9. Mechanical Resolution: The system should offer a mechanical resolution of 0.01 mm/step (0.39 mil/step; half step). 10. Spindle Motor: The spindle motor should be a brushless DC motor. 11. Tool Chuck: The system should utilize a collet tool chuck. 12. Tool Change Method: The system should feature an automatic tool changer (ATC). 13. ATC Magazine Capacity: The ATC magazine should have a capacity of 5 tools plus 1 detection pin (6 position capacity). 14. Interface: The system should support a USB interface or better 15. Power Requirements: Voltage: AC 100 to 240 V \pm10%, 50/60 Hz, 1.2 A Overvoltage Category: II, IEC 60664-1 16. Power Consumption: The system should consume approximately 95 W or better. 17. External Dimensions: The minimum external dimensions should be 750 \times 900 \times 730 mm or better. 18. Operating Temperature: The system should operate within a temperature range of 41 to 104°F (5 to 40°C). 19. Humidity: The system should operate within a humidity range of 35 to 80% RH (no condensation). 20. Included Items: The system should include a power cord, USB cable, manual, Roland DG Software Package CD, detection pin, hexagonal screwdriver, hexagonal wrench, wrench, tool holder, tool positioner, and Z0 sensor. 21. Additional Accessories: <ul style="list-style-type: none"> • Tool holder 3 mm: 3 Nos. • Resin Wood: 300x300mm: 5 Nos. • End mill 0.4mm: 2 Nos. • End mill 0.8mm: 2 Nos. • End mill 1 mm: 1 Nos. • End mill 3 mm: 1 Nos. • End mill 6 mm: 1 Nos. • Ball mill 1mm: 1 Nos. • Ball mill 6mm: 1 Nos. • Engraving bit 0.2 mm: 2 Nos. • Double-sided tape Roll of 12mm x 10mtr: 2 Nos. • Copper clad single side 150*100mm: 5 Nos • Copper clad double side 150*100mm: 5 Nos
	<p>Additional Accessories</p>	<ul style="list-style-type: none"> • BioMed Clear V1: 2 Ltr • BioMed Flex 80A: 1 Ltr • IPA: 25 Ltr • Tissue Paper: 10 Pkt • Tray Box: 2 • Nitrile Gloves: 2 pack

6. Additional terms and conditions:

1. The vendor must supply complete technical documentation of all instruments and parts including technical specifications and operating instructions.
2. A complete design along with the clear indication / marking of the specification mentioned in the technical bidding document (wherever possible) of the instrument.
3. Make, model and specification of the list of equipment as mentioned in schedule of requirements.
4. Scanned copy of the technical brochure and website reference of the same must be included in the bid.
5. There must be a local maintenance center with the availability of the spares in India.
6. A declaration from the principal states that the spares will be made available for the equipment for at least 2 years from the date of installation.
7. 3 numbers of Scanned copy of PO (not older than 5 years) of similar or higher specification supplied within India (at least ONE from premier Government Institution and R & D Organization).
8. A duly signed detailed User List (at least 5) with the concerned person's valid contact details, in India where the instrument is still in the operational condition must be provided.
9. In cases where vendor is not the OEM, a copy of the Authorization Certificate issued by the principal in favors of the vendor along with a certified copy of the Agency Agreement between the Principal and Indian vendor. Both these certificates must be up to date.
10. Where applicable, a letter in the official letterhead of the principal declaring the agent as their authorized agency to bid containing the official tender enquiry number as depicted in the CPP portal, must be included with the technical bid.
11. A duly signed separate compliance sheet of the specification (at every point) mentioned in the technical part along with the deviation (if any). This compliance sheet will not be considered as the technical specification of the instrument.
12. Each bidder must mandatorily quote all the items mentioned in technical specification.
13. Partial submission of bid is not permitted. Bidders should apply for all items.
14. The warranty period shall be 2 year from the date of installation of Goods and acceptance at Central University Rajasthan. The supplier shall, in addition, comply with the performance and / or consumption guarantees specified under the contract. If for reasons attributable to supplier, these guarantees are not attained in whole or in part, there of as may be necessary in order to attain the contractual guarantees specified in the contract as their own cost and experience and to carry out further performance tests. The warranty should be comprehensive on site.
15. The vendor should commit the relocation of the facility at least one time free of cost after first installation within 3 years.

