SVSU

श्री विश्वकर्मा कौशल विश्वविद्यालय

(हरियाणा सरकार, एक्ट संख्या 25, 2016 के तहत)

Shri Vishwakarma Skill University

Plot 147, Sector 44, Gurugram, Haryana

Tender Document for

(Supply and Installation of Physics Lab)

Tender No: SVSU/2020/DA/T006 **Dated: 13/02/2020**

1. Notice Inviting Quotation

Sub: Notice Inviting Tenders for Supply and Installation of Physics Lab.

Shri Vishwakarma Skill University, Haryana invites online Tender: **"Supply and Installation of Physics Lab"** through e-procurement on portal https://etenders.hry.nic.in from reputed Manufacturers/Authorized Dealers/ Distributors/Agent as per TENDER document. The TENDER documents may also be downloaded from website (http://www.svsu.ac.in) of Shri Vishwakarma Skill University, Haryana for reference only. A minimum eligibility criterion has been given in TENDER document.

Apart from uploading e-tender on website, bidder has to deposit EMD and Tender Fee + E-service fees along-with other documents.

1.1. SCHEDULE

1.	**(Tender Fee + E-Service Fee) + GST**	
	(1) For Haryana based manufacturing Micro and Small Enterprises (MSEs) & Khadi Village Industries Unit eligible as per the "Haryana State Public Procurement Policy for MSME -2016" notified vide G.O. No. 2/2/2016-4I BII(1) dated 20-10-2016/ for Startups as notified vide G.O. No.2/2/2016-4IBII dated 03.01.2019.	**NIL**
	(2) For remaining bidders both from the Haryana and Non Haryana (Tender Fee + E-Service Fee) + GST	**(1000/- + 1000/-) + 360/- = 2360/- (Rupees Two Thousand Three Hundred Sixty only)**
2.	**EMD Amount**	
	(1) For Haryana based manufacturing Micro and Small Enterprises (MSEs) & Khadi Village Industries Unit eligible as per the "Haryana State Public Procurement Policy for MSME -2016" notified vide G.O. No. 2/2/2016-4I BII(1) dated 20-10-2016/ for Startups as notified vide G.O. No.2/2/2016-4IBII dated 03.01.2019.	**NIL**
	(2) For remaining bidders both from the Haryana and Non Haryana	**Rs. 16000/- (Rupees Sixteen Thousands only)**
3.	Performance Security	**10% of the Purchase order Value**
4.	Product Warranty Period	**3 Years**
5.	Issue of Tender Document	**13/02/2020**
6.	Online Tender Purchase Start Date	**13/02/2020**
7.	Online Tender Purchase End Date	**Up to 11:00 Hrs. on 06/03/2020**

8.	Last date for receipt of queries	**18/02/2020**
9.	Date of pre bid meeting	**20/02/2020 at 11:30AM**
10.	Online proposal Submission Start Date	**25/02/2020 at 11:00AM**
11.	Online proposal Submission End Date	**Up to 11:00 Hrs. on 06/03/2020**
12.	Opening of Technical Bid	**11:30 Hrs. on 06/03/2020**
13.	Technical Presentation	**Subsequent date to be informed later.**
14.	Financial Bid	**Subsequent date to be informed later.**
15.	Validity period of Proposal	180 Days
16.	Address of Communication	**Registrar** **Shri Vishwakarma Skill University,** Plot 147, Sector 44, Gurugram Haryana
17.	Contact Phone Numbers	**0124-2746800**
18.	E-mail Address	**Registrar.hvsu@gmail.com**

- Tender document can also be downloaded from University Website www.svsu.ac.in

University reserved the right to change any Date, Time and condition of Tendering without assigning any reasons and reserve all the rights.

➢ Amendments to TENDER, if any, would be published on e-procurement website https://etenders.hry.nic.in only and not in newspaper. The Shri Vishwakarma Skill University, Haryana reserves all the rights to accept or reject any or all tenders without assigning any reasons.

1.2. DISCLAIMER

The information contained in this Tender document or subsequently provided to the bidders, whether verbally or in documentary or any other form by or on behalf of Shri Vishwakarma Skill University, Haryana is provided to bidder on the terms and conditions set out in this TENDER and such other terms and conditions subject to which such information is provided.

Information provided in this TENDER to the bidders is on a wide range of matters, some of which depends upon interpretation of law. The information given is not an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Shri Vishwakarma Skill University, Haryana accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.

Shri Vishwakarma Skill University, Haryana also accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance or any bidder upon the statements contained in this TENDER.

Shri Vishwakarma Skill University, Haryana may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this TENDER.

The issue of this TENDER does not imply that Shri Vishwakarma Skill University, Haryana is bound to select a bidder or to appoint the Selected Bidder, as the case may be, for the Consultancy and Shri Vishwakarma Skill University, Haryana reserves the rights to reject all or any of the Proposals without assigning any reasons whatsoever.

The bidder shall bear all its costs associated with or relating to the preparation and submission of its Proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by Shri Vishwakarma Skill University, Haryana or any other costs incurred in connection with or relating to its Proposal. All such costs and expenses will remain with the bidder and Shri Vishwakarma Skill University, Haryana shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a bidder in preparation or submission of the Proposal, regardless of the conduct or outcome of the Selection Process.

2. Instructions to Bidders

2.1. Subject: Invitation for Supply and Installation of Physics Lab

Shri Vishwakarma Skill University, invites online Bids (Technical bid and Financial bid) from eligible and experienced OEM (Original Equipment Manufacturer) OR OEM Authorized Dealer/Distributors/Agent for **Supply and Installation of Physics Lab** with warranty period as stated at "Schedule "on site comprehensive warranty from the date of receipt of the material as per terms & conditions specified in the tender document.

Bidders can access tender documents on the website of the University and fill them with all relevant information and submit the completed tender document with Tender Fee and EMD amount online as per the schedule to https://etenders.hry.nic.in.

2.2. INSTRUCTION TO BIDDER FOR E-TENDERING

Note: *Following conditions will over-rule the conditions stated in the tender documents, wherever relevant and applicable.*

2.2.1. E-Tendering:

2.2.1.1. For participation in e-tendering module of Shri Vishwakarma Skill University, Haryana it is mandatory for prospective bidders to get registration on website https://etenders.hry.nic.in, Therefore, it is advised to all prospective bidders to get registration by making on line registration fees payment at the earliest.

2.2.1.2. Tender documents can be downloaded from website http://www.svsu.ac.in. However, the bidders have to upload complete tender document online along-with deposit of EMD amount and Tender Document Fee + E-service fee and without EMD amount and Tender Document Fee + E-service fee bids will not be accepted.

2.2.1.3. E-service/gateway charges shall be borne by the bidders.

2.2.1.4. As per the directions of the Controller of Certifying Authorities, Ministry of Communication and Information Technology, Government of India, a **Class II Digital Certificate** shall be required to bid for all tenders solicited electronically. If the bidder does not have such a certificate, it may be obtained from any of the registering authorities or certification authorities. Kindly note that it may take at least three-five business days for the issue of a digital certificate. Bidders are advised to plan their time accordingly. Shri Vishwakarma Skill University, Haryana shall bear no responsibility for accepting bids which are delayed due to non-issuance or delay in issuance of such digital certificate.

2.2.1.5. If bidder is bidding first time for e-tendering, then it is

obligatory on the part of bidder to fulfil all formalities such as registration, obtaining Digital Signature Certificate etc. well in advance.

2.2.1.6. Bidders are requested to visit our e-tendering website regularly for any clarifications and/or due date extension or corrigendum.

2.2.1.7. Bidder must positively complete online e-tendering procedure at https://etenders.hry.nic.in

2.2.1.8. Shri Vishwakarma Skill University, Haryana shall not be responsible in any way for delay / difficulties / inaccessibility of the downloading facility from the website for any reason whatsoever.

2.2.1.9. For any type of clarifications bidders/contractors can visit https://etenders.hry.nic.in and http://www.svsu.ac.in.

2.2.1.10. The bidder whosoever is submitting the tender by his Digital Signature Certificate shall invariably upload the scanned copy of the authority letter.

2.2.1.10.1. TENDER cost + E-service Fee and EMD Amount.

2.2.1.10.2. Affidavits.

2.2.1.10.3. Authority Letter to Sign on behalf of Consultant.

2.2.1.10.4. Authority Letter for use of Digital Signature.

2.2.1.10.5. Technical Bid with all relevant enclosures.

2.2.1.10.6. All documents to be submitted by the firms should be duly attested by gazetted officer/ notary public in case these are copies of the original documents. No unattested documents will be entertained.

The prospective bidders will upload scanned self-certified copies of requisite documents as required in e-tendering process.

2.2.1.11. The Tender document cost+ E-Service Fee is to be deposited online by bidder.

2.2.1.12. The tenders uploaded without/incomplete/partial EMD and tender fee + E-service fees shall be disqualified.

2.2.1.13. The EMD amount is to be deposited online by bidder.

2.2.1.14. The tender documents fees shall not be refunded.

2.2.1.15. If the tenders are cancelled or recalled on any grounds, the Tender Document Fee and e-Service Fee will not be refunded to the bidder.

2.2.1.16. No Proposal will be accepted without valid TENDER cost and Earnest Money Deposit.

2.2.2. Technical bid: -

Bidders must positively complete online e-tendering procedure at https://etenders.hry.nic.in. They shall have to submit the documents as prescribed in the TENDER online in the website. The website/e-portal may accept a file sizing upto 10 MB, however, the bidders may

submit their complete bids (with all the requisite documents) in multiple files.

2.2.3. Financial bid: -

Bidder must submit the Price/Financial bid document as per the format given in TENDER/available online and uploaded as per instructions therein. **Physical submission of price bid will not be considered.** The financial bids of technically qualified bidders shall be opened online at the notified date. The bidder can view the financial bid opening date by logging into web-site.

2.2.4.1. On the due date of e-tender opening, the technical bids of bidders will be opened online. Shri Vishwakarma Skill University, Haryana reserves the right for extension of due date of opening of technical bid.

2.2.4.2. Shri Vishwakarma Skill University, Haryana reserves the right to accept or reject any or all tenders without assigning any reason what so ever.

2.2.4.3. In case, due date for opening of tender happens to be a holiday, the due date shall be shifted to the next working day for which no prior intimation will be given.

2.2.4.4. Any change/modifications/alteration in the TENDER by the Bidder shall not be allowed and such tender shall be liable for rejection.

For amendment, if any, please visit https://etenders.hry.nic.in web site regularly. In case of any bid amendment and clarification, the responsibility lies with the bidders to note the same from web site. The **Shri Vishwakarma Skill University, Haryana** shall have no responsibility for any delay/omission on part of the bidder.

ANNEXURE - I

<< Organization Letter Head >>

3. TERMS and CONDITIONS

3.1 **Due date**: The tender has to be submitted online on or before the due date. The offers received after the due date and time will not be considered. No application will be received through e-mail/fax. The University would not be responsible for any delay.

3.2 **Tender Fee (Non-Refundable):** The Bidder should submit a non-refundable tender fee online. The Technical Bid without Tender fee would be considered as UNRESPONSIVE and will not be accepted. The tender fee will not be returned/refunded to any Bidder in any circumstances. If the tenders are cancelled or recalled on any grounds, the Tender Document Fee and e-Service Fee will not be refunded to the bidder.

