



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 Robotics Lab)

Tender No: SVSU/2022/SFET/T005

Dated: 19/05/2022

1. Notice Inviting Quotation

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

Shri Vishwakarma Skill University, Haryana invites online Tender: **“Supply and Installation of Robotics 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	{4000/- +720} + 1180/- = 5900/- (Rupees Five Thousand Nine Hundred 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	2 % of Tender cost
3.	Performance Security	10% of the Purchase order Value
4.	Product Warranty Period	3 Years
5.	Issue of Tender Document	19/05/2022 at 11:30 Hrs.
6.	Online Tender Purchase Start Date	19/05/2022 at 11:30 Hrs.
7.	Last date for receipt of queries through mail	23/05/2022 at 17:00 hrs.
8.	Date of pre bid meeting	25/05/2022 at 14:00AM

9.	Online proposal Submission Start Date	19/05/2022 at 11:30 Hrs.
10.	Online Tender Purchase End Date	08/06/2022 at 16:00 Hrs.
11.	Online proposal Submission End Date	08/06/2022 at 16:00 Hrs.
12.	Opening of Technical Bid	11/06/2022 at 11:00 Hrs.
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 Robotics 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 Robotics 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.

<< 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 **Compliance 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/manufacture 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/warranty 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.

<< 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. Concerned Department 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	Qty	Technical Specifications
Electronics Technology Division			
A	Controller Section		
1	Arduino Uno (original)	15	Original Arduino UNO Compatible ATmega328P Development Board; Input Voltage : 7-12V Clock Speed: 16MHz

2	Arduino Mega (original)	8	Original Arduino ATMEGA2560 Compatible Clock Speed: 16MHz Operating Voltage: 5V Input Voltage: 7-12V
3	Arduino Nano (original)	8	Original Arduino Nano Compatible ATmega328 5V 16M Microcontroller Board Input Voltage : 6-9V Clock Speed: 16 MHz
4	Atmega 128 IC board	2	This board has a Atmega 128 Microcontroller: - 64 Pin (TQFP type), 53 GPIO and 128 KB IC - Standard Male berg strip to make connections easy on the Atmega 128 Development board - One way fit
5	Atmega 128 Development board with IC	8	A development board designed in a way to implement multiple projects on a single platform using an Atmega 128 microcontroller IC: - Input Voltage: 7V – 12V DC - 53 GPIO and 128KB of Flash Memory - 7 Ports(A,B,C,D,E,F,G) - Supports 10 external DC motor drivers - 8 ADC channels - Standard FRC and Relimated connectors compatible with motor drivers and other interfacing modules
6	Atmega 16 Microcontroller IC	5	- AVR Microcontroller - Memory: 16 KB - 40 Pin IC - Package: DIP
7	Atmega 16 Development board with IC	10	A development board designed in a way to implement multiple projects on a single platform using an Atmega 16 microcontroller IC: - Input Voltage: 7V – 12V DC - Standard FRC and Relimated connectors - Size of board = 80 mm x 70 mm - 32 GPIO and 16KB of Flash Memory. - 4 Ports(A, B,C,D) - Supports 6 external DC motor driver circuits - 6 ADC channels
8	Atmega 8 Microcontroller IC	4	- AVR Microcontroller - Memory: 8 KB - 28 Pin IC - Package: DIP

9	Atmega 8 Development board with IC	8	A development board designed in a way to implement multiple projects on a single platform using an Atmega 8 microcontroller IC: - Input Voltage: 7V – 12V DC - Standard FRC and Relimated connectors - 23 GPIO and 8KB of Flash Memory. - 3 Ports (B, C and D) - Supports 6 external DC motor driver circuits - 6 ADC channels
10	USBASP Programmer Kit	22	- USBASP Programmer - Compatible with the atmega 8/16/128 development board - Size = 30 mm x 55 mm - USB B type connector - Facility to turn the power supply on and off using a connector - With USB Cable (A-B type) - 10 pin FRC
11	APM2.6 3DR flight controller board	1	- It is a professional quality IMU autopilot that is based on the Arduino Mega platform - Includes 3-axis gyro and accelerometer, along with a high-performance barometer - Onboard 4 Mega Byte Dataflash chip for automatic data logging - Atmel's ATMEGA2560 and ATMEGA32U-2 chips for processing and usb functions respectively - GPS input, I2C, Power module input - Telemetry radio, OSD and airspeed sensor ports
B	Electronic Actuator Control Section		
1	L293D Motor Driver Board	6	- It can drive 2 DC motors supplying 600mA to each motor - Input Voltage: 12V - Facility for speed control - Extra ports for 5V output
2	L298 Motor Driver Board	12	- Input Voltage: 12V DC - It can drive 2 DC motors supplying 2A to each motor - Standard FRC, Phoenix and Relimated connectors for reliable connections - Size: 52 mm x 52 mm

3	Relay Motor Driver Board	36	<ul style="list-style-type: none"> - Input Voltage: 12V DC - It can drive 1 DC motor on both directions and can supply up to 10A of current - Standard FRC, Phoenix and Relimated connectors for reliable connections - Reverse polarity protection (Short Circuit Protection)
4	High Current Motor Driver Board	16	<ul style="list-style-type: none"> - Input Voltage: 12V-36V DC - It can drive 1 DC motor on both directions with variable speed and can supply up to 30A of current - Standard FRC, Phoenix and Relimated connectors for reliable connections - Operating PWM frequency range up to 20 KHz - Current sensing output - Reverse Polarity protection (Short Circuit Protection) - Size: 50 mm x 40 mm
5	Servo Motor Driver Board	12	<ul style="list-style-type: none"> - Input Voltage: 7V – 12V DC - It can drive 4 Servo motors of each 6V - Maximum output current up to 16A - Compatible with all development boards
6	Electronics Speed Control (ESC)	6	<ul style="list-style-type: none"> - Current rating: 30A - Suitable for 3s & 2s LiPo batteries - Weight: 25g
7	Stepper Motor Driver Board	4	<ul style="list-style-type: none"> - Input voltage: 8V – 36V DC - It can drive one stepper motor with 2A per coil - Maximum output current is 4A - Micro-step resolutions of full,1/2,1/4,1/8 and 1/16 - Size = 44 mm x 32 mm
8	CBC Motor Driver Board	4	<ul style="list-style-type: none"> - Input Voltage: 12V- 24V DC - It is a Bi-directional DC motor with variable speed and can supply up to 50A of current to the motor - Reverse Polarity protection (Short Circuit Protection) - Standard Phoenix and Relimated connectors for reliable connections
9	Pneumatics Actuator Control Board	8	<ul style="list-style-type: none"> - Input Voltage: 7V – 12V DC - It can drive one Pneumatic actuator of 12V - Maximum output current up to 1A - Compatible with all Development boards