TENDER FORM

(Techno Financial UN priced Bid)

Tender No.....

To

The _____

Dear Sir,

1. I/We hereby offer to supply the items as listed in the schedule to this tender hereto/portion thereof as you may specify in the acceptance of Tender at the price given in the said Schedule and agree to hold this offer open for a period of 90 days from the date of opening of the tender. I/we shall be bound by a communication of acceptance issued by you.
2. I/We have understood the Instruction to bidders and Conditions of Contract in the form as enclosed with the invitation to the tender and have thoroughly examined the specifications quoted in the Schedule hereto and am/are fully aware of the nature of the goods required and my/our offer is to supply the goods strictly in accordance with the specifications and requirements.
3. A crossed Bank Draft in favour of the CURAJ INCUBATION FOUNDATION for **Rs1,50,000** as Earnest Money will be submitted in pre-bid meeting. The Draft is drawn onBank payable at Bandarsindri/Madanganj/Kishangarh.
4. The following have been added to form part of this tender.
 - a) Details of items quoted for, as per instructions provided in the schedule of requirement.
 - b) Schedule of requirements, quoting the make only duly signed and stamped (without indicating price)
 - c) Copy of PAN.
 - d) Copy of last audited balance sheet.
 - e) Copy of Valid Central/State sales tax/GST registration certificate.
 - f) Statement of deviations from financial terms & conditions, if any.
 - g) Manufacturer's Authorization Certificate on their letter pad.
 - h) Technical Specifications Compliance statement along with original Brochure / literature.
 - i) Any other enclosure. (Please give details)
5. We undertake to execute all orders which have been placed to meet emergent requirements on priority basis.
6. Certified that the bidder is:
 - a) A sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of the sole proprietor,

OR
 - b) A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney.

OR
 - c) A company and the person signing the document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All corrections/deletions should invariable be duly attested by the person authorized to sign the bid document).

OR

Otherwise (be specified)

7. We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof shall constitute a binding contract between us.

Yours faithfully,

(Signature of bidder)

Dated this day of _____

Address...

.....

.....

Telephone:_____

FAX_____

E-mail_____

Seal of Bidder Organization

(8) Tender Form (Priced Bid) Part B

To _____
The _____

Ref: Tender No , Dated

Sir,

Having examined the bidding documents and having submitted the techno Financial un-priced bid for the same, we, the undersigned, hereby submit the priced bid for supply of goods and services as per the schedule of requirements and in conformity with the said bidding documents.

We hereby offer to supply the Goods/Services at the prices and rates mentioned in the enclosed schedule of price.

We do hereby undertake that, in the event of acceptance of our bid, the supply of Goods/Services shall be made as stipulated in the schedule of requirement and that we shall perform all the incidental services.

The prices quoted are inclusive of all charges net F.O.R University. We enclose herewith the complete Financial Bid as required by you. This includes:

- i. Price Schedule as per schedule of requirement.
- ii. Statement of deviations from financial terms and conditions.

We agree to abide by our offer for a period of 90 days from the date fixed for opening of the bid documents and that we shall remain bound by a communication of acceptance within that time.

We have carefully read and understood the terms and conditions of the bid document and we do hereby undertake to supply as per these terms and conditions. The Financial Deviations are only those mentioned in the statement of deviations from financial terms and conditions.

Certified that the bidder is:

A sole proprietorship firm and the person signing the bid document is the sole proprietor/ constituted attorney of sole proprietor,

Or

A partnership firm, and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney,

Or

A company and the person signing the bid document is the constituted attorney.

(NOTE: Delete whatever is not applicable. All corrections/deletions should invariably be duly attested by the person authorized to sign the bid document.)

We do hereby undertake that, until a formal notification of award, this bid, together with your written acceptance thereof, shall constitute a binding contract between us.

Dated this day of _____
Details of enclosures

Signature of Bidder
Full Address:
Fax No.
E-mail:

Seal of Bidder Organization

9. Price Bid Format

The rates to be quoted for each item of the Price Bid/BOQ in Indian Rupees, both in figures and words for the execution of work on 'Turnkey Basis' including all the required material, labour, accessories, tools & tackles etc., taxes, duties & levies for the complete work, as per Scope of Work, Specifications and approved design & drawings. All the pages shall be stamped and signed by the authorized representative of the Bidder. The Price Schedule with rates and amount duly filled in and signed shall be submitted in a separate sealed envelope, as given in Instructions to Bidder.

