# RFP for Establishment, maintenance and Training of Artificial Intelligence and Machine Learning (AI-ML) at Its centre at L. D. College of Engineering, Gujarat Advanced and Emerging Technology Institute (GATI), Ahmedabad

To inculcate culture of innovation amongst the students and to provide a conducive environment for optimum harnessing of their creative pursuit, the State Government aims to encourage innovation, support start-ups, to train faculties and students in emerging areas of technology and/or through academic institutions and universities. Start-ups in an economy's technology sectors is an important indicator of technological performance for several reasons.

L. D. College of Engineering (LDCE) invites Techno-Commercial Bid for Artificial Intelligence and Machine Learning (Al-ML)Lab - Interested parties, who wish to participate in this bid may obtain the bid documents from GeM portal or from GIL website OR <a href="www.ldce.ac.in">www.ldce.ac.in</a>. Bidders/Lead bidder need to submit all the necessary documents (regarding eligibility & Technical bid) online on GeM portal on or before due date of bid submission.

Bidder shall submit their bids on GeM portal.

		DGM (Tech.), Gujarat Informatics Ltd
		Email : viveku@gujarat.gov.in
		Phone no. : 079-23259239
		Directorate of Technical Education
1.	Contact Person	Email: dire-dte@gujarat.gov.in,
		dteguj@gujarat.gov.in
		Phone no. 079-23253546
		The Principal, L. D. College of Engineering
		Email:  dce-abad-dte@gujarat.gov.in

The pre-bid queries / clarifications if any should be submitted in writing to Gujarat Informatics Limited & Directorate of technical Education & Principal, L. D. College of Engineering, Ahmedabad at least on or before 2 days of pre-bid meeting date. Thereafter the clarifications received from the bidders will not be entertained.

Please address all pre-bid queries and correspondence to

- Vivek Upadhyay, DGM (Tech.), Gujarat Informatics Limited, Block No. 2, 2nd Floor, Karmayogi Bhavan, Sector-10A, Gandhinagar 382 010 Phone No. 079-23259239, Fax No. 079-23238925, E-mail: <a href="mailto:viveku@gujarat.gov.in">viveku@gujarat.gov.in</a>, <a href="mailto:kajalp@gujarat.gov.in">kajalp@gujarat.gov.in</a>
- **Joint Director, Directorate of Technical Education**, Block 2, 6th Foor, Block No. 2, 2nd Floor, Karmayogi Bhavan, Sector-10A, Gandhinagar 382 010, Phone no. 079-23253546, Email: <a href="mailto:dire-dte@gujarat.gov.in">dire-dte@gujarat.gov.in</a>, <a href="mailto:dteguj@gujarat.gov.in">dteguj@gujarat.gov.in</a>
- The Principal, L. D. College of Engineering, C/o. Gujarat Advanced and Emerging Technology Institute (GATI), Gujarat State, 3rd Floor ACPC Building, L. D. College of Engineering campus, Near Gujarat University, Navrangpura, Ahmedabad, Gujarat. Email: ldce-abad-dte@gujarat.gov.in

Fax / Email should be followed by post confirmation copy.

## [QCBS evaluation Details]

The Bidder with lowest qualifying financial bid (L1) will be awarded 100% score. Financial Scores for other than L1 Bidders will be evaluated using the following formula:

Financial Score of a Bidder (Fn) = {(Commercial Bid of L1/Commercial Bid of the Bidder) X 100} % (adjusted to 2 decimal points)

Where, Fn = Normalized financial score of the Bidder Combined and Final evaluation is relevant for QCBS bids only. L1 = Lowest qualifying financial bid

#### **Combined and Final Evaluation**

The technical and financial scores secured by each Bidder will be added using weightage of <60%> and <40%> respectively to compute a Composite Bid Score.

The Bidder securing the highest Composite Bid Score will be adjudicated as the most responsive Bidder for award of the Project/Contract. The overall score will be calculated as follows: -

<Bn = 0.60 \* Tn + 0.40 \* Fn>

Where,

Bn = overall score of Bidder

Tn = Technical score of the Bidder (out of maximum of 100 marks)

Fn = Normalized financial score of the Bidder. In the event the bid composite bid scores are

'tied', the Bidder securing the highest technical score will be adjudicated as the Best Value Bidder for award of the Project.