10	Arduino Uno shield board	18	<ul style="list-style-type: none"> - It has 2 FRC connectors to connect 2 L298 drivers - It has 3 5 pin relimated connectors to connect relay motor drivers - Separate connector for connecting bluetooth - Separate analog pin connector - Input Voltage: 12V - Extra ports for 5V output
C	Battery Section		
1	Lipo battery, 11.1V, 1300 mAh	6	<ul style="list-style-type: none"> - Lithium Polymer battery - Capacity: 1300 mAh - Voltage: 11.1V (3 cell) - Continuous Discharge Rate: 20C
2	Lipo battery, 11.1V, 2200 mAh	4	<ul style="list-style-type: none"> - Lithium Polymer battery - Capacity: 2200 mAh - Voltage: 11.1V (3 cell) - Continuous Discharge Rate: 20C
3	Lipo battery, 11.1V, 5200 mAh	2	<ul style="list-style-type: none"> - Lithium Polymer battery - Capacity: 5200 mAh - Voltage: 11.1V (3 cell) - Continuous Discharge Rate: 20C
4	Sealed Lead Acid (SLA) Battery, 12V, 7000 mAh	2	<ul style="list-style-type: none"> - 12V Sealed Lead Acid (SLA) Battery - 7000 mAh
5	Balanced Lipo Battery Charger	2	<ul style="list-style-type: none"> - Lipo Balanced battery - 2S and 3S batteries - Type: Universal (B6AC)
6	Battery checker with buzzer	12	<ul style="list-style-type: none"> - 1-8S Lipo Battery Tester and Voltmeter - Low Voltage Alarm Indicator
7	Balanced Lipo Battery Charger (Small)	3	<ul style="list-style-type: none"> - Lipo battery charger - 2S and 3S batteries - Type: Small (B3AC)
8	Lipo Safe bag	6	<ul style="list-style-type: none"> - High Quality Lipo Safe Bag - Size: (XL)
D	Sensor Section		
1	Ultrasonic sensor	1	<ul style="list-style-type: none"> - Resolution: up to 1-inch - Range: 6 inches to 125 inches (10 Feet) - Proximity detection from 1 mm to 1 feet - Free run operation that continually measures and outputs proximity information - Filtered range output allows ranging and multi-sensor operation.
2	Ping sensor	8	HC-SR04 Ultrasonic Distance Measuring Sensor

3	GP2 sensor (10-80 cm)	2	- Range of distances measured from 4 cm to 30 cm Infrared Proximity Sensor - Analog output inversely proportional to distance
4	Diffused scan Proximity sensor (Industrial Grade)	9	- Diameter = approximate 18 mm - Sensing distance = up to 500 mm (adjustable) - Supply voltage = 10 – 30 V DC - Logic output: NPN/NO - Current: up to 100 mA
5	Inductive Proximity sensor (Industrial Grade)	11	- Diameter = approximate 18 mm - Sensing distance = up to 8mm - Supply voltage = 10 – 30 V DC - Logic output: NPN/NO - Current: up to 300 mA
6	Capacitive Proximity sensor(Industrial Grade)	5	- Diameter = approximate 18 mm - Sensing distance = up to 8mm - Supply voltage = 10 – 30 V DC - Logic output: NPN/NO - Current: up to 300 mA
7	Rotary encoder	4	- Incremental Rotary Encoder - 3 Channel - 360 PPR - 5 VDC
8	Triple Axis Accelerometer	3	Resolution: 13-bit Measurement: up to $\pm 16g$ interface: either an SPI (3- or 4-wire) or I2C digital interface
9	Encoder Sensor Module	6	- Optical encoder with IR LED and photo diode to detect the presence and absence of the slits. - Ideal for counting. - TTL output
10	3 sensor line following array	6	- 3 sensor array - TCRT 500 sensor with Analog outputs
11	Microwave Doppler Radar Motion Detector Sensor	2	- Max. frequency: 10.53 GHz - Max. Current Consumption: 40mA - Max. Supply Voltage: 5.25V DC - Operating Temperature: 55° celcius
12	PIR sensor module	2	- Pyroelectric Infrared Pir Motion Sensor Detector Module

13	Temperature sensor Module	2	The temperature sensor is a NTC thermistor Multi-point temperature measurement Measures temperatures: -55°C / +125°C Accuracy: + / - 0.5°C Dimensions: 30mm x 15mm x 6mm Weight : 2g
14	TSOP sensor Module	10	The module consist of a IR emitter and TSOP receiver pair Typical Maximum Range :20cm Calibration preset for range adjustment. Indicator LED with 3 pin easy interface connector
15	Force Sensor	4	Dimensions: - Overall length: 2.375' - Overall width: 0.75' - Sensing diameter: 0.5'
16	Flex Sensor	3	- Angle Displacement Measurement - Bends and Flexes physically with motion device - Simple Construction - Low Profile - Flat Resistance: 25K Ohms - Resistance Tolerance: ±30% - Temperature Range: -35°C to +80°C - Bend Resistance Range: 45K to 125K Ohms - Power Rating : 0.50 Watts continuous. 1 Watt Peak
17	Gas Sensor (LPG)	2	- Type: Analog - Detecting Type: LPG, Butane, Propane, Methane, Ethanol, Hydrogen, Smoke - Rated Voltage: DC 5V - Detecting Range: 300-10000ppm - Pin Quantity: 4 - Pin Definition : AO - Analog Output, DO - Digital Output, GND - Ground, - VCC - Voltage To Current Converter
18	Sound Detection Sensor Module	3	Sound Detection Sensor Module with Sensitivity Control Potentiometer Main Chip: LM393, Electric Condenser Microphone Working Voltage: DC 3.3 to 5V Single channel signal output.
19	Piezo Sensor	3	- Diameter: 27 mm approximately.
20	IR LED + Photodiode Sensor Module	6	- IR LED + PD sensor module
21	RFID reader - tags	1	RC522 RFID Card Reader Module + 10 Tags