3.3 **Preparation of Bids**: The Technical and financial offer/bid should be submitted online. The technical bid should consist of all technical details along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid.

All documents to be submitted by the firms should be duly attested by gazetted officer/ notary public in case these are copies of the original documents. No unattested documents will be entertained.

3.4 **Earnest Money Deposit (EMD) (if applicable):** While submitting bid, the BIDDER shall deposit an amount mentioned in tender document as Earnest Money, with the Institute through the following instruments:

3.4.1 The Bidder should submit an EMD amount online. The Technical Bid without EMD would be considered as UNRESPONSIVE and will not be accepted. The EMD will be refunded without any interest to the unsuccessful Bidder after the award of the Purchase Order. The Earnest Money Deposit (EMD) in other form viz., Pay Order/Cheque etc. shall not be accepted.

3.4.2 No interest shall be payable by the BUYER to the BIDDER on Earnest Money for the period of its currency.

3.5 **Refund of EMD:** The EMD will be returned to unsuccessful Bidders only after the award of Purchase Order. In case of successful Bidder, EMD will be returned after the submission of Performance Bank Guarantee.

EMD will not be refunded, if the order is not accepted. In case, the offer is accepted, but not honoured by the Bidder, the EMD will be forfeited. The EMD will also be forfeited, if wrong information is furnished or any vital information is concealed in the tender document.

If the tenders are cancelled or recalled on any grounds, the EMD will be returned to the bidder.

3.6 **Opening of the tender:** The bid will be opened by a committee duly constituted for this purpose in presence of Bidder's representative if available. Only one representative will be allowed to participate in the tender opening. Bid received without or incomplete Tender Fee or EMD will be rejected outrightly. The technical bid will be opened first and it will be examined by a technical committee (as per specification and requirement). The financial offer/bid will be opened only for the offer/bid which are technically qualified as per the specification, and will be opened in the presence of the bidder's representatives subsequently for further evaluation. The Bidder if interested may participate on the tender opening Date and Time. The Bidder should produce authorization letter from their company to participate in the tender opening. The University may call bidders for demonstration and presentation of the equipment during technical evaluation. The cost for the demonstration will be borne by the supplier and University will not pay any TA/DA for presentation/ demonstration. If any firm fails to successfully demonstrate the system quoted by them, the Bid of that firm will not be considered.

3.7 **Acceptance/ Rejection of bids: The Committee reserves the right to reject any bid not fulfilling the eligibility criteria.**

Eligibility Criteria:

3.7.1 Bidder should be the manufacturer/authorized dealer/ distributors/agent. Letter of Authorization from original equipment manufacturer (OEM) specific to the tender should be enclosed (Annexure – IX).

3.7.2 An undertaking from the OEM is required stating that they would facilitate the Bidder on a regular basis with technology/product updates and extend support for the warranty as well. (Annexure - IV)

3.7.3 OEM should be Nationally/Internationally reputed Company.

3.7.4 Non-compliance of tender terms, non-submission of required documents, lack of clarity of the specifications, contradiction between Bidder specification and supporting documents etc. may lead to rejection of the bid.

3.7.5 In the tender, either the agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.

3.7.6 If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.

3.7.7 Sample for offered items may be asked from tender during technical evaluation.

3.7.8 The Agency should not have incurred any loss for the last 3 financial years which is mandatory. Bidders should submit audited statement and Financial assessment copy/Income Tax Return Copy showing their net balance / Profit for last three financial years

3.8 Performance Security:

3.8.1 Performance Bank Guarantee is mandatory.

3.8.2 The Successful Bidder shall require to submit the performance security/Guarantee in the form of irrevocable bank guarantee issued by any Indian Nationalized Bank for an amount which is stated at the "Schedule" of the tender document within 21 days from the date of receipt of the purchase order and should be kept valid for a period of 60 days beyond the date of completion of warranty period. The Performance security in other form viz., FD/Term Deposit Receipt etc. shall not be accepted.

3.8.3 The Successful Bidder should submit performance security/Guarantee as prescribed above to be received in the office Registrar, Stores & Purchase Section on or before 21 days from the date of issue of order acknowledgement. The performance bank guarantee to be furnished in the form of Bank Guarantee as per Annexure-VII of the tender documents, for an amount covering 10% of the purchase order value.

3.8.4 The Performance Bank Guarantee should be established in favour of Shri Vishwakarma Skill University," through any Bank situated at Gurugram or outstation with a clause to enforced the same on their local branch at Gurugram. Performance Bank Guarantee shall be for the due and faithfully performance of the contract and shall remain binding, notwithstanding such variations, alterations for extensions of time as may be made, given, conceded or agreed to between the successful Bidder and the purchaser under the terms and conditions of acceptance to tender.

3.8.5 If the supplier shall not submit the performance security within 21 days from the date of receipt of purchase order and if there is delay in submission of performance security, purchase order may be cancelled. The competent authority may accept the performance security after the above mention deadline of 21 days subject to submission of justification by the Bidder, however the decision of the competent authority is final in this regards.

3.8.6 The successful Bidder is entirely responsible for due performance of the contract in all respects according to the speed, intent and meaning of the terms and conditions and specification and all other documents referred to in the acceptance of tender.

3.8.7 The performance bank guarantee shall be kept valid during the period of contract.

3.9 Force Majeure: The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

3.9.1 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual

capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

3.9.2 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

3.10 Risk Purchase Clause: In event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from the other source on the total risk of the supplier under risk purchase clause.

3.11 Packing Instructions: Each package will be marked on three sides with proper paint/indelible ink, the following:

3.11.1 Item Nomenclature
3.11.2 Order/Contract No.
3.11.3 Country of Origin of Goods
3.11.4 Supplier's Name and Address
3.11.5 Consignee details
3.11.6 Packing list reference number

3.12 Delivery and Documents: Delivery of the goods should be made within a maximum of 06 weeks from the date of placement of purchase order at Shri Vishwakarma Skill University, Transit Office: Plot No. 147, Sector 44, Gurugram or at that place to be informed by the SVSU. The delivery period can be extended by the Registrar, Shri Vishwakarma skill university, Gurugram, only in exceptional cases on written request of the Supplier giving reason/explaining circumstances due to which delivery period could not be adhere to. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:

3.12.1 4 Copies of the Supplier invoice showing contract number, goods description, quantity
3.12.2 unit price, total amount;
3.12.3 Insurance Certificate if applicable;
3.12.4 Manufacturer's/Supplier's warranty certificate;
3.12.5 Inspection Certificate issued by the nominated inspection agency, if any
3.12.6 Supplier's factory inspection report; and
3.12.7 Certificate of Origin (if possible, by the beneficiary);
3.12.8 Two copies of the packing list identifying the contents of each package.
3.12.9 The above documents should be received by the Purchaser before arrival of the Goods (except where the Goods have been delivered

directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

3.13 **Liquidated Damages (L.D)/Penalty for Non-execution of Order:** If a supplier fails to execute the order in time as per the terms and conditions stipulated therein, it will be open to the purchaser to recover liquidated damages for delay in delivery and installation from the supplier at the rate 1% (one percent) of the total cost of the material/contract per week or such other amount as the Registrar, SVSU, Gurugram may decide till the supply/work remains incomplete, provide that the total amount of the compensation shall not exceed 10% (ten percent) of the total cost of the material/contract. After the lapse of 15 days beyond the stipulated/extended period, it will be the discretion of the University to cancel the supply/work execution order at the risk and the cost of the Supplier/contractor. Besides, forfeiture of the Earnest Money, the University shall be at liberty to take such action as recovery of compensation to the extent of 10% of the amount of the supply/contract order, blacklisting, etc. An appeal against this penalty shall, however, lie with the Hon'ble Vice-Chancellor (VC), Shri Vishwakarma Skill University, Gurugram, whose decision shall be final.

3.14 **Prices:** The price should be quoted in net per unit (after breakup) and must include all packing, forwarding, freight, insurance charges, loading, unloading and delivery charges etc. may be quantified in terms of amount. These charges may not be payable against such vague statement as "packing, forwarding, freight, insurance charges, loading, unloading and delivery charges etc. extra". The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However, the percentage of taxes & duties shall be clearly indicated. **Charges not mentioned in the quotation/tender shall not be paid.**

3.15 **Rate contract with GEM or DS&D (Haryana):** If the bidder or their Principals are on rate contract with **GEM or DS&D (Haryana)**, this shall be mentioned specifically in the offer and a photocopy of the same, duly attested, may be appended.

3.16 **Progress of Supply:** Wherever applicable, supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:

- **3.16.1** Quantity offered for inspection and date
- **3.16.2** Quantity accepted/rejected by inspecting agency and date
- **3.16.3** Quantity dispatched/delivered to consignees and date
- **3.16.4** Quantity where incidental services have been satisfactorily completed with date
- **3.16.5** Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/Purchaser with date
- **3.16.6** Date of completion of entire Contract including incidental services, if any
- **3.16.7** Date of receipt of entire payments under the Contract (In case of stage-wise inspection, details required may also be specified).

3.17 Resolution of Disputes: The dispute resolution mechanism would be as follows:

3.17.1 In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Vice Chancellor, Shri Vishwakarma Skill University and if he is unable or unwilling to act, the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.

3.17.2 In the case of a dispute between the purchaser and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (i) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.

3.17.3 The venue of the arbitration shall be the place from where the order is issued.

3.18 Applicable Law: The place of jurisdiction would be Gurugram/Palwal Haryana.

3.19 Right to Use Defective Goods: If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

3.20 Transfer and Subletting: The supplier shall not sublet, transfer, assign or otherwise part with the acceptance to the tender or any part thereof, either directly or indirectly, without the prior written permission of the Purchaser.

3.21 Supplier Integrity: The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

3.22 Installation & Demonstration: The supplier is required to do the installation and demonstration of the equipment within one week of the arrival of materials at the SVSU, Gurugram, site of installation, otherwise the penalty clause will be the same as per the supply of materials. In case of any damage to equipment and supplies during the carriage of supplies from the origin of equipment to the installation site, the supplier has to replace it with new equipment/supplies immediately at his own risk. Supplier will settle his

claim with the insurance company as per his convenience. SVSU will not be liable to any type of losses in any form.

3.23 **Insurance:** For delivery of goods at the purchaser's premises, the insurance shall be obtained by the supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning. In case of orders placed on FOB/FCA basis, the purchaser shall arrange Insurance. If orders placed on CIF/CIP basis, the insurance should be up to SVSU, Gurugram Campus.

3.24 **Warranty:**

3.24.1 Warranty period shall be (as stated at "Schedule "of this tender) from date of installation of Goods and acceptance at SVSU. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. The warranty should be comprehensive on site.

3.24.2 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall arrange to repair or replace the defective goods or parts within 10 days free of cost in SVSU Gurugram Campus. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 10 days. If the supplier having been notified fails to remedy the defects within 10 days, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.

3.24.3 The warranty period should be clearly mentioned. The maintenance charges (AMC) under different schemes after the expiry of the warranty should also be mentioned. The comprehensive warranty will commence from the date of the satisfactory installation/commissioning of the equipment against the defect of any manufacturing, workmanship and poor quality of the components.