#### **Example:**

#### A. Normalisation of technical bids:

Bidders	Technical Score	Calculation	Normalized Technical
			Score
Bidders-1	75	75/95*100	78.94
Bidders-2	80	80/95*100	84.21
Bidders-3	85	85/95*100	89.47
Bidders-4	95	95/95*100	100

#### B. Normalisation of Financial Bids:

Bidders Financial	Financial Quote in	Calculation	Normalized Financial Score
	Lakhs upto 2		
	decimal points		
Bidders-1	120	120/120*100	100
Bidders-2	145	120/145*100	82.75
Bidders-3	135	120/135*100	88.88
Bidders-4	170	120/170*100	70.58

#### C. Final Score calculation through QCBS:

The final score will be calculated through Quality and Cost Selection method based on the following weightage:

Technical: 60% Financial: 40%

Final score = (0.60\* Normalised Technical Score) + (0.40\* Normalised Financial Score)

#### C. Final Score calculation:

Bidders	Normalized	Normalized	Final Score as
	Technical	Financial Score	per QCBS
	Score		
Bidders-1	78.94	100	87.364

Bidders-2	84.21	82.75	83.626
Bidders-3	89.47	88.88	89.234
Bidders-4	100	70.58	88.232

The bidder with the highest final score shall be treated as the successful bidder. In the above example, Bidder – 3 will be treated as successful bidder. In the event the final score are 'tied', the bidder securing the highest technical score will be adjudicated as the Best Value Bidder for award of the contract.

#### **ELIGIBILITY CRITERIA:**

Sr no	Eligibility Criteria
1	The sole bidder or Lead Bidder in case of consortium should be system Integrator in the field of IT company
	in India and should be in existence since last 3 years as on last date of bid submission.
	In case of consortium, other consortium member should be in the field of software development / software
	training since last 3 years as on last date of bid submission
2	The sole bidder or Lead Bidder in case of consortium should have an average annual turnover of minimum Rs. 5 crore for the last three audited financial years (2017- 18, 2018-19, 2019-20).
	The copies of Audited Annual Accounts/Statutory CA Certificate for last three years shall be uploaded along
	with the bid.
3	The sole bidder or any consortium member in case of consortium must have experience of installations of
	such type of High End Computers in at least 5 Government OR Private Universities/Institutes. Customer
	references & Purchase orders must be uploaded along with the bid.
4	The bidder should be authorized by its OEM for following items to quote in the bid.
	Server
	NAS
	Rack
	UPS
	Network Switch
	Desktop
	Laptop
	Projector Additional Control of the
	Multi- Functional Printer
5	OEM of items as mentioned below should have presence in India since last 5 years
	Server
	NAS
	UPS
	Network Switch
	Desktop
	Laptop
	Projector
	Multi- Functional Printer
6	The sole bidder or Lead Bidder in case of consortium must have one office in Gujarat. Please upload the
	copy of any two of the following: Property tax bill/Electricity Bill/Telephone Bill/VAT/CST Registration/Lease
	agreement. In case, bidder do not have office in Gujarat, bidder should give undertaking to open office in
	Gujarat within 45 days from the date of empanelment.
7	The sole bidder or each of the consortium member in case of consortium should not be blacklisted by any
	Ministry of Government of India or by any State Government of India or any of the Government PSUs at the
	time of bidding. Self-Declaration / Certificate / affidavit mentioning that the Bidder is not blacklisted as per
	the clause should be submitted.
9	The sole bidder or any consortium member in case of consortium will have to attach copy of at least 01
	work completion certificate of similar kind from the client in last three years for the supply of equipment
	and providing manpower fulfilling the training for same area. Attach proof of same.

#### Note:

- Consortium is allowed. Maximum Two companies shall be allowed in a consortium including the Lead Member. In case of Consortium, lead bidder will have to submit Consortium agreement which clearly stating the roles and responsibilities of each member.
- The Lead bidder or the Consortium member of a bid cannot be part of multiple bidders. Only an
   OEM / Product Company can be part of multiple consortiums (if the firm is not participating as a Lead Bidder)

**Note:** In GeM bid, Eligibility Criteria are not mentioned, however bidder & OEM of the quoted product must meet eligibility criteria as mentioned above only & Eligibility Criteria as mentioned above will be considered for evaluation.

#### INTRODUCTION

To inculcate culture of innovation amongst the students and to provide a conducive environment for optimum harnessing of their creative pursuit, the State Government aims to encourage innovation, support start-ups, to train faculties and students in emerging areas of technology and/or through academic institutions and universities. Start-ups in an economy's technology sectors is an important indicator of technological performance for several reasons.