22	Color sensor	2	- TCS3200 Color. - Includes a TAOS TCS3200 RGB sensor chip and 4 white LEDs.
23	IMU 10DOF Gyroscope Acceleration Compass Module	2	Sensors: - MPU6050 3x Axis accelerometer sensor and 3x Axis gyroscope sensor - HMC5883L Triple Axis Magnetometer - BMP180 Barometric Pressure Sensor
24	Brainsense Sensor	1	- Uses the TGAM1 module, Dry Electrode and Ear clip electrode - Automatic wireless pairing - 6-hours battery run time - Bluetooth v2.1 Class 2 (10 meters range). iOS and Android support
25	Kinect Sensor	1	- Microsoft Kinect Sensor for Xbox 360
26	Current sensor	2	ACS712 30A Range Current Sensor Module
27	Pixy CMUcam5 smart vision Sensor	2	Pixy CMUcam5 Image Sensor
28	Leap Motion Sensor	1	Leap Motion Controller Gesture Motion Control for PC or MAC
29	Finger Print sensor	2	- Supply voltage: 3.6 – 6.0VDC - Operating current: 120mA max - Peak current: 150mA max - Fingerprint imaging time: <1.0 seconds - Window area: 14mm x 18mm - Signature file: 256 bytes - Template file: 512 bytes - Safety ratings (1-5 low to high safety) - False Acceptance Rate: <0.001% (Security level 3) - False Reject Rate: <1.0% (Security level 3) - Interface: TTL Serial - Baud rate: 9600, 19200, 28800, 38400, 57600 (default is 57600)
E	Peripheral Boards		
1	Proximity interfacing board	9	- Input voltage 12V - 4 proximity sensors can be interfaced - Digital TTL output
2	Power Distribution board	22	- Battery and DC power adapter supply options - 4 phoenix and 4 2-pin-relimated ports for power distribution - Voltage rating: 0V – 50V - Current rating: 30A
3	LCD with Interfacing Board	4	- Input Voltage: 5V - Standard FRC connection - 16x2 LCD interface - LCD Brightness control

4	Bluetooth interfacing board	7	<ul style="list-style-type: none"> - Input voltage: 3.3V to 5V - Voltage divider network for logic conversion - ON/Off switch for easy programming - Jumper for enabling AT command
F	Soldering Section		
1	Advanced Soldering Station	5	<ul style="list-style-type: none"> -Type: Temperature controlled - Temperature Range: 200 to 480 °C - MCH Solid State Element used as compared to winding element used in other's products. - Genuine Soldron quality product with 6 months Warranty. - ESD Safe
2	Heat Gun	1	<ul style="list-style-type: none"> - Voltage: 230V - Power: 1800 Watts - Heat Settings: Variable - Style: Pistol - Temperature range: 500 – 600 °C - Airflow: max 650 l/min - Type: Professional Tools
3	Soldering Wire Reel (0.5 Kg)	2	<ul style="list-style-type: none"> - 60/40 - 22 Gauge Soldering Wire with Internal Flux
4	Wire Cutter/Stripper	5	<ul style="list-style-type: none"> - Material type: Steel and Iron - Crimping plier(stripper, Cutter)-Awg10-22 - Size: 229 mm/9 inch
5	Diagonal Cutting plier / Wire Nipper	5	<ul style="list-style-type: none"> - Length: 4inch - Induction hardened cutting edges - Finger Guard for Better Control & Added Safety - Bi-material Grip for comfort
6	Digital Multimeter	5	<ul style="list-style-type: none"> Digital Multimeter, 600V Display: LCD 6000 counts, updates 3/sec Maximum current rating- 10A
7	3rd Hand with magnifying glass	1	<ul style="list-style-type: none"> - 3rd Hand with LED light and magnifying glass
8	Anti-static Mat	5	<ul style="list-style-type: none"> - Size: 2 x 4 feet - Thickness: 2mm - 1 grounding chords - 1 wrist strap
G	Motor Section		

1	22 RPM DC geared motor	2	<ul style="list-style-type: none"> - 22 RPM - Dimensions: Length - 90mm - Motor Diameter - 27.5mm Shaft diameter - 6mm - Weight - 250 gms - Operating Voltage - 12V - No load current - 100mA - Full load current - 1.9 A - Stall torque: 45Kg-cm at maximum limited stall current of 4 Amp.
2	60 RPM DC geared motor	2	<ul style="list-style-type: none"> - 60 RPM - Dimensions: Length - 90mm - Motor Diameter - 27.5mm - Shaft diameter - 6mm - Weight - 250 gms - Operating Voltage - 12 V - No load current - 100mA - Full load current - 1.9 A - Stall torque: 35Kg-cm at maximum limited stall current of 4 Amp.
3	100 RPM DC geared motor	16	<ul style="list-style-type: none"> - 100 RPM - Dimensions: Length - 90mm - Motor Diameter - 27.5mm - Shaft diameter - 6mm - Weight - 250 gms - Operating Voltage - 12V - Voltage 12v; no load current - 100mA - Full load current - 1.9 A - Stall torque: 22Kg-cm at maximum limited stall current of 4 Amp.
4	200 RPM DC geared motor	4	<ul style="list-style-type: none"> - 200 RPM - Dimensions: Length - 90mm - Motor Diameter - 27.5mm - Shaft diameter - 6mm - Weight - 250 gms - Operating Voltage - 12 V - No load current - 100mA - Full load current - 1.9 A - Stall torque: 11Kg-cm at maximum limited stall current of 4 Amp

5	300 RPM DC geared motor	2	<ul style="list-style-type: none"> - 300 RPM - Dimensions: Length - 90mm - Motor Diameter - 27.5mm - Shaft diameter - 6mm - Weight - 250 gms - Operating Voltage - 12 V - No load current - 100mA - Full load current - 1.9 A - Stall torque: 8Kg-cm at maximum limited stall current of 4 Amp.
6	10 RPM Centre-Shaft Motor	2	<ul style="list-style-type: none"> - Dimensions: Length - 46mm ; Diameter - 37mm ; Shaft diameter - 6mm - Weight - 125 gms - Stall Torque - 5 kg/cm - Operating Voltage - 12V - No-load current - 60 mA(Max), Load current - 300 mA(Max)
7	50 RPM Centre-Shaft Motor	2	<ul style="list-style-type: none"> - Dimensions: Length - 46mm ; Diameter - 37mm ; Shaft diameter - 6mm - Weight - 125 gms - Stall Torque - 5 kg/cm - Operating Voltage - 12V - No-load current - 60 mA(Max), Load current - 300 mA(Max)
8	100 RPM Centre-Shaft Motor	8	<ul style="list-style-type: none"> - Dimensions: Length - 46mm ; Diameter - 37mm ; Shaft diameter - 6mm - Weight - 125 gms - Stall Torque - 5 kg/cm - Operating Voltage - 12V - No-load current - 60 mA(Max), Load current - 300 mA(Max)
9	60 RPM High Torque Motor	2	<p>Generic Motor with Gear Box</p> <ul style="list-style-type: none"> • 60 rpm Motor • Operating Voltage - 12v • Continuous torque - 60kgcm, load current - 10A, Stall torque: 150 Kg-cm at stall current of 25A <p>All steel gears and shafts rotate in robust sintered bushings. Bearings are permanently lubricated and therefore require no maintenance.</p>
10	300 RPM High Torque Motor	4	<p>Generic Motor with Gear Box</p> <ul style="list-style-type: none"> • 300 rpm Motor • Operating Voltage - 12v • Continuous torque - 60kgcm, load current - 10A, Stall torque: 150 Kg-cm at stall current of 25A <p>All steel gears and shafts rotate in robust sintered bushings. Bearings are permanently</p>