3.25 **Governing Language:** The contract shall be written in English language. English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.

3.26 Applicable Law: The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction.

3.27 Notices:

3.27.1 Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX or e mail and confirmed in writing to the other party's address.

3.27.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

3.28 Taxes: Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser. However, GST in respect of the transaction between the Purchaser and the Supplier shall be payable extra, if so stipulated in the order.

3.29 Payment: For Indigenous supplies, 100% payment shall be made by the Purchaser against delivery, inspection, successful installation, commissioning and acceptance of the equipment at SVSU, Gurugram Campus in good condition and to the entire satisfaction of the Purchaser and on production of unconditional performance bank guarantee as specified in Clause 3.7 of tender terms and conditions.

3.30 User list: Brochure detailing technical specifications and performance, list of industrial and Government educational establishments where the items enquired has been supplied by the Bidder has undertaken such work during last three years must be provided. (Annexure-V).

3.31 Manuals and Drawings:

3.31.1 Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the works as stated in the specifications.

3.31.2 The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract.

3.31.3 Unless and otherwise agreed, the goods equipment shall not be considered to be completed for the purposes of taking over until such manuals and drawing have been supplied to the Purchaser.

3.32 Application Specialist: The Bidder should mention in the Techno-Commercial bid the availability and names of Application Specialist and Service Engineers in the nearest regional office. (Ref. to Annexure-VI)

3.33 Site Preparation: The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete

details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter.

The supplier may visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre-installation requirements.

3.34 **Spare Parts:** The Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier. Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty obligations under the Contract; and In the event of termination of production of the spare parts; Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested. Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

3.35 **Defective Equipment:** If any of the equipment supplied by the Supplier is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the faculty/expert committee (constituted by The Registrar/Dean Academic) will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the Supplier with 18% interest if such payments for such equipment have already been made. All damaged or unapproved goods shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 7 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, SVSU may consider "Banning" the supplier.

No payment shall be made for rejected material nor would the Supplier be entitled to claim for such items. Rejected items would be removed by the Supplier from the site within two weeks of the date of rejection at his own cost. In case they are not removed they will be auctioned at the risk and responsibilities of the Supplier without any further notice.

3.36 **Termination for Default:**

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

3.36.1.1. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser.

3.36.1.2. If the Supplier fails to perform any other obligation(s) under the Contract.

3.36.1.3. If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

3.36.2 For the purpose of this Clause:

3.36.2.1. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

3.36.2.2. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidder (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.

3.36.3 In the event the Purchaser terminates the Contract in whole or in part, the Purchaser may procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

3.37 Shifting: Once our new Academic Block will be ready, the supplier has to shift and reinstall the instrument free of cost to that new Academic Block.

3.38 Reservation of Rights: University reserved the right to enhance or mitigate the quantity without any notice.

3.39 Training of Personnel: The supplier shall be required to undertake to provide the technical training to the personnel involved in the use of the equipment at the Institute premises, immediately after completing the installation of the equipment as per Annexure-X

3.40 Compliancy certificate: This certificate must be provided indicating conformity to the technical specifications. (Annexure-II)

3.41 Evaluation of Offer:

3.41.1 L1 will be decided on the basis of the total as quoted in the price bid.

3.41.2 Offer which deviates from the vital conditions (as illustrated below) of the tender shall be rejected:

3.41.2.1. Non submission of complete offers.

3.41.2.2. Receipt of offers after due date and time and or by email / fax (unless specified other-wise).

3.41.3 In case any BIDDER is silent on any clauses mentioned in this tender document, the Institute shall construe that the BIDDER had accepted the clauses as per the invitation to tender.

3.41.4 No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.

3.42 **Negotiation of Rates:** Regarding negotiations of rates, policy issued by the State Government vide G.O. No.2/2/2010-4-IB-II dated 18.06.2013, G.O. No.2/2/2010-4-IB-II dated 16.06.2014, G.O. No.2/2/2010-4-IB-II dated 09.02.2015 will be applicable. The policy guidelines are available at https://haryanaeprocurement.gov.in on home page under section as Tender Forms."

3.43 The Financial bids of only those bidders will be opened who qualify on the basis of their Technical Bids. The date & time of opening of the Financial bids will be intimated in the due course.

3.44 The offer without prescribed earnest Money, tender Fee & E-Service fee is liable to be summarily rejected. The deficiency in the remaining documents and tender requirement can be made subject to the decision by the competent authority of the university.

3.45 Any company/firm/dealer/manufacturer black listed by Central/State Government/Autonomous organization are not entitled to submit the tender. If it is submitted, it will be rejected and Earnest Money Deposit or/and Performance security will be seized and legal action will be taken against them.

3.46 Any or all tenders can be rejected by the Registrar, SVSU on the recommendation of tender committee without assigning any reason at any stage. It cannot be challenged in any court.

3.47 Tenders which do not fulfil any or all of the above conditions or incomplete, are liable for rejection.

3.48 Bidder should abide to all terms and conditions stipulated in tender document for which he has to submit the affidavit.

3.49 The foreign manufacturer or their Indian representative will ensure a proper after sales service as per requirement from time to time, against the guarantee/warrantee clause as per the terms and conditions agreed. Any negligence on this account shall be the sole responsibility of foreign bidder and liability for compensation will be fixed up by the Department.

3.50 Legal action may be initiated against such Bidder in case any of the information submitted by the Bidder is found to be false at any stage of the contract.

ANNEXURE - II

<< Organization Letter Head >>

4. Technical Specification and Compliance Sheet

Tender Criterion: The Purpose of buying the lab/equipment is for proper education of students & make them employable in Industry. Hence the equipment availability & reliability should be in high order with latest version. In order to ensure flaw less service back up and 100% Equipment availability without any down time is necessary.

1. The offered Model of OEM must be working in Indian Conditions, without any Problems. Minimum 2 performance reports to be submitted.
2. Company should have Experience in installation, Service and Training of such lab/equipment in Indian Environment. Detailed list to be submitted.
3. OEM should have service branch in the nearest possible locations to the University; and the OEM should also have spares etc. stored in India (nearest possible location).
4. The Bidder should be able to provide support for hardware components (spares, accessories and consumables) and the software for a minimum period of 10 years from the date of commissioning.
5. The bidder should provide free updates for the software installed time to time.
6. The Bidder should provide Instruction Manuals, Operation Manuals, Safety Manuals, Training Modules, Relevant manuals, Problems with solutions, literature and standard Programme tutorials both hard and soft copy and also provide the display boards.
7. Supplier has to give full warranty of the system for Three Year.
8. All accessories (Connecting pipes/tubes/ electrical cables, etc.) will be supplied by the vendor for each unit for smooth running of Lab.
9. Purchase team may visit the OEM premise before dispatch of machine.
10. Incomplete or partial bidding will not be accepted; in such case the bid will not be considered. Supplier should supply all the equipments mentioned in the tender document on turnkey basis.
11. The systems should be complete in all respect including spares, Consumables and accessories including for 3 years but not limitation to following. The warranty period will be three years duration for each item on comprehensive basis.

Specification and Requirements: -

Sr. no	Product Name	Technical Specification
1	Spectrometer Setup	**The instrument should have following features:** • Adjustment of entrance slit is provided • Prism table for accurate component placement • Crosswire - Eyepiece • Wide aperture optics • Rack and pinion arrangement focusing • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure.

		The instrument should have following Technical Specifications: Base: Type : Cast iron Circle dia : 150 mm. (6") Scale Type : Stainless Steel Main scale : 0 - 360° Vernier scale : 30 div Least Count : 20" Collimator Tube length : 160 mm. Focal length of Achromatic lens : 175mm. (approx.) Telescope Tube length : 185 mm. Focal length of Achromatic lens : 175 mm. (approx.) Prism Geometry : 50 50 mm. equilateral Refractive index : 1.51 Hollow prism : 50 50 mm. equilateral Plane transmission grating : 15,000 l/inch Light source : Mercury lamp **Experiments that can be performed:** • To determine the Wavelength of main spectral line of mercury light using plane transmission grating and spectrometer. • To determine the Refracting Angle of prism using spectrometer. • To determine the Refractive Index and Dispersive Power of prism using spectrometer. • To determine the Refractive Index of transparent liquid like water using a hollow prism and spectrometer. • To draw a graph between the Angle of Minimum Deviation and wavelength, for different colours of light using spectrometer. • To plot a graph between Angle of Incidence and corresponding Angle of Deviation using prism and spectrometer. • To draw a graph between the Refractive Index μ and Wavelength for different colour of light and to verify Cauchy's formula.
2	Traveling Microscope	**It should have following features:** • Wide Aperture Optics • Accurate and precise arrangement • Magnifying lens for reading • Rack and pinion arrangement focusing • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure. **It should have following Technical Specifications:** Base : Iron Scale : Stainless Steel **Vertical Scale** Main Scale : 0-150mm Vernier Scale : 0-1mm Least Count : 0.01mm **Horizontal Scale** Main Scale : 0-180mm Vernier Scale : 0-1mm Least Count : 0.01mm Eyepiece : 10x (Ramsden)

<table>
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<td>3</td>
<td>Electricity Lab Trainer</td>
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The instrument should have following features:

Solderless connections
Complete set of coils and cores to understand the Basics of Electromagnetic induction and Transformers
Provided with a component box to perform all the experiments
CBT covering all the experiments
Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure.

The instrument should have following Technical Specifications:
DC Power Supply : 5 V, 200 mA
AC Power Supply : 6 V, 1A
Relay : 5 V
Galvanometer : 30 - 0 - 30
Galvanometer Resistance : 80 W
Light Bulbs : 6V
Potentiometers : 25 W, 1 W, 10 KW, 1 W
Switch : 1 Pole, 2 Way Toggle type
Core types : E, I, U

Coils
<table>
<tr><th>No. of Turns</th><th>Wire Dimension (mm.)</th><th>Maximum Current (Amp.)</th><th>Inductance (Approx.)</th></tr>
<tr><td>200 Turn</td><td>0.818</td><td>1.46</td><td>590 mH</td></tr>
<tr><td>400 Turn</td><td>0.573</td><td>0.728</td><td>2.3 mH</td></tr>
<tr><td>800 Turn</td><td>0.404</td><td>0.363</td><td>9.2 mH</td></tr>
<tr><td>1600 Turn</td><td>0.251</td><td>0.144</td><td>34.2 mH</td></tr>
<tr><td>3200 Turn</td><td>0.170</td><td>0.072</td><td>134 mH</td></tr>
<tr><td>Fuse</td><td>1 Amp.</td><td></td><td></td></tr>
<tr><td>Power Supply</td><td>230 V , 50 Hz</td><td></td><td></td></tr>
</table>
Experiments that can be performed:

To study the Resistances individually as well as in series and in parallel connections.
To study the Ohm's Law mathematical relationship between three variable Voltage (V), current (I) and Resistance (R).
To study the voltage and current flowing into the circuit.
To study the Kirchhoff’s Law for electrical circuits.
To study the R-C circuit and find out the behavior of capacitors in a R-C network and study the phase shift due to capacitor.
To study the L-C circuit and find out its behavior as resonance circuit.
To study the characteristics of a semiconductor diode.
To study the characteristics of a transistor.
To study the behavior of current, when light bulbs are connected in circuit.
To understand the Faraday's Law of electromagnetic induction.