The following tasks are included as per scope of work defined below,

#### Scope of Work

Purpose of developing lab in emerging area is to strengthen the knowledge and practical skills of faculty and students and thus increasing the employability.

Bidder should provide all related manuals technical/user/safety/training etc.

**Training:** The courses offered should be certified by IT sector skill Council NASSCOM **OR** The Trainer should possess valid certificate in the AI/ML area of training which is well accepted in IT sector

Quoted items must be as per **Annexure 1**. Necessary furniture/fixture and electrical work for complete functioning of the laboratory should be provided by bidder.

Bidder will be responsible to undertake and complete the work related to supply, installation and commissioning of equipments and devices as per the bid requirement. All required accessories (connecting cables etc) must be supplied. The bidder will be responsible for providing training (as mentioned in bid document in a batch of 30) to participants after successful installation of all hardware and software. Post training support need to be provided till the contract period in development of applications. Also learning material in hard copy or soft copy must be provided. Carry out training as per schedule decided by institute up to 3 years after completion of installation.

All the latest / relevant software framework/tool/ application/module related to **Artificial Intelligence and Machine learning (AI-ML)** on open source / customized version is required to be deployed by bidder in proposed hardware in lab to impart the necessary training as per scope of work.

The work must be completed on turnkey basis and the supplied equipments are required to be maintained for 5 years on comprehensive warranty basis from the date of Final Approval and Testing and need to sign SLA. The Bidder shall be responsible for implementation of the work as defined.

#### Bidder is required to carry out following tasks.

- **a. Turnkey Project Basis:** The Bidder shall act as single Bidder to organize and manage the entire project including supply, installation and commissioning of all required hardware, software, networking, accessory items etc and Training. The Bidder shall be in a position to test, demonstrate and certify the basic requirements in accordance with the contract.
- b. **Technical Arrangements:** Post the award of the contract the bidder shall provide details related to the power requirement based on the components that will be installed in various physical locations. Institute will provide the Power, Earthling and if required any other support required on the Civil part.
- c. Warranty Support: The Bidder shall be responsible for the warranty support as mentioned in Annexure-1
- d. **Quality of goods supplied:** All goods or materials shall be supplied strictly in accordance with the specifications, Drawings, datasheets, other attachments and conditions stated in the bid document. All materials supplied by the Bidder shall be guaranteed to be of the best quality of their respective kinds and shall be free from faulty design, workmanship and materials.

Before submission of bid, bidders are requested to visit laboratory location for all the required hardware, software, furniture, fixtures and electrical work for complete functioning of the laboratory.

After submission of the bid, the Bidders/Lead bidder will have to give presentation to the authorities at GTERS/GATI.

#### **BID PROCESS AND EVALUATION**

- EMD shall be uploaded by bidder in the online bid & Hard copy of EMD will have to submit within 5 days of bid opening in a sealed cover at Directorate of Technical Education, Gandhinagar with the heading "Bid No."
  - EMD as mentioned above, shall be submitted either through RTGS OR in the form of Demand Draft/Banker's cheque OR in the form of an unconditional Bank Guarantee (which should be valid for 45 days beyond the bid validity); in the name of Directorate of Technical Education payable at Gandhinagar and must be submitted along with the covering letter.
  - Please affix the stamp of your company on the overleaf of demand draft.
  - Note: Failing to submit physical covers of EMD within given time limit may lead to the rejection of the bid.
- 2. The bidder/lead bidder has to submit the tender in 2 parts (1) Technical Bid and (2) Financial Bid. Which are required to be submitted online on GeM portal.
- 3. Late Bids: The bidder/lead bidder will not be able to submit the bid after bid submission date and time.
- 4. Technical bid shall consist of documents as specified later in this document. The bidder/lead bidder has to submit all technical documents duly signed by the bidder/lead bidder.
- 5. The bidder/lead bidder is required to attach the checklist & tick mark in it the documents attached. Bidder/Lead bidder is required to arrange & submit the documents as mentioned in the sequence of checklist. Please don't submit any unnecessary documents.
- 6. The EMD may be forfeited at the discretion of **Principal, L. D. College of Engineering, Ahmedabad**, on account of one or more of the following reasons:
  - a. If a Bidder/Lead bidder withdraws its bid during the period of bid validity.
  - b. If Bidder/Lead bidder does not respond to requests for clarification of their Bid
  - c. If Bidder/Lead bidder fails to co-operate in the Bid evaluation process, and
  - d. In case of a successful Bidder/Lead bidder, if the Bidder/Lead bidder fails:
    - i. To sign the SLA as mentioned above or
    - ii. To furnish performance bank guarantee as mentioned or
    - iii. If the bidder/lead bidder is found to be involved in fraudulent practices.