			lubricated and therefore require no maintenance.
11	Servo motor, plastic geared	8	- Torque - 4.8V: 8 kg-cm, 6v: 11 kg-cm, - Speed - 4.8V: 0.17 sec/ 60°, 6.0v: 0.14 sec/ 60°
12	Servo motor, metal geared	8	- Weight: 55g - Dimension: 40.7×19.7×42.9mm - Stall torque: 9.4kg/cm (4.8v); 11kg/cm (6.0v) - Operating speed: 0.19sec/60° (4.8v); 0.15sec/60° (6.0v) - Operating voltage: 4.8~ 6.6v - Gear Type: Metal gear servo wire length: 32cm
13	Servo motor, metal geared (small)	4	- Torque: 2.20 kg-cm (4.8v) - Speed: 0.11 sec/60° - Weight: 14g - Gear Type: Metal - Rotational Range: 180°
14	100 RPM I type Bo-Motor	6	- Operating Voltage - 3 to 12V - Current (without loading) , 40-180mA, 20-180 rpm - Output Torque - 0.8-5kgcm - Weight - 30g
15	Stepper motor (1.8° step angle)	4	- Step Angle - 1.8°, Current - 1 A - Resistance - 2.4 ohms, Inductance - 6.5 mH - Holding Torque - 4.2 kgcm, Voltage - 2.4v - Weight - 350 grams - No of Leads - 4
16	BLDC motor (850 KV)	6	- Kv (rpm/v): 850 - Power(W): 250 - Voltage: 11.1V - Thrust: upto 750gms - Idle current(A): 0.6 - Batteries: 2-4Cells Li-PO - Weight: 52g - Max. transient current: 12A/60S - Shaft diameter: 5mm threaded - Dimensions: 27.5*30mm
17	Geared Motor	8	- Dimension: Body Length- 85 (max); Body Diameter - 50mm; Shaft Diameter - 8mm; Shaft Length - 18mm. - Torque (kgcm) - 15 - Voltage - 12 - Current - 220 mA to 1.3 A (max)

18	Servo Motor (Mega Torque Quarter Scale Speciality Giant Servo)	2	- Torque at 4.8V : 274.96 oz-in (19.8kg-cm) - Torque at 6.0V : 343.01 oz-in (24.7kg-cm) - Speed at 4.8V : 0.19 sec/60° - Speed at 6.0V : 0.14 sec/60° - Dimensions : 2.59 x 1.18 x 2.26 in. (66 x 30 x 57.6 mm) - Weight : 5.36 oz. (152g)
19	DC Geared Motor with Encoder 75 rpm	4	- DC Geared Motor with Encoder - Speed = 75 RPM - Torque = 26N.cm - Operating voltage = 12V DC
20	DC Geared Motor with Encoder 150 rpm	2	- DC Geared Motor with Encoder - Speed = 150RPM - Torque = 13N.cm - Operating voltage = 12V DC
21	150 RPM Centre-Shaft Motor	4	- Dimensions: Length - 46mm ; Diameter - 37mm ; Shaft diameter - 6mm - Weight - 125 gms - Stall Torque - 5 kg/cm - Operating Voltage - 12V - No-load current - 60 mA(Max), Load current - 300 mA(Max)
H	Communication Modules		
1	Wireless camera	1	Range of 5 TO 10m "straight-line of sight", can go through walls but ranges vary. Resolution is 380 TV tines Output power:100mW/200mW Minimum illumination of 3 lux. Camera/transmitter operates on one 9V battery or DC 9-12V Adaptor (included). Receiver requires DC 12V Adapter (included), output to any PC or Laptop. Hi Resolution - Color wireless camera
2	TV tuner module	1	iBall LCD TV Box Claro TV - Tuner / FM / AV - CTV27 TV Tuner Card
3	Zigbee Wireless Communication Module	4	XbeePro Module S2C XBP24CZWIT-004
4	Zigbee transmitter board	3	Xbee ZigBee Adapter Board with USB Interface
5	Zigbee receiver board	3	- Input voltage: 6V to 12V - Easy mounting provision for Zigbee Receiver Module
6	Bluetooth module	7	HC-05 Serial Port/TTL Bluetooth Module

7	Audio to Digital Convertor (DTMF) board	2	<ul style="list-style-type: none"> - DTMF board used for decoding of the Dual Tone Multiple Frequency signals - On board crystal - 3.5 mm Audio jack - Facility to connect speaker (12V,8 ohm) - Tuning facility available
8	GSM module with antenna	2	SIM900A GSM Modem With SMA Antenna (GSM Module)
9	Remote	3	<ul style="list-style-type: none"> - Two boards attached to each other with male and Female Berg Strips - Top board consisting of 16 Buttons that can be reprogrammed as per the need - Lower board consists of Atmega 8 microcontroller with the facility to program it. - On board power and regulator facility - Ergonomic design
10	Wireless Transceiver Communication Module with Antenna	3	nRF24L01+ PA LNA SMA Antenna Long Range 2.4G 1100m Wireless Transceiver Communication Module
11	GPS Module	1	<ul style="list-style-type: none"> - Ublox NEO-6M NEO - 6M GPS module Built-in - Compass For APM 2.8 APM2.6 PIX flight controller board For RC Quadcopter
12	2.4Ghz 6ch transmitter with receiver	1	2.4 GHZ Transmitter; 6 channel receiver; 8 model memories
13	Speech Recognizer and Synthesizer	1	- Movi Arduino Shield Speech Recognizer And Speech Synthesizer
14	Wired Mobile Speaker	1	- Wired Mobile/iPod/PC Speaker
15	GPS Module to serial TTL	1	- NEO-6M U-BLOX NEO-6M GPS Positioning Module to Serial TTL
16	BAFO USB to Serial Adapter with Cable	1	BAFO USB to Serial Adapter (DB9, Adapter Type) + RS232 Cable
I	Consumable Electronics Components		
1	3mm LED- red	50	Transparent red
2	3mm LED- blue	50	Transparent blue
3	5mm LED- red	50	Transparent red
4	5mm LED- blue	50	Transparent blue
5	IR LED 5mm	10	white or transparent white