Sr. No.	Item	Brand/Model	Qty (as per tender)	Rate per unit	Total Amount
1	3D Printer				
2	3D printer-II				
3	Laser Cutter & Engraver Machine				
4	Desktop Milling Machine (PCB Machine)				
5	PCB Printing Machine				
6	Vinyl Printing and Cutting Machine				
7	3D Scanner				
8	Vacuum Forming Machine				
9	Manual Lathe Machine				
10	CNC Router				
11	Soldering Station				
12	Digital Multimeter				
13	Digital Oscilloscope				

14	Power Supply				
15	Function Generator				
16	Tabletop Multimeter				
17	Cordless Drill				
18	Hot Air Gun				
19	Table Saw				
20	Vacuum Cleaner				
21	Rotary Tool Kit				
22	Rubber Grip Hacksaw				
23	Junior Hacksaw				
24	Hacksaw Mini				
25	Claw Hammer Steel Shaft				
26	Ball Pein Hammer				
27	Rubber Mallet				
28	Ring spanner set 12Pcs				
29	Open end spanner set 12pcs				
30	Combination Spanner set 8 Pcs				
31	Allen Hex Key 10pcs				
32	Allen key 12pcs ball type				

33	Combination pliers				
34	Long Nose plier				
35	Circlip bent				
36	Circlip Straight				
37	Diagonal Cutting Pliers				
38	Wire stripper				
39	Adjustable Spanner				
40	Pipe Wrench				
41	C-Clamp				
42	C-Clamp				
43	Snap-off Knife				
44	16pcs screwdriver set				
45	6pcs precision screw driver set				
46	Max steel snip cutter				
47	PVC Pipe cutter				
48	Hot glue gun				
49	Tool Kit 126peices				
50	Small file set				
51	Big file set				
52	Punch set				

53	Bench Wise				
54	Drill bit set				
55	Baby wise				
56	Digital Vernier Calliper				
57	Micrometer				
58	Steel Rule				
59	Steel Rule				
60	Degree Protector				
61	Inside calliper				
62	Outside calliper				
63	Engineering Square				
64	Meter Tape				
65	Measuring Tape				
66	Measuring Tape				
67	Spirit Level				
68	Goggle				
69	Apron				
70	Earmuff				
71	Mask				
72	Fire Extinguisher				
73	First aid kit				
74	Hand Gloves				
75	License				
76	Desktop				
77	A3 Laser Printer				
78	Vacuum Oven				
79	Spin Coating System				

80	ESD Workstation				
81	Mechanical Workbench				
82	Storage Unit				
83	Component Organizer				
84	Electronic Dry Cabinet with Humidity Controller				
85	Tool Trolley				
86	White Board				

Total No. of Item(s) quoted _____

Seal and Signature of the bidder

Separate rate for Comprehensive onsite Maintenance (for 3rd to 4th & 5th year, after expiring of 2 year warranty period).

S. No.	Details	Rate of CMC (For 3rd year)	Rate of CMC (For 4th year)	Rate of CMC (For 5th year)

Seal and Signature of the bidder

(10) FORMAT OF PERFORMANCE BANK GUARANTEE

This guarantee should be furnished by a Nationalized Bank / Scheduled Bank, authorized by RBI to issue a Bank Guarantee.

This bank guarantee should be furnished on stamp paper of Rs. 100/-

The stamp paper should have been purchased in the Name of the Bank executing the Guarantee.

In the case of foreign bidder the B.G may be furnished by an international reputed bank acceptable to the PURCHASER countersigned by any Nationalized / Scheduled Bank in India authorized by Reserve Bank of India.

Bank guarantee must be sent to the University directly by the post to the following address:

CURAJ INCUBATION FOUNDATION

Central University of Rajasthan,

Bandarsindri, Distt. Ajmer,

Rajasthan - 305817

However, bidder may submit a copy of the same.