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<td>4</td>
<td>Electrostatics Lab Trainer</td>
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It should have following features:

Complete training system to study the fundamentals of Electrostatics
Electrostatic charging by Induction, Conduction, Friction
Digital Electroscope consists of Charge Polarity Indicator & Display
Accessories are provided in a good quality carrying case with foam inserts
Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure.

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		It should have following Technical Specifications: Electroscope Display : Measures relative intensity of charge in millivolts Charge Polarity Indicators : Blue LED - Negative charge, Green LED - Positive charge Rods : Teflon, Ebonite, Perspex Cloths : Silk, Cotton, Woolen Pith balls (with pendulum) : Single & pair is provided for different observations Power Supply : 230 V ± 10 %, 50 Hz **It should performed following experiments:** ▪ To study the Charge Induction in Electrostatics ▪ To study the Charge Conduction in Electrostatics ▪ To study the Pith ball pendulum Electroscope ▪ To study the relative charges of different rods with the help of Digital Display in milli volts ▪ To study the Electrostatic Charge with the help of Charge Demonstration Tube ▪ To study the Electrostatic Charge by the combination of different rods & cloths
5	Magnetism Lab	**It should have following features:** ▪ Complete training system to study the fundamentals of magnetism ▪ Dramatic demonstration of Lenz's Law ▪ Homopolar motor demonstration ▪ Provided with floating ring magnets and a dowel to demonstrate magnetic levitation ▪ Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure. **It should have following Technical Specifications:** **Types of material of magnet:** 1. Alnico 2. Ceramic or ferrite 3. Rare earth magnet (Neodymium) **Shapes of Magnet:** 1. Bar Magnet 2. U-Shape Magnet 3. Horse shoe Magnet 4. Cylindrical Magnet 5. Ring Magnet 6. Disc Magnet **Magnetic Compass** **Magnetic Field Demostrator** **Lenz's Law Demonstrator** **Motor Assembly** **Coil:** No. of Turns : 400 Inductance (approx.) : 2.3mH Max. Current : 0.728 A **It should performed following experiments:**

		▪ Plotting of the combined magnetic field of the earth and a bar magnet and to locate the neutral points. Calculation of the magnetic moment and the pole strength of the magnet ▪ Study of magnetic field lines by Magnetic Field Demonstrator ▪ Study of magnetic levitation by Floating Ring Magnets ▪ Study of Oersted Law ▪ Study of Faraday's Law of Electromagnetic Induction ▪ Study of Lenz's Law ▪ Study of Electromagnet ▪ Study of the principle of motor by a simple assembly of motor
6	Optics Bench	**It should have following features:** ▪ Light source is designed with in built cooling fan ▪ Accessories are provided in a good quality carrying case ▪ Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure. **It should have following Technical Specifications:** Two Rods of 1meter length with two stands Light Source : 150 watt Incandescent light source Power Supply : 230 V , 50 Hz Different Shapes of slits : Converging and Diverging lens Focal length : 100 mm, 150 mm Diameter : 50 mm each **Concave and Convex mirror** Focal length : 100 mm, 150 mm Diameter : 50 mm each **Plane Mirror** Dimension (mm) : 100 × 75 × 2 **D-Shape lens** Dimension (mm) : 100 × 50 × 20 **Prism** Dimension (mm) : 50 × 50 equilateral Mirror Stand Lens Stand Ray Table Viewing Screen Two Optical Pins **It should performed following experiments:** ▪ To study the image formation of source ▪ Introduction of ray optics by ray tracing ▪ Verification of Reflection of light ▪ To determine Refractive index of semi circle (D-shape) lens by Snell's law ▪ Verification of Reversibility of light ▪ To determine critical angle and obtain Total Internal Reflection ▪ To study Dispersion of light ▪ To study Convergent and Divergent lens by image and object relationships ▪ To measure Focal Length of Convex lens using Basic Lens Equation ▪ To measure magnification of image of Convex lens ▪ To determine Focal length of Concave mirror by two Pin method

		▪ To determine Focal length of Convex lens by two Pin method
7	Divergence of Laser	**It should have following features:** ▪ Sliding stand with precise measurement ▪ Precise Voltage and Current measurement ▪ Microcontroller based LCD ▪ Provided with DC supply ▪ Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure. **It should have following Technical Specifications:** **Optics bench** Length : 1meter **Laser source** Wavelength : 630 nm Output : Less than 3mW **Convex Lens** Type : Double Convex Focal Length : 100, 150, 200 mm Diameter : 50 mm **Detector** : Photodiode **DC Power Supply** : 0 - 5 V **Mains** : 230 V AC , 50 Hz **Fuse** : 0.5 A **It should performed following experiment:** ▪ To determine the Divergence of Laser beam
8	Inverse Square Law Demonstrator	**It should have following features:** • Sliding stand with precise measurement • Light Source with height adjustment • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure. **It should have following Technical Specifications:** **Optics bench:** Length : ½ meter Light Source : Incandescent Lamp Wattage : 100W Detector : Photodiode **It should performed following experiment:** • Verification of Inverse Square Law
9	Half shade Polarimeter	**It should have following features:** o Sodium vapour lamp light source o Adjustable height o Circular scale graduated from 0° to 360° o Polarimeter borosilicate glass tube with bubble trapper in the middle o Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure. **It should have following Technical Specifications:** **Polaroid:** Thickness : 0.1 mm Diameter : 26 mm Type : Nitrocellulose polymer

		Half wave plate: Wavelength : 589 nm Type : Quartz **Objective lens:** Type : Double Convex Focal length : 50 mm **Eye piece:** Type : Double Convex Focal length : 230 mm **Polarimeter tube:** Length : 100 mm(1dm) Material : Borosilicate Volume : 23 ml **Sodium vapour lamp:** Wavelength : 5893 Wattage : 35 W Lamp has to be connected with provided external power supply. **It should performed following experiments:** o Determination of the specific rotation of sugar solution using Half Shade Polari meter. o Study of variation of angle of rotation of sugar solution with its concentration. o Study of optical rotary dispersion of sugar solution or to determine the dependence of angle of rotation of sugar solution on the wavelength of light
10	Malus Law Apparatus	**It should have following features:** • Comprises of fixed lamp arm, central circular glass plate base and movable analyzer arm • Holders with adjustable height and circular scale plates • Digital ammeter for precise reading • Graduated circular scale of analyzer from 0° to 360° • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** **Digital ammeter** Range : 0 - 20 microampere Power supply : 9V Detector : Photodiode **Polaroid** Diameter : 26 mm Type : Nitrocellulose polymer film **Incandescent lamp** Wattage : 40 W Input power supply : 230 V ,50Hz Measuring scale : 0° - 360 **It should performed following experiments:** • Study the Polarization of light by reflection and thus verify the Brewster's law. • Verify Malus law using a plain glass plate and a Polaroid. • Verify Malus law using two Polaroid. • Verify Malus law using two plain glass plates.

11	Determine Planck's Constant using LED	**It should have following features:** • LCD for current and voltage • Variable Power Supply (0-5Volt) • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** Mains : 230V , 50 Hz Fuse : 0.5A DC Power Supply : 0 - 5V **LED** Type : Super bright Size : 5 mm Colours : Blue, Green, Orange, Red **DC Voltmeter:** Type : LCD Display : 3½ digit Range : 200 mV - 200 V **DC Ammeter** Type : LCD Display : 3½ digit Range : 2µA - 200 mA **It should performed following experiments:** • Determination of Planck's Constant using Light Emitting Diode (LED). • Draw the I-V characteristic for Light Emitting Diode (LED) and hence determine the Threshold Voltage. • Determination of Planck's Constant by plotting curve between Threshold Voltage and Wavelength of LEDs.
12	Moment of Inertia Setup with Lamp and scale arrangement	**It should have following features:** • Micro controller based Measurement Unit • Engraved and ruled inertia discs • Inverted U- shaped metal body with chuck screw connection • Measurement unit gives instant result of moment of inertia • Three auxiliary bodies • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** **Circular Base** Type : Iron Diameter : 25cm **Inertia Discs** Type : Aluminium Diameter : 15cm Balancing ring : 04 **Suspension Wire** Type : M.S. Wire Width : 28 gauze **Auxiliary Bodies of known MOI Square** Sides : 3.2 cm Weight : 252.2 gm **Triangle**

		Sides : 3.6 cm Weight : 173.8 gm **Cylindrical** Radius : 1.9 cm Weight : 300.4 gm **Lamp & Scale(Optional)** Lamp : Laser light source Scale : 30-0-30 cm **It should performed following experiments:** • Determination of the moment of inertia of given body using inertia table. • Determination of the moment of inertia of given body using inertia table using lamp and scale arrangement. • Prove the perpendicular axis theorem of moment of inertia using inertia table.
13	Torsional Pendulum Setup	**It should have following features:** • Microcontroller based Measurement Unit • Cylindrical and spherical bodies for oscillation • Inverted chuck screw connection • Leveling screw for horizontal balance • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following technical specifications:** **Circular Base** Type : Iron Diameter : 24 cm **Suspension Wire** Type : MS Wire Diameter : 0.68mm **Experimental Body** **Cylindrical** Diameter : 65 mm Weight : 2.13kg **Spherical** Diameter : 100mm Weight : 1.6kg **Measurement Unit** Adaptor Input : 100-300V, 50/60Hz Adaptor Output : 5V DC Least Count : 1Sec **It should have following experiment:** • Determination of modulus of rigidity of material
14	Fresnel Biprism Setup	**It should have following features:** • A complete system with a Light Source, Bench and all other accessories • Sliding uprights are provided • Laser as a Monochromatic source • Convex lens is used for focused image • Concave lens for clear vision of fringes • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** **Optics bench**

		Length : 1.5 m **Laser source** Wavelength : 630 nm Output : Less than 3mW **Biprism** Dimension : 50 x 40 mm Material : Glass Refractive index : 1.5 **Convex Lens** Type : Double Convex Focal Length : 100 mm Diameter : 50 mm **Concave Lens** Type : Double Concave Focal Length : 150 mm Diameter : 50 mm **It should performed following experiments:** • Determination of the wavelength of the monochromatic light with the help of Fresnel Biprism. • Determination of fringe width of the interference pattern.
15	Nodal Slide Assembly Setup	**It should have following features:** • A comprehensive and self contained optics system • A complete system with a Light Source, Bench and all other accessories • Sliding uprights • 40W incandescent lamp Light Source • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** **Optics bench** Length : 1 m **Light source** Output : 40 W Input : 220 V , 50Hz **Convex Lens** Type : Double Convex Focal Length : 150 mm Diameter : 50 mm **Nodal Slide Assembly** Circular scale : 0 - 360° Linear scale : 70 - 0 - 70 mm **It should performed following experiments:** • Determination of the focal length of the convergent lens. • Determination of the focal length of the combination of convergent lenses. • Verification of the relation. $\frac{1}{F} = \frac{1}{f1} + \frac{1}{f2} - \frac{d}{f1.f2}$ • Determination of the principle points of the lens system
16	Calibration of Voltmeter &	**It should have following Technical Specifications:** Analog Voltmeter : 0 - 10 V