6	IR Photodiode	20	- 5 mm Round Head Infrared Receiver Photodiodes IR Diode
7	10uF 63V electrolytic capacitor	30	Electrolytic Capacitor
8	1uF 63V electrolytic capacitor	50	Electrolytic Capacitor
9	10uF 50V electrolytic capacitor	50	Electrolytic Capacitor
10	3.3nF ceramic capacitor	50	Ceramic Capacitor
11	0.1uF ceramic capacitor	50	Ceramic Capacitor
12	1uF ceramic capacitor	50	Ceramic Capacitor
13	Resistor 68 ohm CFR	100	1/4 watt Carbon Film Resistor CFR
14	Resistor 100 ohm CFR	100	1/4 watt Carbon Film Resistor CFR
15	Resistor 220 ohm CFR	200	1/4 watt Carbon Film Resistor CFR
16	Resistor 270 ohm CFR	100	1/4 watt Carbon Film Resistor CFR
17	Resistor 1k ohm CFR	200	1/4 watt Carbon Film Resistor CFR
18	Resistor 2.7k ohm CFR	100	1/4 watt Carbon Film Resistor CFR
19	Resistor 3.3k ohm CFR	200	1/4 watt Carbon Film Resistor CFR
20	Resistor 4.7k ohm CFR	100	1/4 watt Carbon Film Resistor CFR
21	Resistor 10k ohm CFR	200	1/4 watt Carbon Film Resistor CFR
22	Resistor 22k ohm CFR	100	1/4 watt Carbon Film Resistor CFR
23	Resistor 33k ohm CFR	100	1/4 watt Carbon Film Resistor CFR
24	Resistor 1M ohm CFR	100	1/4 watt Carbon Film Resistor CFR
25	Joystick Pots 1k ohm + cap potentiometer	10	1k ohm Potentiometer+Cap
26	Power Resistor 6E8, 5 WATT	20	Power rating: 5W ; Resistance range: 0.1E to 22M (E12-series) ; Operating temperature range: -55°C to +155°C ; Tolerance: 5% ; Max. operating voltage: 250V

27	Power Resistor 2E2, 5 WATT	20	Power rating: 3W ; Resistance range: 0.1E to 22M (E12-series) ; Operating temperature range: -55°C to +155°C ; Tolerance: 5% ; Max. operating voltage: 250V
28	10k blue trimpot 3386 potentiometer	15	10K Single-Turn 10mm Square Top Adjust Trimming Potentiometer Power Rating: 500mW
29	Transistor BC 547	100	BC547 - NPN Transistor
30	Crystal - 12 MHz	25	12 MHz Quartz Crystal for Microcontroller
31	Crystal - 16 MHz	20	16 MHz Quartz Crystal for Microcontroller
32	Crystal for DTMF decoder 3.579547 M Hz	10	3.57 MHz Quartz Crystal for Microcontroller
33	4-leg reset switch	50	Single Pole Single Throw Switch Rated upto 50 mA
34	IC 7805 (SMD TO-252)	20	smd TO-252
35	IC 7805 (TO-220)	20	TO-220
36	IC 7806 (TO-220)	20	TO-220
37	IC 7809 (TO-220)	4	TO-220
38	Diode 1N4007	100	1N4007 - General Purpose Rectifier Diode
39	5-leg Slider switches R/A	50	Right Angle Mini Slide Switch (PCB SPDT)
40	5-leg Slider switches Normal	50	Straight Mini Slide Switch (PCB SPDT)
41	Anchor switch	10	Current - 6A ; Voltage - 240V
42	6mm dia circular switch	7	Round Button Momentary Switch AC 125V 0.25A (Opening 6mm)
43	10mm dia circular switch	19	DS-314 Round Button Momentary Switch Normally Open AC 250V 3A (Opening 10mm)
44	Push switch (square)	4	Push Auto Switch(Bistable)
45	DPDT rocker centre off switch	10	ON-OFF-ON Switch 6-Pin DPDT 3-Position Snap Boat Rocker 6A/250V 10A/125V
46	General Purpose Board (GPB)	15	- General Purpose board - Number of holes = 75 x 76 holes
47	Breadboard - 840 points	5	- 840 contact points Bread Board GL-12 Quick circuit testing and mock-up - Suitable for most IC's, Standard 0.1' Spacing - Positive and Negative Power Rails on Top and Bottom
48	Single pin female to female cable	80	female to female cable
49	Mini limit switch	10	Current - 5A ; Voltage - 250V AC

50	2 pin straight relimated connector	100	white relimate base male pcb mount
51	3 pin straight relimated connector	100	white relimate base male pcb mount
52	4 pin straight relimated connector	100	white relimate base male pcb mount
53	5 pin straight relimated connector	112	white relimate base male pcb mount
54	6 pin straight relimated connector	50	white relimate base male pcb mount
55	7 pin straight relimated connector	50	white relimate base male pcb mount
56	8 pin straight relimated connector	50	white relimate base male pcb mount
57	2 pin relimated cable both sided cable	25	2 pin relimated cable
58	3 pin relimated cable both sided cable	30	3 pin relimated cable
59	4 pin relimated cable both sided cable	30	4 pin relimated cable
60	5 pin relimated cable both sided cable	35	5 pin relimated cable
61	6 pin relimated cable both sided cable	35	6 pin relimated cable
62	7 pin relimated cable both sided cable	25	7 pin relimated cable
63	8 pin relimated cable both sided cable	20	8 pin relimated cable
64	2 pin big Phoenix connector	50	2 pin big Terminal Block Connector
65	2 pin small Phoenix connector	50	2 pin small Terminal Block Connector
66	10 pin FRC Base vertical	20	216 Series Box Header Straight 2.54 mm 10 pin
67	10 pin FRC Base Right Angle	20	216-A Series Box Header Right Angle 2.54 mm 10 pin
68	14 pin FRC Base vertical	40	216 Series Box Header Straight 2.54 mm 14 pin