WHEREAS M/s, having its registered office at hereinafter called the Distributor in India for

....., herein after called "The supplier" for the supply of, in consideration of the Central University of Rajasthan, Department of, School of Central University of Rajasthan, Kishangarh (hereinafter called "CURAJ") P.O. No. CURAJ / Dated. Placed an order for the due fulfillment by the said supplier of the terms and conditions in the purchase order, on production of a Bank Guarantee for Rs..... (Rupees.....

..... Only). We Bank, (Rein after referred to as "the Bank") at the request of supplier do hereby undertake to pay to the CURAJ an amount not exceeding to Rs..... (Rupees..... only).

2. We Bank do hereby undertake to pay CURAJ, the amounts due and payable under this guarantee without any demur, merely on a demand from CURAJ stating that the amount claimed is required to meet the recoveries due or likely to be due from the said supplier. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under the guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding to Rs..... (Rupees only)

3. We undertake to pay to the CURAJ any money so demanded notwithstanding any dispute or disputes raised by the supplier in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid and discharge of our liability for payment there under and the Supplier shall have no claim against us for making such payment.

4. We the Bank further agree that the guarantee herein contained shall remain in full force and affect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the CURAJ under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till Registrar on behalf of the CURAJ certified that the terms and conditions of the said Agreement have been fully and properly carried out by the said and accordingly discharges this guarantee.

5. We, the Bank further agreed that the CURAJ shall have the fullest liberty without our consent and without affecting in any manner our obligations here under to vary any of the terms and conditions of the said Purchase Order or to extend the time of performance by the said contractor from time to time or to postpone for any time or from time to time any of the powers exercisable by the CURAJ against the said supplier and to forbear or enforce any of the Terms and Conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier or for any forbearance act or omission on the part of the CURAJ or any indulgence by the CURAJ to the said supplier or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

6. This guarantee will not be discharged due to change in the constitution of the bank or the supplier.

7. We, the Bank lastly undertakes not to revoke this guarantee except with the previous consent of the CURAJ in writing.

8. This guarantee shall be valid up to unless extended on demand by CURAJ.

Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs...../-
(Rupees only).

Notwithstanding anything contained herein

1. Our liability under this bank guarantee shall not exceed Rs...../-(Rupees
..... Only)

2. Bank guarantee shall be valid up to

3. We are liable to pay the guaranteed amount or part thereof under this bank guarantee only and only if you
serve upon us a written claim or demand on or before

Dated:

Signature & Seal of the Bank

Note: The above format contains specific clauses and expressions. These clauses and expressions can vary
depending upon the nature / type of agreement and situation. Basic aspect to be kept in mind is that interest
of CURAJ is fully protected.

(11) FORMAT FOR MANUFACTURER'S AUTHORIZATION LETTER TO AGENT

(On letter head)

Ref. No.

Date:

To
CURAJ INCUBATION FOUNDATION
Central University of Rajasthan,
Bandarsindri, Distt. Ajmer,
Rajasthan - 305817

Sub. : Tender for Supply & Installation of Laboratory Equipment

Dear Sir,

We, _____, who are established and reputed manufacturers of _____, having factory _____ at _____, hereby _____ authorize M/s. _____ (name & address of Indian distributor / agent) to bid, negotiate and conclude the order with you for the goods manufactured by us.

We shall remain responsible for the tender/ Agreement negotiated by M/s _____, jointly and severally.

An agency commission of _____ % included in the FOB price is payable to M/s _____. We hereby extend our full guarantee and warranty for one year of tender for the goods offered for supply against this invitation for bid by the above supplier.

1. _____

2. _____

(Specify in detail manufacturer's responsibilities)

The services to be rendered by M/s. _____ are as under:

1) _____

2) _____

(Specify the services to be rendered by the distributor / agent)

In case duties of the Indian agent/distributor are changed or agent/ distributor is changed it shall be obligatory on us to automatically transfer all the duties and obligations to the new Indian Agent failing which we will ipso-facto become liable for all acts of commission or omission on the part of new Indian Agent/ distributor.

Yours faithfully,

[Name & Signature] for and on behalf of M/s. _____ [Name of manufacturer]

(12) DECLARATION REGARDING BLACKLISTING / DEBARRING FOR TAKING PART IN TENDER.