	Ammeter by Potentiometer	Analog Ammeter : 0 - 1 A Potentiometer Wire : Constantan Length : 10 meters DC Supply (Standard) : 1.016 V Variable Resistance : 3 - Decade : X 0.1E, X 1E, X 10E Voltage Ratio Factor : 0, 1.5, 15, 30, 150, 300 Total Resistance : 15K E Variable Supply : 0 - 12 V Mains : 230 V ±10, 50 Hz Fuse : 0.5 A Dimensions (mm.) : W 345 x D 245 x H 105 Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should performed following experiments:** • Study of Standardization of the DC Potentiometer • Calibration of Voltmeter using DC potentiometer • Calibration of Ammeter using DC potentiometer
17	Current Carrying Coil Setup	**It should have following features:** • Precise Tangent Galvanometer • Sliding Magnetometer • Provided with DC power supply • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** Mains : 230 V AC , 50 Hz DC Power Supply : 5 Volt, 2.6 A DC Ammeter : 0 - 3 A **Tangent Galvanometer** Type : Stewart and Gee Scale : 50 - 0 - 50 cm **Magnetometer** Pointer : Aluminium Quadrant : 0° - 90° (Four) **Coil** Bobbin : Aluminium Diameter : 19 cm Wire : Insulated copper Turns : 0 to 5, 50, 500 **It should performed following experiments:** • Determination of the radius of a current carrying coil • Determination of the magnetic field with the variation of distance along the axis of current carrying coil
18	Resolving power of Telescope with Sodium light source	**It should have following features:** • Provided with variable rectangular slit • Crosswire- Eyepiece • Wide aperture optics • Rack and pinion arrangement focusing • Sodium Lamp as Monochromatic Light Source (Optional) • Durable and precise construction

		• Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following technical specifications:** **Slit** Stripes Width : 1mm Separation between Stripes : 1mm, 2mm, 5mm **Variable Rectangular Slit** Main scale : 5mm Circular scale : 50 divisions Least Count : 0.02mm Eyepiece : 10x (Ramsden) **Sodium vapor lamp** Wavelength : 5893A Wattage : 35W Mains Supply : 230V, 50Hz **It should be able to perform following experiment** • To determine Resolving Power of a Telescope
19	Thermal Expansion Trainer	**It should have following features:** • Precise measurement by Spherometer • For heating Electric Oven is provided • Buzzer indicator • Samples for study– Copper, Brass, Aluminum • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **The trainer should have following Technical Specifications:** **Steam jacket** Type : Brass Length : 50 cm Diameter : Inner 2.5 cm Outer 3 cm **Sample** Type : Copper, Steel, Aluminium Length : 52 cm Diameter : 10 mm **Spherometer** Main Scale : 10 - 0 - 10 mm Circular Scale : 100 divisions Least Count : 0.01 mm **Buzzer indicator** : 1.5 - 15 VDC **Power Supply** : 230 V, 50 Hz **Adaptor Output** : 5 V, 500 mA **The trainer should performed following experiment:** • To determine the co-efficient of Linear Expansion of a given Sample.
20	Lee's Disc Setup	**It should have following Technical Specifications** **Adaptor Output:** 5V, 500mA **Temperature Sensors** Range: Up to 150°C Max. Resolution: 0.5°C

		Disc Sample type: Cardboard, Glass, Plywood **Disc Diameter:** 111mm **Disc Thickness:** 2.8mm Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should be able to perform following experiments:** • To determine the Coefficient of Thermal Conductivity of Bad Conductors by Lee's Disc method
21	Acceleration Measurement Set up	**It should have following features:** • Digital Stop watch • Simple and Compound pendulum • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following technical specifications:** Bar Rod Length : 1m Breadth : 4.3cm Width : 0.7cm Number of holes : 19 Distance between holes : 5cm Diameter of holes : 1cm Diameter of bob : 2.47cm Height of Hook : 1.1cm **Measurement unit** Adaptor input : 100-240V, 0.2A, 50 Hz Adaptor output : 5V **It should be able to perform following experiments:** • To determine the acceleration due to gravity by object drop method • To determine the acceleration due to gravity by Simple Pendulum • To determine the acceleration due to gravity with the help of Compound Pendulum • To determine the radius of gyration and moment of inertia of a Compound Pendulum about its centre of gravity
22	Seebeck and Peltier Effect	**It should have following features:** • High Seebeck Coefficient of thermoelectric module • Micro-controller based measurement • Digital display of temperature of hot and cold side • Provided with PC based measurement and calculation • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should be able to perform following experiments:** Display : LCD (16 x 2) Temperature : Range: 0 - 150°C Resolution: 0.1°C Voltage : Range: 0 – 2000 mV Resolution: 0.1 mV Glass Beaker : 250 ml Fan : 3 V

		Supply : Adaptor Input : 220-240 V, 50 / 60 Hz Adaptor Output : 5 V, 1 A **It should be able to perform following experiments:** • To study the Seebeck Effect • To Study the Peltier Effect • Understanding conversion of energy from one form to another • Application of thermal energy • To plot graph between thermo emf generated v/s temperature difference • Calculation of Seebeck Coefficient.
23	Joule's Constant Measurement Setup	**It should have following features:** • Complete setup for measuring Joule's constant • Constant current source • Calorimeter to prevent heat loss • LCD Display • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following technical specifications:** **Power Supply** Input : 230V AC 10%, 50Hz Output : 0-10V / 0-1.5A **Calorimeter** Material : Copper Container Volume : 140 ml **Heater Coil** Material : Nichrome Resistance : 5Ω **Thermometer** Least count : 1°C Maximum range : 110°C **It should be able to perform following experiments:** • To determine mechanical equivalent of heat (J) joule's constant by electrical method
24	Hall Effect Training System	**The trainer should have following features:** ▪ A complete setup for the study of Hall Effect in semiconductor ▪ A Hall Effect probe is provided with p type germanium crystal with oven ▪ Provided with InAs sensor for measuring magnetic field ▪ Gauss and Tesla meter for measuring magnetic field with LCD and PC interface facility ▪ A thermocouple is provided for thermo-emf measurement ▪ Provided with an Electromagnet ▪ Provided with the power supply unit for an electromagnet ▪ Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **The trainer should performed following experiments:** ▪ Measure the magnetic field by Gauss and Tesla meter ▪ Find the poles of an electromagnet with the help of Hall probe and Gauss meter

- Measurement of Hall voltage
- Calculate the charge carrier concentration (density) of semiconductor crystal
- Calculate the Hall coefficient of Ge 'p' type crystal
- Calculate the mobility of charge carrier particles
- Study the Hall voltage as a function of current at constant magnetic field
- Study the Hall voltage as a function of magnetic field at constant current
- Study the dependence of Hall Effect coefficient on temperature

The trainer should have following Technical Specifications:

Gauss & Tesla meter

Microcontroller Based LCD screen for Measurement of Magnetic Field in Gauss and Tesla,
with PC Interface facility.

Sensor	:	InAs for better sensitivity
Range	:	0 - 20 K Gauss

Indicates the direction of the magnetic field

Resolution	:	1 Gauss
Power Supply	:	230 V ±10 %, 50 Hz

Measurement Unit

a) Measurement of probe current and hall voltage

Digital Display	:	0 - 200 mV
Current	:	0 - 20 mA
Accuracy	:	0.2 % of the reading 1 of digit
Load Regulation	:	0.03 % for 0 to full load

b) Measurement of Thermo emf and heater current –

Digital Display	:	0 - 20 mV (100 microvolt Min.)
Accuracy	:	0.1 % of reading 1 digit
Current	:	0 - 1 A
Accuracy	:	± 0.2 % of the reading 1 of digit

c) Hall probe

Crystal	:	P - type lightly dopped
Resistivity	:	6 - 7 ohm.cm
Thickness	:	0.50 mm 2 %

d) Oven

Maximum constant current	:	750 mA
O Maximum temperature	:	90C

e) Temperature sensor

Temperature is measured with Chromel-Alumel thermocouple with its junction at a distance of 1mm from the crystal.

Thermocouple	:	Chromel-Alumel (Thermo e.m.f. chart is provided)

f) Power Supply : 230 V ±10 %, 50 Hz

Constant Current Power Supply

Current range	:	0 to 3.5 A
Output Voltage	:	40 V
Display	:	3½ digit, 7 segment
Power Supply	:	230 V, ±10 %

		Electromagnet Poles : 25 mm diameter Coils : 2 Nos. Resistance : 2.2 Ohms (approx.) Yoke : U shaped soft iron material Input voltage : 40 V, 3.5 A
25	Gauss & Tesla Meter	**It should have following features:** • Microcontroller based Instrument • LCD screen • PC Interface facility with run time graph plotter • High Accurate InAs sensor • Compact Size • Indicates the direction of magnetic field • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** Range : 0-2k Gauss (0-0.2 T) 2-20k Gauss (0.2-2 T) Zeroing Adjustment : By potentiometer Display : 16 x 2 Characters LCD PC interface : PC interface facility with run time graph plotter and a user friendly software Sensor : InAs sensor for better accuracy and stability Accuracy : ±3% Sensor : InAs sensor is provided for better accuracy and stability Power Supply : 230V , 50Hz
26	Susceptibility of Paramagnetic Materials by Quinck's Tube method	**It should have following features:** ▪ Quink's tube is provided with measuring scale ▪ Provided with a magnifying lens ▪ Gauss and Tesla meter for measuring magnetic field with LCD and PC interface facility ▪ InAs Probe for better sensitivity of magnetic field ▪ Provided with an Electromagnet ▪ Provided with the Constant Current Power Supply for an Electromagnet ▪ Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** **1. Quinck's Tube** It is a U-shaped glass tube. One of the limbs of the tube is wide and the other one is narrow. Wide limb of the tube is fitted with the stand. **2. Paramagnetic samples** It includes with two paramagnetic material one is Ferric Chloride (Fecl) and other is MangneseSulphate (MnSo). **3. Electromagnet :** Poles : 25 mm diameter Coils : 2 No. Resistance : 2.2 Ohms (approx.) Yoke : U shaped soft iron material Input voltage : 40 V, 3.5 A

		4. Constant current power supply Current range : 0 to 3.5 A Output Voltage : 40 V Display : 3½ digit, 7 segment Mains : 230 V, **5. Gauss and Tesla meter** Microcontroller Based LCD Display For Measurement of Magnetic Field in Gauss and Tesla, With PC Interface facility. It can indicate the direction of the magnetic field. Sensor : InAs for better sensitivity Range : 0 - 20 Kg Indicate the direction of the magnetic field Power Supply : 230 V , 50Hz Hall probe Crystal : P- type lightly dopped Resistivity : 6 - 7 ohm.cm Thickness : 0.50 mm 2% 6. Travelling Microscope Optics : True achromatic objective with 75mm focusing distance and 10X Ramsden eyepiece with fine cross wire Scale: Horizontal scale : 20 cm divided at 0.5 mm interval Vertical scale : 14 cm divided at 0.5 mm interval Venire scale : 50 division with a least count of 0.01 mm **It should be able to perform following experiments:** • Measurement of susceptibility of Ferric Chloride (Fecl) 3 Paramagnetic solution • Measurement of susceptibility of Manganese Sulphate (MnSo) Paramagnetic solution
27	e/m Measurement Setup	**It should have following features:** • Microcontroller based power supply instrument for CRT • LCD display to measure deflection voltage • Focusing adjustment provided • Intensity adjustment provided • Cathode Ray Tube mounting on acrylic stand • Deflection magnetometer provided • Octal socket provided on the front panel of power supply for connecting CRT • Provided with Pair of bar magnet and compass box • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** **Cathode Ray Tube:** a. Distance between Plates : d = 0.3 cm b. Length of Plates : *l* = 2 cm c. Distance between Screen and Plates (edge): L = 14.5 cm Focusing Voltage : Variable 0 to 300 V DC Intensity Adjustment Voltage : Variable 0 to 60 V DC Deflection Voltage : Variable 0 to 50 Volt