69	14 pin FRC Base Right Angle	20	216-A Series Box Header Right Angle 2.54 mm 14 pin
70	10 pin FRC reel - 1m	10	length= 1m(For Ops: purchase bundle of 100ft)
71	14 pin FRC reel - 1m	20	length= 1m(For Ops: purchase bundle of 100ft)
72	10 pin FRC Header	50	201 Series FRC Female with Strain Relief 2.54 mm 10 pin
73	14 pin FRC Header	100	201 Series FRC Female with Strain Relief 2.54 mm 14 pin
74	SPDT Relay (12V coil)	10	5 pin sugarcube 12V, 7A
75	Berg strip Male type- straight (2.54mm, 40x1)	50	Pin Style: Square No. of pins: 40 Pin Spacing: 2.54 mm
76	Berg strip Female type- straight (2.54mm, 40x1)	50	Pin Style: Square No. of pins: 40 Pin Spacing: 2.54 mm
77	Berg strip Male type- straight (2.54mm, 40x2)	20	Pin Style: Square No. of pins: 80 Pin Spacing: 2.54 mm
78	Berg strip Female type - straight (2.54mm, 40x2)	20	Pin Style: Square No. of pins: 80 Pin Spacing: 2.54 mm
79	IC base- 6 pin	20	DIP Package
80	IC base- 14 pin	25	DIP Package
81	IC base- 16 pin	20	DIP Package
82	IC base- 20 pin	20	DIP Package
83	IC base- 28 pin	10	Narrow IC Base For Atmega8
84	IC base- 40 pin	20	IC Base for Atmega16
85	Heat shrink 2mm (5m)	1	- 2mm diameter - Length = 5 meter
86	Heat shrink 3mm (5m)	1	- 3mm diameter - Length = 5 meter
87	Heat shrink 5mm (5m)	1	- 5mm diameter - Length = 5 meter
88	Heat shrink 10mm (5m)	1	- 10mm diameter - Length = 5 meter
89	T connector male with blue black wires	10	T connector (Deans) male with blue black wires
90	Nylon cable tie 100 x 2.5mm	2	2.5mm x 100mm 100pcs bundle
91	Nylon cable tie 150 x 3.6mm	2	3.6mm x 150mm 100pcs bundle

92	Nylon cable tie 200 x 4.6mm	2	4.6mm x 200mm 100pcs bundle
93	Screw on wire connector block	5	Wire Connector 12 Position Barrier Screw splice Terminal Block 10A Color:clear ; Size:about110*16*12mm long ; Net weight:18g
94	Two way tape 20mm width	10	Dual tape 20mm
95	Paper Tape (abro tap)	2	Paper Tape (abro tap) 20mm
96	Steel grip Insulation Tape	2	Steel grip Insulation Tape
97	Transparent tapes- 1 inch	6	Transparent tapes 1inch
98	Desolder Wick	10	- D-Sol-Wick 1m long 2.5mm broad
99	Soldering Flux	5	- 15g soldering flux
100	Heat Sink (small)	20	PI49 20mm
101	Heat Sink (big)	20	PI48 25mm
102	Motor wire(copper) 0.5sqmm blue- 1m	92	Length-1m(For Ops: purchase bundle of 100m)
103	Motor wire(copper) 0.5sqmm black- 1m	92	Length-1m(For Ops: purchase bundle of 100m)
104	Single strand wire 0.5mm- 1m	92	Length-1m
105	Servo motor, plastic geared (small)	2	- Torque: 1.8 kg-cm (4.8v) - Speed: 0.10 sec/60° - Weight: 9g - Gear Type: plastic - Rotational Range: 180°
106	Tweezer Set	2	- 10 cm long with various types of heads for different components

107	Library Books	1	<p>List of Books: (2 units of each)</p> <ul style="list-style-type: none"> - Introduction to Robotics by S K Saha, Tata McGraw Hill Education Private Limited. - Programming and customizing AVR microcontroller by Dhananjay Gadre, McGraw Hill Education TAB. - Modern Digital and Analog Communication Systems by B. P. Lathi , Oxford Publication. - Microcontroller Architecture Programming and applications with the 8085 by Ramesh Gaonkar, Penram International Publishing. - Robotics control sensing vision and intelligence by Fu, Gonzalez and Lee, McGraw-Hill Education. - Internet of Things: Architecture and Design Principles by Raj Kamal, McGraw Hill Education. - Industrial Robotics: Technology, Programming and Applications by Nicholas Odrey, Mitchell Weiss, Mikell Groover, Roger Nagel and Ashish Dutta, McGraw Hill Education. - Robotic Engineering: An Integrated Approach by Klafter, Prentice-Hall. - Introduction To Roboitcs : Mechanics and Control by Craig, Pearson Publications - Artificial Intelligence 3e: A Modern Approach by Stuart J. Russell, Peter Norvig, Pearson Education India
108	12V, 2A Switch Mode Power Supply (SMPS)	2	12V, 2A, 24W DC SMPS
Robotic Study Platforms			

1	MOBILE ROBOT PLATFORM (TYPE 1)	2 <ul style="list-style-type: none"> - Weight = 1 kg - Dimensions = 13.8 cm × 17.8 cm × 19.2 cm - Maximum transitional velocity = 0.22m/s - Maximum rotational velocity = 2.84 rad/sec (162.72 deg/sec) - Maximum payload = 15 kg - Operating time = About 2 hr 30 min - Charging time = About 2 hr 30 min - SBC = Raspberry Pi 3 - Embedded Controller = OpenCR(32-bit ARM Cortex M7) - Sensors: 3 axis gyroscope, 3 axis accelerometer, 3 axis magnetometer - Types of wheels = Conventional round wheels with castors - Things included: 1x Raspberry Pi3 1x OpenCR Board 1x HLS-LFCD2 Laser Distance Sensor 1x USB2LDS 2x Dynamixel XL430 2x Wheels with Tires 1x Li-Po Battery Necessary Cables Pieces for Building and Customizing Robot Chassis
2	MOBILE ROBOT PLATFORM (TYPE 2) MARSian- Mars Rover prototype	2 <ul style="list-style-type: none"> Mechanism for locomotion: - Rocker bogie mechanism - 4 links (2 on each side) with 6 wheel drive - Motors : 6 metal geared 12V DC motor, 100 rpm and 4kgcm torque Manipulator: - Length 200mm - 1 DoF actuated by metal geared 12V DC motor, 30 rpm and 10kgcm torque End effector (Parallel link gripper): - Jaw opening : 60mm - Servo motor(6V 4Kgcm torque) Live video link (Wireless image and video transmission): - Pan and tilt mechanism for camera - 1/3" image sensor with 628 x 582pixels - Frequency 1.2G,voltage Tx-9V Rx-12V,power dissipation 640mW - Linear link distance 50-100m - 1800 rotational movement for wide area coverage Electronic circuit: - Atmel Atmega 16 controller IC development