I / We _____ Manufacture / Partner(s)/ Authorized Distributor /agent of M/S. _____ hereby declare that the firm/company namely M/s. _____ has not been blacklisted or debarred in the past by Union / State Government or organization from taking part in Government tenders in India.

Or

I / We _____ Manufacture / Partner(s)/ Authorized Distributor / agent of M/s. _____ hereby declare that the Firm / company namely M/s. _____ was blacklisted or debarred by Union / State Government or any Organization from taking part in Government tenders for a period of _____ years w.e.f. _____ to _____. The period is over on _____ and now the firm/company is entitled to take part in Government tenders.

In case the above information found false I / we are fully aware that the tender / contract will be rejected / cancelled by the Central University of Rajasthan, and EMD / SD shall be forfeited.

In addition to the above, Central University of Rajasthan, will not be responsible to pay the bills for any completed / partially completed work.

Signature with Seal

Name _____

Address _____

Attested:

(Public Notary / Executive Magistrate)

(13) CERTIFICATE OF GUARANTEE/WARRANTY

I/We certify that the guarantee/warranty shall be for a period of 2 years (as applicable) starting from the date of satisfactory installation, commissioning and handing over of the equipment and of the works conducted therewith covered under the Supply order in working order. During the guarantee/warranty period, I/we shall provide free “after sale service” and the replacement of any part(s) of the equipment or rectification of defects of work of the equipment will be free of cost. The replacement of the parts shall be arranged by us, at our own cost and responsibility. We undertake that the above guarantee / warranty shall begin only from the date of satisfactory and faultless functioning of the equipment for 30 days at University premises. The benefit of change in dates of the guarantee / warranty period shall be in the interest of the user/your organization.

During the warranty period, we shall provide at least 02 preventive maintenance visits per year.

- All complaints will be attended by us within 2 working days of receipt of the complaint in our office.
- In case there is delay of more than 2 days in attending to a complaint from our side then you can count the number of days in excess of the permissible response time in the downtime. The above said response time of 2 days for attending to a complaint by us will not be counted in the downtime.
- Penalty: We shall pay a penalty equivalent to 0.50% of the FOB value of the equipment for every week or part thereof delay in rectifying the defect.

Note: The right to accept the reason(s) for delay and consider reduction or waive off the penalty for the same shall be at the sole discretion of University.

We certify that the equipment being/quoted is the latest model and that spares for the equipment will be available for a period of 10 year and we also guarantee that we will keep the organization informed of any update of the equipment over a period of 10 year.

We guarantee that in case we fail to carry out the maintenance within the stipulated period, University reserves the right to get the maintenance work carried out at our risk, cost and responsibility after informing us. All the expenses including excess payment for repairs/maintenance shall be adjusted against the Performance Bank Guarantee. In case the expenses exceed the amount of Performance Bank Guarantee, the same shall be recoverable from us with/without interest in accordance with the circumstances.

We shall try to repair the equipment at University premises itself. However, the equipment will be taken to our site on our own expenses in case it is not possible to repair the same at University premises. We shall take the entire responsibility for the safe custody and transportation of the equipment taken out for repairs till the equipment is rehabilitated to the University after repair. Any loss of equipment or its accessories under its charge on account of theft, fire or any other reasons shall be at our sole risk and responsibility which will be compensated to University for such losses.

We undertake to perform calibration after every major repair/breakdown/taking the equipment for repair out of University premises.

In case of extended guarantee/Warranty, we undertake to carry out annual calibration of the equipment.

We guarantee that we will supply spare parts if and when required on agreed basis for an agreed price. The agreed basis could be an agreed discount on the published catalogue price.

We guarantee to the effect that before going out of production of spare parts, we will give adequate advance notice to you so that you may undertake to procure the balance of the life time requirements of spare parts.

We guarantee the entire unit against defects of manufacture, workmanship and poor quality of components.

Signature of Bidder
(Name)

Seal of Bidder Organization

(14) Technical specifications compliance Sheet

1. The technical compliance bid must be in this sheet only, otherwise it should be assumed that bidder is not able to offer technically desired product. Information provided elsewhere or in different form will not be considered.
2. All the columns of this sheet should be filled in compulsorily by the bidder, merely asking the office to refer catalogue or brochure will not be entertained.
3. The bidder shall assume full responsibility of the information provided in this sheet. Any false statement should render the breach of basic foundation of the tender.