		Scale : 0 to 30 cm each side CRT Connection : By Octal socket LCD : 16 x 2 Deflection Magnetometer : 0 to 360° Power Supply : 230 Volts ± 10%, 50Hz Fuse : 500 mA Dimension of Power Supply (mm.) : W 215 D195 H 130
28	Newton's Ring Apparatus	**It should have following features:** • Traveling microscope with x-y-z axes movement • Horizontal measurement scale with fine and coarse movement screw • Cross wire in the field of view for ring's diameter measurement • Newton's ring assembly consisting of plano-convex lens mounted on an optically plane glass plate • Adjustable plane glass plate is provided to be inclined at 45º with respect to the vertical plain • Sodium vapour lamp as the monochromatic (5893Å) and broad light source • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** Sodium Vapour Lamp Wavelength : 5893Å Power Supply : Input voltage 230V ± 10%, 50Hz Operating Wattage : 35W Lens Type : Plano - convex Focal Length : 100 cm Diameter : 6 cm Newton's Ring Microscope Magnification : 30 X Horizontal Movement Limit : 9 cm Least Count of Circular Scale : 0.001cm **It should be able to perform following experiments:** • Determination of the Wavelength of sodium light by measuring the diameters of Newton's rings. • Determination of the Refractive Index of a liquid transparent medium such as water using Newton's ring apparatus.
29	Resistivity and Band-Gap Measurement. (Four Probe Method)	**It should have following features:** • A complete setup for measurement of Resistivity & Band gap • Four individually spring loaded probe arrangement is provided • Collinear and equally spaced probe • The probes are mounted in a Teflon bush, which ensure a good electrical insulation between the probes • Germanium crystal in the form of a chip is provided • Oven arrangement with safety precaution • Provision for low and high rates of heating • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:**

		Four probe Contacts with sample : Spring Loaded Space between probes : 2 mm ±2% Probes : Collinear **Sample** Material : Germanium crystal Type : n-type Thickness : 0.50 mm. **Oven** Maximum Temperature : Room Temperature to 200°C (max) Heater Resistance : 37ohms (approx.) Maximum heater Voltage : 45 V **Measurement Unit** **Digital Voltage measurement:** Display : 3½ digit, with auto polarity Range : X1(0 - 200 mV) and X 10(0 - 2 V) Resolution : 100 mV at X1 range **Constant Current Generator:** Current Range : 0 to 20 mA Resolution : 1 mA Accuracy : ±0.25 % or ±1 digit Open Circuit Voltage : 18 V **Oven Power Supply:** Input : 230 V AC ± 10% **Heating Options:** a) Low : 40 V AC b) High : 45 V AC **Temperature Measurement:** Mercury Thermometer Range : 0 -150 °
30	Ballistic Galvanometer setup	**It should have following features:** • Power Supply for Ballistic Galvanometer • Moving Coil with large Moment of Inertia • Flexible Phosphor-Bronze Ribbon Suspension • Highly Sensitive Coil • Lamp and Scale Arrangement with Adjustable Stand • Deflection Measurement Scale • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** **Ballistic Galvanometer** Suspension Wire : Phosphor Bronze Reflector : Concave Mirror Coil Resistance : 100 ohm **Lamp & Scale** Lamp : Laser Light Source Scale : 30 - 0 - 30 cm **Ballistic Galvanometer Power Supply** Supply Voltage : 6V Potentiometer : 5 KW Mains : 230 V ± 10%, 50 Hz Fuse : 0.5 A **It should be able to perform following experiments:**

		• Determination of Ballistic constant by steady deflection method • Determination of Charge sensitivity of Ballistic Galvanometer using capacitors • Comparing capacitance of two condenser using Ballistic Galvanometer • Study the logarithmic decrement for a Ballistic Galvanometer
31	Hysteresis Loop Tracer	**The trainer should have following features:** • Display of magnetic field in gauss • Provided with nickel, hard steel and soft iron samples • Provided with an extensive manual • Variable magnetic field • A good quality solenoid coil • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **The trainer should have following Technical Specifications:** Display : 3½ digit Mains Supply : 230 50 Hz **Sample:** Type : Nickel, Hard Steel, Soft Steel Length : 39 mm each Diameter : 1.2 mm each Diameter of pickup coil : 3.21 mm • Understanding the following magnetic parameters and their measurement by this set up: ➢ Corecivity ➢ Retentivity ➢ Saturation magnetization ➢ Various magnetic phase identification ➢ Hysteresis loss
32	Measurement of Wavelength of Laser by Diffraction Grating	**It should have following features:** • A complete system with Light Source, Bench and all necessary accessories • Sliding stand for precise arrangement • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** **Optics bench** Length : 1 meter **Laser source** Wavelength : 630 nm Output : Less than 3 mW Diffraction Grating : 300 L / mm **Scale** Horizontal : 10 - 0 - 10 cm Vertical : 9 - 0 - 9 cm
33	Coupled Oscillator	**It should have following features:** • Needle pivoting for very less friction • Two identical pendulums • Spring coupling • Oscillations of pendula is recorded on PC

		• Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** **Pendulum** Length : 1 meter Spring Length : 21cm Diameter : 30mm Spring constant : 2.5N/m **Power supply** Output : 12V, 5V / 500mA Detector : Magnetic Field Sensor PC interfacing : RS232 **Data Acquisition Unit** Display : LCD Least count : 1 second **Scope of Learning:** • Study two normal modes of Coupled Oscillator and record the oscillations to determine the time period for both the modes (T_0 and T_1) • Record the oscillations for Resonance Mode. To determine the Coupled Time Period and Beat Time Period of the oscillations (T_c and T_b), also compare the experimental values of time period with calculated values • To determine Degree of Coupling, Coupling Constant for different coupling lengths and study the variance of both T_0 and T_1 with Coupling Constant • To determine the Spring Constant with the help of Coupled Oscillator
34	Michelson Interferometer with Diode laser	**It should have following features:** • High quality optics • Machined parts with highly stable base • Precision micrometer with one micron least count • Precision mechanical design for mirror alignment and movement • Online product tutorials and manual should be available to perform lab experiments by following step-by-step experimental procedure **It should have following Technical Specifications:** Base : Machined MS base of 6kg with rubber sheet attached at bottom to reduce vibration **Micrometer** Least count : 0.001 mm Range : 0-25 mm Beam Splitter Type : Cubic Size (mm) : 15 x 15 x 15 R%/T% : 50 / 50 Flatness : λ/4 (at 632nm) **Mirror** Type : Circular Diameter (mm) : 25 (5 mm thick) Second Mirror : Fixed on Beam Splitter **LASER** Type : Diode LASER (Battery operated) Wavelength : 630nm He-Ne LASER (630nm) with power supply

		It should be able to perform following experiments: • To understand Two Beam Interferometry using Michelson Interferometer • To generate circular fringe pattern • To calculate the wavelength of the given light source
35	Cathode ray Oscilloscope	• Analog channel bandwidth: 30 MHz • 2 analog channels • Compact size, light weight, easy to use • 7 inch TFT LCD, intensity graded color display
36	Vernier Calliper	• Stainless steel Vernier Callipers 0-150 mm
37	Screw Gauge	• Brass 0-25 mm
38	Spherometer	• Brass 10-0-10
39	Stop Watch	• Least count 1 ms
40	Ammeter	• DC Ammeter Range: 0-3 A • Accuracy:2.5% Scale length 57+-2mm
41	Voltmeter	• DC Voltmeter Range: 0-3 A • Accuracy:2.5% Scale length 57+-2mm
42	Galvanometer	• Accuracy:2.5% Scale length 57+-2mm
43	Rheostat	• Single tube wound with kanthal resistance wire on porcelain tube 25x5.6 cms 1A 400 Ohm
44	Screw Jack	• Cast iron
45	Worm wheels	• Cast iron
46	Fly wheel	• Machined and balanced cast iron wheel and steel spindle supported on ball bearings in strong iron brackets.
47	Bernoulli's theorem apparatus	• Test Section: Material Acrylic (One Piece). • Piezometer Tubes: Material P.U. Tubes (7 Nos.) • Water Circulation: FHP Pump, Crompton/kirloskar makes. • Flow Measurement: Using Measuring Tank with Piezometer, Capacity 25 Ltrs. • Sump Tank: Capacity 60 Ltrs. • Inlet Tank: Capacity 25 Ltrs. • Stop Watch: Electronic. • Control Panel Comprises of: Standard makes On/Off Switch, Mains Indicator, etc. • Tanks will be made of Stainless Steel. • Instruction Manual: An ENGLISH instruction manual should be provided along with the Apparatus

S. No.	Name of Items (Full Specifications are given above)	Quantity Required	Compliance as per Specification (Y/N)
1	Spectrometer Setup	**05**	
2	Traveling Microscope	**05**	

3	Electricity Lab Trainer	**01**	
4	Electrostatics Lab Trainer	**01**	
5	Magnetism Lab	**01**	
6	Optics Bench	**01**	
7	Divergence of Laser	**01**	
8	Inverse Square Law Demonstrator	**01**	
9	Half shade Polarimeter	**01**	
10	Malus Law Apparatus	**01**	
11	Determine Planck's Constant using LED	**01**	
12	Moment of Inertia Setup with Lamp and scale arrangement	**01**	
13	Torsional Pendulum Setup	**01**	
14	Fresnel Biprism Setup	**01**	
15	Nodal Slide Assembly Setup	**01**	
16	Calibration of Voltmeter & Ammeter by Potentiometer	**02**	
17	Current Carrying Coil Setup	**01**	
18	Resolving power of Telescope with Sodium light source	**01**	
19	Thermal Expansion Trainer	**01**	
20	Lee's Disc Setup	**01**	
21	Acceleration Measurement Set up	**01**	
22	Seebeck and Peltier Effect	**02**	
23	Joule's Constant Measurement Setup	**01**	
24	Hall Effect Training System	**01**	
25	Gauss & Tesla Meter	**01**	
26	Susceptibility of Paramagnetic Materials by Quinck's Tube method	**01**	
27	e/m Measurement Setup	**01**	
28	Newton's Ring Apparatus	**01**	
29	Resistivity and Band-Gap Measurement. (Four Probe Method)	**01**	
30	Ballistic Galvanometer setup	**01**	
31	Hysteresis Loop Tracer	**01**	
32	Measurement of Wavelength of Laser by Diffraction Grating	**01**	
33	Coupled Oscillator	**01**	
34	Michelson Interferometer with Diode laser	**01**	
35	Cathode ray Oscilloscope	**02**	
36	Vernier Calliper	**10**	

37	Screw Gauge	**10**	
38	Spherometer	**10**	
39	Stop Watch	**10**	
40	Ammeter	**10**	
41	Voltmeter	**10**	
42	Galvanometer	**10**	
43	Rheostat	**10**	
44	Screw Jack	**05**	
45	Worm wheels	**05**	
46	Fly wheel	**05**	
47	Bernoulli's theorem apparatus	**01**	

University reserved the right to enhance or mitigate the quantity without any notice.