			<p>board</p> <ul style="list-style-type: none"> - Relay motor drivers - Servo motor drivers - Bluetooth module <p>Wireless communication:</p> <ul style="list-style-type: none"> - 2.4G frequency and 115.2kbps interface data rate - 3.3V CMOS UART interface level <p>Mode of Control:</p> <ul style="list-style-type: none"> - Bluetooth communication through Android App - Controlled by Android mobile phone <p>Performance:</p> <ul style="list-style-type: none"> - Line of sight operation = 50m video transmission, 90m indoor and 1.6km outdoor data exchange - Operating terrain = Dry land with gravels - Interaction object = Weight 50gm, maximum volume 40x40x40 mm cube <p>Electrical connections:</p> <ul style="list-style-type: none"> - Supply voltage = 11.1V DC (Lithium Polymer battery) - Supply current capacity = 2200mAh - AC adapter supply = 12V 0.5Ah for video receiver unit <p>Physical:</p> <ul style="list-style-type: none"> - Wheel dimensions = Diameter 100mm x width 40mm - Protective shell = 500 x 500 x 400 mm - Weight = 5kg (robot only) - Body material = Acrylic
3	Roboman	12	<ul style="list-style-type: none"> - 2 wheeled robot with a single board consisting of the controller, driver and communication module - Operated wirelessly using android based mobile application - Reprogrammable platform - Easy to assembly

4	Humanoid Robot	1	<p>Humanoid: Height: 397 cm Weight : 1.7 kg DOF: 16 - 18 Main Controller : CM-530</p> <ul style="list-style-type: none"> - Weight-54g - CPU-ARM Cortex STM32F103RE - Operation Voltage-6V ~ 15V (Recommended Voltage 11.1V) - Current Consumption-When IDLE : 50mA - External I/O max current : 0.3A - Overall max current : 10A (Fuse) - Operating Temperature -50°C ~ 70°C - Internal I/O device-Button : 6 (Reset 1 ; Port 5) - MIC : 1 (For sound detection) - Voltage Sensor : 1 - External I/O Device-compatible I/O 5pin port : 6 - AX/MX series (TTL) 3pin connector : 5 DYNAMIXEL (servo motor) : AX-12A : 18pc - Baud Rate = 7843 bps ~ 1 Mbps - Resolution = 0.29° - Running Degree = 0° ~ 300° - Endless Turn - Weight = 53.5g(AX-12, AX-12+), 54.6g(AX-12A) - Dimensions (W x H x D) = 32mm x 50mm x 40mm - Gear Ratio = 254 : 1 - Stall Torque = 1.5 N*m (at 12V, 1.5A) - No Load Speed = 59rpm (at 12V) - Operating Temperature = -5°C to +70°C - Input Voltage = 9.0 to 12.0V (Recommended : 11.1V) - Command Signal = Digital Packet - Protocol Type = Half Duplex Asynchronous Serial Communication (8bit, 1stop, No Parity) - Physical Connection = TTL Level Multi Drop Bus - ID = 0 to 253 - Feedback = Position, Temperature, Load, Input Voltage, etc - Material = Engineering Plastic - Sensor : Gyroscope, Distance Measuring sensor, Infrared sensor - Software : RoboPlus - Power : LIPO 11.1V, SMPS 12V 5A - Remote Control : Remote controlled , Bluetooth communication
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			<p>PROCESS CONTROL UNIT:</p> <ul style="list-style-type: none"> - Intel Processor Core i5-8500 8th gen - Processor speed: 3GHz base frequency - 8 GB DDR4-2666 SDRAM (1 X 8 GB) - 1 TB 7200 rpm SATA hard disk drive - Optical drive: 9.5 mm Slim DVD-Writer - External drive bays: 1 slim ODD - Internal dive bays: One 3.5" HDD - Graphics: NVIDIA® GeForce® GT 730 (2 GB DDR3 dedicated) - 18.5 inch monitor - includes wired keyboard and wired mouse - Dedicated UPS
5	Parallel Robotic Platform Learning System	1	<p>MECHANICAL specifications:</p> <ul style="list-style-type: none"> - Material: Body: Chromium plated mild steel, Actuators: Engineering plastic body Links: Mild Steel Coupler and Bolts: Stainless Steel - Number of axis = 6 - Pose repeatability = ± 0.173 mm (ISO 9283) - Joint Level Accuracy = 0.088° - Weight = 5 kg with mouting base - Cubical workspace = 60mm \times 60mm \times 60mm - Minimum Incremental Motion X,Y,Z = 1.5mm - Maximum Displacements = X ~ 320mm, Y ~ 308mm, Z ~ 158mm - Maximum Angular Displacements = Roll ~ 43°, Pitch ~ 25°, Yaw ~ 65° - Payload = 3 kg (at 11.1V) - Operating temperature = -5°C to $+80^\circ\text{C}$ - Mounting position = Floor, ceiling, walls, floating - Size = 300mm \times 300mm \times 450mm with Supporting Base Stand of 50mm. - Surface finish, paintwork = Base stand: (stationary) Metallic gray, Moving parts: Chromium plated - Material = Body: Chromium plated mild steel, Actuators: Engineering plastic body Links: Mild Steel Coupler and Bolts: Stainless Steel - Joint Level Accuracy = 0.088° - Minimum Incremental Motion X,Y,Z = 1.5mm - Maximum Velocity = 0.5m/s - Maximum Joint Torque = 5.5N.m (at 11.1V) 6.0N.m (at 12V) 7.3N.m (at 14.8V) - Maximum Joint Speed = 378°Per Second - Force/Torque Control = Torque control (upto 10 bit precision) at each joint allows end-

		<p>effector force/torque control</p> <ul style="list-style-type: none"> - Sound Level = < 50dB - Top Platform = Modified for more agility and light weight. Provision for mounting sensors and gripper. - Pelican Case included <p>ELECTRICAL specifications:</p> <ul style="list-style-type: none"> - Operating Voltage = 11.1V 12.0V (Recommended) 14.8V - Maximum Current = 30A at Full load - Standby Current = 600mA - Connecting Cable = Single 3-Wire cable for Communication and Power. - Actuator Characteristics = Full metal gear PID adjustable using seperate Actuator GUI Contactless absolute encoder (12 bit for 360°) Feedback: Position, Temperature Position, Velocity or Torque Control - Power Supply = 110/220 V to 12V <p>SOFTWARE specifications:</p> <ul style="list-style-type: none"> - Supported platforms = PC with Mac or Linux (Ubuntu, Debian, Rasperry Pi, or other distributions.) - Programming Compatibility = MATLAB, Python, Java, C/C++, C#, LabView, ROS. - Communication = USB to TTL (Daisychain - Half duplex Asynchronous Serial Communication) - API Compatibility = Python, ROS <p>Standard computer with i5 procesor or above, 8 GB RAM, with Graphics card. Preferably with Linux Ubuntu 14.04 or higher.</p>
<p>Industrial Robot Section (SCARA & Articulated 4 axis & 6 axis robots)</p>		