Name of Equipment / Instrument:

Compliance Check list/ Table

S. No.	Technical specification	Features available in equipment. Specify the range	Any deviation from specification
	Technical Specification as per Tender document		
1			
2			
3			
4			
5			
6			
7			

(15) Check list for Terms and Conditions:**To be filled by the bidder and submitted along with the Technical Bid.**

S. No.	Technical Information	Page No.	Remarks
1.	Tender Fee, if applicable		
2.	EMD		
3.	Company/ Firm registration details		
4.	Authorization Certificate		
5.	The Bidder shall have an average annual turnover of minimum Rs. 3.00 Crore in the last 3 financial years (i.e., F/Y 2021-22 & 2022-23, 2023-24). Copy of Audited Balance Sheets for all the three financial years shall be submitted.		
6.	Experience		
7.	Income tax return (Last Three Years)		
8.	Audited balance sheet (Last Three Years)		
9.	Original Technical Catalogue of the quoted model and same should be available on the website		
10.	Compliance Statement with relation to the technical specification as mentioned in the bidding document duly supported by the original catalogue.		
11.	Self-declaration for not black listed		
12.	Client list (list of users) of quoted model of the items, attach couple of orders without any alteration/modification		
13.	Performance certificate of the same supplied machine (of quoted make and Model) from clients		
14.	Warranty & extended technical support certificate		
15.	Acceptance of all terms / conditions towards after sales / services as mentioned in the bidding document.		
16.	Certificate, to the effect that the bidder is not supplying the quoted item(s) to any other Govt. / Pvt. Organizations / Institutions at the rate lower than the rate quoted against this tender.		
17.	Certificate for 'Class-I local supplier' and 'Class-II local supplier'		
18.	Certificate for verification of local content		
19.	Integrity Pact		
20.	Certificate wrt to clause 3 rate reasonability		
21.	Certificate wrt to clause 14 that the bidder fulfils the requirement for procurement of material from country which shares a land border with India.		
22.	Signed and stamped Compliance sheet wrt clause 28 (vi)		

INTEGRITY PACT

This INTEGRITY PACT is made and executed at.....on this day of.....20....

BY AND BETWEEN

THE PRESIDENT OF INDIA acting through Registrar (insert name & designation of the officer) of Central University of Rajasthan, Bandarsindri, Kishangarh-305817, Ajmer. (hereinafter referred to as "The Buyer" which term or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the First Part;

AND

M/s A company incorporated under the Companies Act,.....through its representative/authorized signatory (insert name & designation of the officer) vide resolution dated passed by the Board of Directors, having its office at (hereinafter referred to as "The Bidder/Contractor which term or expression shall, unless excluded by or repugnant to the subject or context, mean and include its successor-in-office, administrators or permitted assignees) of the Second Part.

PREAMBLE

The Buyer intends to award under laid down organizational procedures, contract/s for..... The Buyer values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the Buyer will appoint Independent External Monitors (IEMs) who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1- Commitments of the Buyer

(1.) The Buyer commits itself to take all measures necessary to prevent corruption and to observe the following principles:-

- a. No employee of the Buyer, personally or through family members, will in connection with tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- b. The Buyer will during the tender process treat all Bidder(s) with equity and reason. The Buyer will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential /additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- c. The Buyer will exclude from the process all known prejudiced persons.

(2.) If the Buyer obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Buyer will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder(s)/Contractor(s)

(1.) The Bidder(s)/Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s)/Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution.

- a. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer promise or give to any of the Buyer's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or

during the execution of the contract.

- b. The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to the others, any information or document provided by the Buyer as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s)/Contractors(s) of foreign origin shall disclose the name and address of the Agents/representatives in India if any. Similarly the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign Buyer, if any. Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/ representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed at (page no. 6).
- e. The Bidder(s) / Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intend to make to agents, brokers or any other intermediaries in the connection with the award of the contract.
- f. Bidder(s) /Contractor(s) who have signed the integrity pact shall not approach the courts while representing the matter to IEMs and shall wait for their decision in the matter.

(2.) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or to be an accessory to such offences.

Signature & Seal of Registrar
Central University of Rajasthan

Signature & Seal of Bidder
Name
Address

End of Tender Document