Note: All the accessories (in all respect) which shall be required to run the machine has to be supplied along with the machine.

OTHER REQUIREMENTS: The bidders will have to fulfil the following general requirements:

1. Bidder shall ensure that the routine work should not hamper during installation and commissioning.
2. Monitoring and inspection: Monitoring and inspection shall be done by Representative of SVSU at site.
3. Supplier should ensure that all the safety measures has to be installed as per the existing statutory compliances while designing the lab.

The bidder will have to sign with seal of firm on each & every page of this tender as a token of acceptance to our terms & conditions & submit along with technical bid.

I have also enclosed all relevant documents in support of my claims, (as above) in the following pages.

Signature of Bidder

Name: ……

Designation: ……

Organization Name: ……

Contact No.: ……

ANNEXURE – III

<< Organization Letter Head >>

BID SUBMISSION

Online Bid Submission:

Online system shall be followed, i.e.

(i) Please note that in any case if price-bid/Financial Offer submitted manually then bid shall not be accepted.

(ii) Only those proposals will be considered for opening, who have submitted their BID online by due date/time (as specified in Bid Data Sheet).

The Online bid complete in all respect. The following checklist is for the convenience of the bidders. Kindly check the following points before submitting the bids.

Sr. No.	Content	Document Submitted (Yes/No)	Page Number as per numbering given to the technical bid documents uploaded on the portal (If Applicable)
1.	Whether the all pages of the proposal has been signed with seal of firm by bidder/authorized signatory?		
2.	Have submitted the Scanned copy (PDF format) of the technical proposals on e-Procurement Portal?		
3.	Have submitted the Company Registration & associated Documents on e-Procurement Portal?		
4.	Have submitted copy of PAN, GST, TAN Registration etc. on e-Procurement Portal?		
5.	Have submitted EMD and TENDER+ E-Service charges on e-Procurement Portal?		
6.	Have all the pages of proposal (Technical Proposal) been properly numbered and signed by authority/ authorized person only?		
7.	Have you checked the eligibility Criteria and Submitted the relevant documents as proof on e-Procurement Portal?		
8.	Have submitted the authority letter for signing the proposal on behalf bidder on e-Procurement Portal?		
9.	Have submitted the authority letter for use of digital signature on e-Procurement Portal?		
10.	Have submitted the Notice Inviting Quotation with schedule and disclaimer		
11.	Have submitted the Instructions to Bidders		
12.	Have submitted the Terms and Condition as per Annexure - I		

Sr. No.	Content	Document Submitted (Yes/No)	Page Number as per numbering given to the technical bid documents uploaded on the portal (If Applicable)
13.	Have submitted the Technical Specification and Compliance Sheet as per Annexure – II		
14.	Have submitted the Details of Bid Submission as per Annexure - III		
15.	Have submitted the Organization Declaration Sheet as per Annexure – IV		
16.	Have submitted the List of Government organizations/ Department/PSU and Private Organizations where the same products have been supplied (in last three years) along with their contact number(s) as per Annexure-V Note: The bidder(s) are required to submit proper proof (like Purchase Order/Work Order and Performance Report) duly attested by Gazetted Officer or Notary and client to support/ proving the claim.		
17.	Have submitted the offered Model of OEM must be working in Indian Conditions, without any Problems. Minimum 2 performance reports with Purchase Order/Work Order duly attested by Gazetted Officer or Notary to be submitted as per Annexure-V		
18.	Have submitted the List of application specialist / Supporting / Service Engineer and Nearest Address of service branch who have the technical competency to handle and support the quoted product during the warranty period as per Annexure - VI.		
19.	Have submitted the Details of Electronic Fund Transfer/RTGS Transfer (Annexure VIII)		
20.	Have submitted the Manufacturer's Authorization Form (Annexure-IX)		
21.	Have submitted the Training Requirement (Annexure –X)		
22.	Financial Proposal Document (Annexure-XI)		
23.	Have submitted the Affidavit regarding Authenticity and correctness of information/documents as per Annexure - XII		
24.	Have submitted the Affidavit regarding delisting/blacklisting, demobilization etc. as per Annexure - XIII		

Sr. No.	Content	Document Submitted (Yes/No)	Page Number as per numbering given to the technical bid documents uploaded on the portal (If Applicable)
25.	Have submitted the Affidavit regarding completion of supply and installation & commissioning of Machine/Lab Equipments etc. in running condition within stipulated time frame as per Annexure - XIV		
26.	Have submitted the Technical supporting documents in support of all claims made at Annexure-II		
27.	Whether the TENDER document has been signed by bidder/authorized signatory and submitted on e-Procurement Portal?		
28.	Whether the TENDER corrigendum (if any) has been signed by bidder/authorized signatory and submitted on e-Procurement Portal?		
29.	Have submitted the audited statement and Financial Assessment Copy/Income Tax Return Copy showing their net balance / Profit for last three financial years for financial eligibility.		
30.	All documents to be submitted by the firms should be duly attested by gazetted officer/ notary public in case these are copies of the original documents. No unattested documents will be entertained.		
31.	Have submitted the financial bid as per BOQ.		--------

(Signature with Seal of the Bidder)

Name: ……..

Designation: ……..

Organization Name: ……..

Contact No.: ……..

ANNEXURE - IV

<< Organization Letter Head >>
DECLARATION SHEET

We, _____ hereby declare that all the information and statements made in this Proposal are true and accept that any misleading information contained in it may lead to our disqualification. I have gone through the specifications, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certify that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.

We, further specifically certify that our organization has not been Black Listed/De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years.

Name & Address of the Bidder/ Manufacturer /authorized dealer/ distributors/agent	
Phone	
Fax	
E-mail	
Contact Person Name	
Mobile Number	
GST Number	
TIN Number	
PAN Number	
(On-line payment of Tender Fees) UTR No. (For Tender Fee)	
(On-line payment of EMD) UTR No. (For EMD)	

Attachments:

1. Power of Attorney in the name of authorized representative to be enclosed.
2. Affidavit(s).

(Signature with Seal of the Bidder)

Name: ……..

Designation: ……..

Organization Name: ……..

Contact No.: ……..

ANNEXURE - V

<< Organization Letter Head >>

LIST OF GOVERNMENT ORGANIZATION/DEPARTMENT/PSU

List of Government Organizations/Department/PSU for whom the Bidder has under-taken such work during last three years (must be supported with work orders) **Note: The bidder(s) are required to submit proper proof (like Purchase Order/Work Order) duly attested by Gazetted Officer or Notary and client to support/ proving the claim.**			
Sr. No.	**Name of the organization**	**Name of Contact Person**	**Contact No.**

Signature of Bidder

Name: ……

Designation: ……

Organization Name: ……

Contact No.: ……

<< Organization Letter Head >>

LIST OF PRIVATE ORGANIZATION

List of Private Organizations for whom the Bidder has under-taken such work during last three years (must be supported with work orders)

Note: The bidder(s) are required to submit proper proof (like Purchase Order/Work Order) duly attested by Gazetted Officer or Notary and client to support/ proving the claim.

Sr. No.	Name of the organization	Name of Contact Person	Contact No.

Signature of Bidder

Name: ……

Designation: ……

Organization Name: ……

Contact No.: ……

<< Organization Letter Head >>

LIST OF PERFORMANCE REPORT

List of Performance Report for whom the Bidder has under-taken such work in Indian Conditions, without any Problems during last three years (must be supported with work orders)

Note: The bidder(s) are required to submit proper proof (like Purchase Order/Work Order) duly attested by Gazetted Officer or Notary and client to support/ proving the claim.

Sr. No.	Name of the organization	Name of Contact Person	Contact No.

Signature of Bidder

Name: ……

Designation: ……

Organization Name: ……..

Contact No.: ……..

ANNEXURE - VI

<< Organization Letter Head >>

LIST of application specialist / supporting / Service Engineer

Name of application specialist / Service Engineer who have the technical competency to handle and support the quoted product during the warranty period.		
Name and Address of the organization	**Name of Contact Person**	**Contact No.**

S. No.	**Nearest Address of service branch**	**Nearest Address of spares branch**

Signature of Bidder

Name: ……

Designation: ……

Organization Name: ……

Contact No.: ……

ANNEXURE - VII

FORMAT FOR PERFORMANCE BANK GUARANTEE

(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred) (TO BE ESTABLISHED THROUGH ANY OF THE NATIONAL BANKS (WHETHER SITUATED AT GURUGRAM OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT GURUGRAM OR ANY SCHEDULED BANK (OTHER THAN NATIONALISED BANK) SITUATED AT GURUGRAM. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT AC-CEPTED.)

To,
The Registrar
Shri Vishwakarma Skill University,
Gurugram, Haryana
India

LETTER OF GUARANTEE

WHEREAS Shri Vishwakarma Skill University, Gurugram (Buyer) have invited Tenders vide

Tender No.: …….. dated: ……

For purchase of .....

and whereas the said tender document requires that any eligible successful Bidder (seller) wishing to supply the equipment /machinery etc. in response thereto shall establish an irrevocable Performance Guarantee Bond in favour of **"Shri Vishwakarma Skill University"** in the form of Bank

Guarantee for Rupees .....

and valid till **Three Year Six Months** from the date of issue of Performance Bank Guarantee that may be submitted within 21 (Twenty-One) days from the date of acceptance as a successful Bidder.

NOW THIS BANK HEREBY GUARANTEES that in the event of the said Bidder (seller) failing to abide by any of the conditions referred in tender document / purchase order / performance of the equipment / machinery, etc. this bank shall pay to Shri Vishwakarma Skill University, Gurugram on demand and without protest or demur Rupees .....

This bank further agrees that the decision of SVSU, Gurugram (Buyer) as to whether the said Bidder (Seller) has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.

We, ... (name of the bank & branch) hereby further agree that the guarantee herein contained shall not be affected by any change in the constitution of the Bidder (Seller) and/ or Shri Vishwakarma Skill University, Gurugram (Buyer).

Notwithstanding anything contained herein:

1. Our liability under this Bank Guarantee shall not exceed Rupees. ..... (Indian Rupees only).
2. This Bank Guarantee shall be valid up to ..... (date).

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

This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at ..... situated at ..... (Address of local branch).

Yours truly,

Signature and seal of the guarantor:

Name of Bank:

Address:

Date:

Instruction to Bank: Bank should note that on expiry of Guarantee Period, the Original Guarantee will not be returned to the Bank. Bank is requested to take appropriate necessary action on or after expiry of bond period.

ANNEXURE - VIII

<< Organization Letter Head >>

MANDATE FORM FOR ELECTRONIC FUND TRANSFER/RTGS TRANSFER

Date: / /

The Registrar
Shri Vishwakarma Skill University,
Gurugram.