1	SCARA Robot Platform	<p>1</p> <p>Reach: 400 mm Payload: 1.5 kg Maximum magnitude: - Rear arm: Mechanical limitation: -90° to + 90°, Software limitation: -85° to 85° - Forearm: Mechanical limitation: -140° to + 140°, Software limitation: -135° to 135° - Z-axis screw: Mechanical limitation: 0mm- 250mm, Software limitation: 10mm- 235mm - End-effector rotation: Mechanical limitation: unlimited, Software limitation: -360° to 360°</p> <p>Maximum speed: - Joint speed of Forearm and Rear Arm: 180°/s - Resultant speed of the Forearm and Rear Arm: 2000 mm/s - Speed of Z-axis - 1000 mm/s</p> <p>Repeatability: +/- 0.02 mm Collaborative function: support sensor-free collision detection and teaching and playback Input Requirements of Power Adapter: 100 -240 V, 50/60 Hz Communication interface: Ethernet, RS-232C I/O: 22 digital outputs, 24 digital inputs, 6 ADC inputs Software: M1 Studio System: Linux</p>
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2	4 axis articulated robot arm work-cell with conveyor, pick & place (MATLAB compatible)	<p>1</p> <p>ROBOT:</p> <ul style="list-style-type: none"> - Number of axes = 4 axis articulated robot - Payload = 500 gram - Max. reach = 320 mm - Position repeatability (Control) = 0.2mm - Communication = USB/Wifi/Bluetooth - Power supply = 100V-240V, 50/60Hz - Power in = 12A, 7A DC - Consumption = 60W max - Working temperature = -10°C to 60°C <p>AXIS MOVEMENT:</p> <ul style="list-style-type: none"> - Joint 1 (base)= Range: -90° to +90°, max speed: 320°/sec - Joint 2(rear arm) = Range: 0° to +85°, max speed: 320°/sec - Joint 3 (forearm) = Range: -10° to +95°, max speed: 320°/sec - Joint 4 (rotation servo) = Range: +90° to -90°, max speed: 480°/sec <p>PHYSICAL:</p> <ul style="list-style-type: none"> - Net wieght = 3.4kg for robot and total 8 kg for the education sell - Footprint = 158mm x 158mm - Materials = Aluminium Alloy 6061, ABS Engineering plastic - Controller = Integrated type - Mounting = Desktop <p>END EFFECTORS:</p> <ul style="list-style-type: none"> - 3D printer kit with max print size of 150mm x 150mm x 150mm, PLA material with a resolution of 0.1mm - 500mw, 405nm (Blue laser) powered by 12V, TTL trigger (with PWM Driver) - 10mm diameter pen holder - 20 mm diameter vacuum suction cup with a pressure of -35Kpa - Pneumatic gripper with a range of 27.5mm and 8N force <p>CONVEYOR:</p> <ul style="list-style-type: none"> - Payload = 500g - Effective delivering distance = 600mm - Maximum speed = 120mm/s - Maximum acceleration = 1100m/s² <p>PROCESS CONTROL UNIT:</p> <ul style="list-style-type: none"> - Intel Processor Core i5-8500 8th gen - Processor speed: 3GHz base frequency - 8 GB DDR4-2666 SDRAM (1 X 8 GB)
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			<ul style="list-style-type: none">- 1 TB 7200 rpm SATA hard disk drive- Optical drive: 9.5 mm Slim DVD-Writer- External drive bays: 1 slim ODD- Internal drive bays: One 3.5" HDD- Graphics: NVIDIA® GeForce® GT 730 (2 GB DDR3 dedicated)- 18.5 inch monitor- includes wired keyboard and wired mouse- Dedicated UPS
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3	6 axis, 8kg Industrial Robot Cell with ROS	<p>1</p> <p>Robotic Arm:</p> <ul style="list-style-type: none"> - Payload: 8kg - Number of Axes: 6 - Max. Reach: 727 mm - Position Repeatability (Control): +/- 0.02 mm - Communication : Ethernet, RS232 - Power Supply: 100V-240V, 50/60 Hz, 1-ph - Control Voltage: 24V - Consumption: 1kVA - Working Temperature: 4 degree celcius to 40 degree celcius - Controller: YRCm1000 & ROS <p>Axis movement:</p> <ul style="list-style-type: none"> - Joint 1: -175 degree to +175 degree, Max speed: 455 degree/sec - Joint 2: -90 degree to +36 degree, Max speed: 385 degree/sec - Joint 3: -80 degree to +90 degree, Max speed: 520 degree/sec - Joint 4: -175 degree to +175 degree, Max speed: 550 degree/sec - Joint 5: -100 degree to +110 degree, Max speed: 550 degree/sec - Joint 6: -147 degree to +147 degree, Max speed: 1000 degree/sec <p>Software: Moto Programming, ROS Plugin (Offline programming package is available separately)</p> <p>Extension I/O Interfaces:</p> <ol style="list-style-type: none"> 1. GPIO: 40DI & 40 DO 2. RS-232C/RS422 3. 10 channel isolated relay card <p>Conveyor:</p> <ul style="list-style-type: none"> - Payload: 2.0 kg - Effective dlivering distance: 800mm - Maximum speed: 100m/s - Direction: Bidirectional <p>End effectors:</p> <ul style="list-style-type: none"> - 2 types of end effectors in scope of supply for this system <p>Overall Physical:</p> <ul style="list-style-type: none"> - Installation Weight: <200kg - Gross Transport Weight: Approx. 220 kg
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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.:

**<< 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.:

<< 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.:

<< 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.:

<< 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.:

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 This Guarantee shall expire no later than 60days beyond the date of completion of contract period.

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.

<< 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 <input type="checkbox"/>	Current <input type="checkbox"/>	Cash Credit <input type="checkbox"/>
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.

<< 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]

<< Organization Letter Head >>
Training Requirement

1.	Product Description(Tender Name)
2.	No. of Attendees	University staff and students
3.	No. of Days	1 Week or as per the requirement
4.	Type of Training	Operational Training and Maintenance Training (Mechanical, Electrical and Electronics)

Proper Training of 1 weeks (full day) or as per the requirement 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.:

**<< 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:

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).

In 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.

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).

In 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.

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).

In 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/I 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.

**(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
Signature with seal
Date & Place

Bidder:
Signature with seal
Date & Place

In presence of (Witnesses)

1.

1.

2.

2.

***Note-This Contract is to be Signed on Rs. 100/- Non Judicial Stamp paper within 15 days after receiving purchase Order/Work Order from buyer.**

(Please put the initials at each page)