Sub: Authorization for release of payment / dues from Shri Vishwakarma Skill University, through Electronic Fund Transfer/RTGS Transfer.

1. Name of the Party/Firm/Company/Institute:
2. Address of the Party:

   Line 1: ……

   Line 2: ……

   City: ……..

   Pin Code: ……..

   E-Mail ID: ……

   Mob No: ……..

   Permanent Account Number (PAN NO.): ……..

3. Particulars of Bank

Bank Name		Branch Name	
Branch Place		Branch City	
Pin Code		Branch Code	
MICR No.			
(9 Digit number appearing on the MICR Bank of the Cheque supplied by the Bank, please attach a Xerox copy of a cheque of your bank for ensuring accuracy of the bank name, branch name and code number)			
IFS Code:(11-digit alphanumeric code)			
Account Type	Saving ☐	Current ☐	Cash Credit ☐
Account Number			

DECLARATION

I hereby declare that the particulars given above are correct and complete. If any transaction delayed and not effected for reasons of incomplete or incorrect information I shall not hold Registrar, Shri Vishwakarma Skill University, responsible. I also undertake to advise any change in the particulars of my account to facilitate updating of records for purpose of credit of amount through NEFT/RTGS Transfer.

Place: ……..

Date: ……..

Signature & Seal of the Authorized Signatory of the Party

Certified that particulars furnished above are correct as per our records

Bankers Stamp: Date:

……

Signature of the Authorized Official from the Bank

N.B: Please fill in the information in CAPITAL LETTERS, computer typed; please TICK wherever it is applicable.

ANNEXURE - IX

<< Manufacturer Letter Head >>

MANUFACTURERS' AUTHORIZATION FORM

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.
Date: [insert date (as day, month and year) of Bid Submission]

Tender No.: [insert number from Invitation for Bids]

To: [insert complete name and address of Purchaser]

WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with the Terms and Conditions, with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on …….. day of …… [insert date of signing]

Annexure – X

<< Organization Letter Head >>

Training Requirement

1.	Product Description	**……(Tender Name)**
2.	No. of Attendees	Faculty of University
3.	No. of Days	2 Weeks
4.	Type of Training	Operational Training and Maintenance Training

Proper Training of 2 weeks (full day) has to be given by the qualified engineer of the firm to the university staff and students without any additional cost.

Signature of Bidder

Name: ……

Designation: ……..

Organization Name: ……..

Contact No.: ……..

Annexure – XI

<< Organization Letter Head >>

Financial Proposal (to be submitted online only)

Financial Proposal

To
The Registrar,
Shri Vishwakarma Skill University, Haryana,
Transit office: Plot No. 147, Sector 44,
Gurugram (Haryana).

Sub: Financial Bid /proposal for "_____"

Dear Sir,

We are pleased to quote/submit our financial proposal for the "_____".

I/We _____ organization here with enclose the Financial Proposal for selection of my/our firm for that tender. For TENDER, **our Financial Proposal submitted in BOQ on online procurement portal**.

Our financial proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiration of the validity period of the Proposal, i.e. 180 days from the last date notified for submission of the proposal.

1. Delivery Mode: - Delivery at University, at site or at that place to be informed by the SVSU.
2. Delivery Period: Within maximum of 06 weeks from the date of placement of purchase order.
3. Terms of payment: For Indigenous supplies, 100% payment shall be made by the Purchaser against delivery, inspection, successful installation, commissioning and acceptance of the equipment at SVSU, Gurugram Campus in good condition and to the entire satisfaction of the Purchaser and on production of unconditional performance bank guarantee as specified in tender terms and conditions.

NOTE: Financial Proposal must be submitted online in BOQ format only. If financial bid submitted manually than bid shall not be accepted in any circumstances.

Signature: ……

Name: ……

Business Address: ……

……

Affix Rubber Stamp: ……

Place: ……

Date: ……

Annexure – XII

Affidavit regarding Authenticity and correctness of information/documents

||SPECIMEN AFFIDAVIT||

(On Non Judicial Stamp of Rs. 100/-)

To
The Registrar,
Shri Vishwakarma Skill University, Haryana,
Transit office: Plot No. 147, Sector 44,
Gurugram (Haryana).

ln response to the Tender No. …… for …….. (Name of the Tender) dated …… for quoting against the Tender as an owner/Director/Proprietor of M/s ……..

I/we …….. who is/are …….. (status in the firm/company) and competent for submissions of the affidavit on behalf of M/S …… (Organization/Manufacturer/authorized dealer/ distributors/agent) do hereby solemnly affirm an oath and state that:

I/we am/are fully satisfied for the correctness of the certificates/records submitted in support of the following information in bid documents which are being submitted in response to notice inviting e-tender No. ……..

We also agreed to buyer for Integrity Pact terms and conditions as applicable from time to time as per government rules.

I/we am/are fully responsible for the correctness of following self-certified Information/ documents and certificates:

1. That the self-certified information given in the bid document is fully true and authentic.
2. That:
    1. The proof of online deposit of EMD and cost of TENDER/bid document + E-service charges and other relevant documents provided are authentic.
    2. Information regarding financial qualification and annual turnover is correct.
    3. Information regarding various technical qualifications is correct.

Signature with Seal of the Deponent (Bidder)

I/we, _____ above deponent do hereby certify that the facts mentioned in above are correct to the best of my knowledge and belief. Verified today_____ (dated) at _____ (place).

Signature with Seal of the Deponent (Bidder)

Note: Affidavit duly notarized in original shall submit in the Office of Shri Vishwakarma Skill University, Haryana, Transit office: Plot No. 147, Sector 44, Gurugram (Haryana) on Technical Presentation day/date.

Annexure – XIII

Affidavit regarding delisting/blacklisting, demobilization etc.

||SPECIMEN AFFIDAVIT||

(On Non Judicial Stamp of Rs. 100/-)

To
The Registrar,
Shri Vishwakarma Skill University, Haryana,
Transit office: Plot No. 147, Sector 44,
Gurugram (Haryana).

ln response to the Tender No. …… for …….. (Name of the Tender) dated …… for quoting against the Tender as an owner/Director/Proprietor of M/s ……..

I/we _____ who is/are_____ (status in the firm/company) and competent for submissions of the affidavit on behalf of M/S_____ (Organization/Manufacturer/authorized dealer/ distributors/agent) do hereby solemnly affirm an oath and state that:

The firm/agency should not be black-listed/de-listed/debarred/ demobilized for poor or unsatisfactory performance from any project by Govt. of India/Any other State Govt./Haryana Govt. or its Departments/agencies etc.

Signature with Seal of the Deponent (Bidder)

I/we, _____ above deponent do hereby certify that the facts mentioned in above are correct to the best of my knowledge and belief. Verified today_____ (dated) at _____ (place).

Signature with Seal of the Deponent (Bidder)

Note: Affidavit duly notarized in original shall submit in the Office of Shri Vishwakarma Skill University, Haryana, Transit office: Plot No. 147, Sector 44, Gurugram (Haryana) on Technical Presentation day/date.

Annexure – XIV

Affidavit regarding completion of supply and installation & commissioning of Machine/Lab Equipments etc. in running condition within stipulated time frame

||SPECIMEN AFFIDAVIT||

(On Non Judicial Stamp of Rs. 100/-)

To
The Registrar,
Shri Vishwakarma Skill University, Haryana,
Transit office: Plot No. 147, Sector 44,
Gurugram (Haryana).

ln response to the Tender No. …… for …….. (Name of the Tender) dated …… for quoting against the Tender as an owner/Director/Proprietor of M/s ……..

I/we _____ who is/are_____ (status in the firm/company) and competent for submissions of the affidavit on behalf of M/S_____ (Organization/Manufacturer/authorized dealer/ distributors/agent) do hereby solemnly affirm an oath and state that:

We further certify that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.

We hereby declare that our firm will supply the Machine/Lab Equipments etc. as per Technical Specification and installation & commissioning of the Machine/Lab Equipments in respective lab(s) in working condition within the time frame as enumerated in the tender document.

we/l further declare that if any delay is found in delivery/installation and the offer is not accepted partially or fully by our firm(s) the performance security or EMD furnished as per the tender document is liable to be forfeited and no objection of being blacklisted in these circumstances.

Signature with Seal of the Deponent (Bidder)

I/we, _____ above deponent do hereby certify that the facts mentioned in above are correct to the best of my knowledge and belief. Verified today_____ (dated) at _____ (place).

Signature with Seal of the Deponent (Bidder)

Note: Affidavit duly notarized in original shall submit in the Office of Shri Vishwakarma Skill University, Haryana, Transit office: Plot No. 147, Sector 44, Gurugram (Haryana) on Technical Presentation day/date.

ANNEXURE – XV

(AN AGREEMENT BETWEEN SHRI VISHWAKARMA SKILL UNIVERSITY AND THE SUPPLIER) *

Shri Vishwakarma Skill University (SVSU), Enacted under Government of Haryana Act No.25 of 2016 having its transit office at Plot No-147, Sector-44, Gurugram, Haryana represented through its authorized signatory **…….. (Name of Registrar)**, Registrar (which expression shall unless repugnant to the context or meaning there off includes its successors and assigns) here in after referred to as **SVSU** or Owner or the **First Party**.

And

Firm Name…….. having its office at ……., through its authorized signatory **…….. (Name &** Post), (which expression shall unless repugnant to the context or meaning there off includes its successors and assigns) here in after referred to as execution Manufacturers/Authorized Dealers/ Distributors/Agent or the **Second Party.**

Whereas SVSU has invited Tender No. ……. for …….. (Name of the Tender) dated ……. and M/s ……. (Firm Name) submitted its proposal in this regard. SVSU after considering its negotiation offer has decided to engage ……..... (Firm Name) as executing agency for Tender No. ……. for ……... (Name of the Tender) dated …… ……

Firm Name…….. (execution **Agency**) is hereby agreed to take the Tender No. ……. for …….... (Name of the Tender) at the quoted negotiation rates, terms and conditions contained the TENDER, Work Order/Purchase Order and duly communications of the above said work.

Now, therefore, in consideration of the mutual covenants herein contained, it is hereby agreed between the parties as follows: -

The agreement shall come into force immediately and shall remain valid until the final completion of the job or cancelled by the Bidder (The Registrar, Shri Vishwakarma Skill University, Haryana) as per the time schedule described in the tender document.

All the terms and conditions and Technical specifications contained in the Tender No. ……. for …….. (Name of the Tender) dated ……. shall be the part of this agreement.

Firm Name…….. (execution **Agency**) hereby declare that I shall remain bound and abide by the rates, terms and conditions and technical specifications of the aforesaid as well as TENDER, Work Order/Purchase Order and due communications of the above said work.

In Witness Whereof, the parties here to have caused this agreement to be signed in their respective names as of this day and year first above written.

Signed by

Buyer: SVSU, Gurugram	**Bidder:**
Signature with seal	**Signature with seal**
Date & Place	**Date & Place**

In presence of (Witnesses)

1.	**1.**
2.	**2.**

***Note-This Contract is to be Signed on Rs. l00/- Non Judicial Stamp paper within 15 days after receiving purchase Order/Work Order from buyer.**

(Please put the initials at each page)