#### **Evaluation:**

- 1. After the closing time of submission, GIL / GoG committee will verify the submission of EMD as per bid terms and conditions. The eligibility criteria & technical evaluation will be carried out of the responsive bids.
- 2. The bidder/lead bidder who qualifies in primary scrutiny, their technical bid will be opened and will have to come to demonstrate their procedure of work. Bidder/Lead bidder will have to demonstrate the execution plan and strength through Presentation. In the presentation, the bidder/lead bidder will have to include the procedure they will adopt to execute, the proposed set-up, equipment brand, specifications and quantity etc. Evaluation of the presentation will be considered while deciding for the bid. Evaluation criteria is mentioned in the bid.
- 3. It is assumed that the Bidders/Lead bidder submitting the bids have gone through all bid terms & agreed with all the terms of the bid.
- 4. For Presentation, all the Bidders/Lead bidder will be informed by email.
- 5. Financial bids will be opened in online format of technically qualified Bidders/Lead bidder only.
- 6. Bidder/Lead bidder who is selected for the contract will have to sign the contract on the fixed format of **Rs. 300 Non-Judicial Stamp paper**.
- 7. The successful bidder/lead bidder will be required to furnish Performance Bank Guarantee in two parts as per details mentioned below:
  - a. The successful bidder/lead bidder will be required to furnish Performance Bank Guarantee@10% of the total value of Training (for 3 year + 2 months) (Total C) in accordance with the conditions of contract within 15 days from the date of contract order from banks (operating in India having branch at Ahmedabad/ Gandhinagar) as per the G.R. no. EMD/10/2021/7729/DMO dated 28.06.2021 issued by Finance Department or further instruction issued by Finance department time to time.

b. The successful bidder/lead bidder will be required to furnish Performance Bank Guarantee@10% of the total value of Hardware + Miscellaneous / site preparation (for 5 year + 2 months) (Total A + Total B) in accordance with the conditions of contract within 15 days from the date of contract order from banks (operating in India having branch at Ahmedabad/ Gandhinagar) as per the G.R. no. EMD/10/2021/7729/DMO dated 28.06.2021 issued by Finance Department or further instruction issued by Finance department time to time.

If the bidder/lead bidder fails to comply with the above requirements within the said period, the earnest money already deposited shall be applicable for forfeiture and **Principal, L. D. College of Engineering, Ahmedabad** shall purchase the items required at the risk and cost of the successful bidder/lead bidder

8. Unfinished or Conditional bid will not be entertained.

### **General terms and Conditions**

- 1. The bidder/lead bidder has to quote for all the items mentioned in the bid as per **Annexure-1** and bidder will have to comply scope of work as specified.
- 2. The bidder/lead bidder may quote only one option (i.e. only one product can be quoted) against each item. Bidders/Lead bidder are required to mention make & model of the product. Do not write OEM against items, unless specified, as Bidders/Lead bidder is expected to give make & model of the product.
- 3. If in any case the quoted item is not available in the market, the bidder/lead bidder will have to supply higher version/replacement of that item in the quoted cost in the same time duration with prior approval of GIL/L. D. College of Engineering, Ahmedabad. No End of Life or End of Support product should be quoted to minimize such instances. (Make & Model quoted by the bidder/lead bidder should be available till the bid validity, duly supported for spares/OEM support for warranty period till the duration of contract).
- 4. The bid is to be quoted for full quantity mentioned in the bid document as per Annexure 1. Bidding of partial quantity/ies will not be accepted.
- 5. The price quoted shall include all taxes, other levies payable, all freight, packing & forwarding, transportation, insurance, loading & unloading, custom duty, labour, commissioning, erection, excise duty, other duties, other charges, etc. to supply goods at laboratory locations. Discount if offered should be included in offered price. Quoted prices shall be inclusive of all taxes.
- 6. Rates quoted should also include supply, training, installation, commissioning, erection and demonstration of machine/material/goods/instruments/equipment at our site/s in functional form and to be maintained up to contract period with training.
- 7. The items for which quotations have been submitted must be in accordance with the specifications given in **Annexure-1**
- 8. Incomplete information of technical specification may lead to disqualification of bidder/lead bidder. Thus, the bidder/lead bidder is required to submit Sr. No. wise itemized compliance for all specifications mentioned in **Annexure-1**.
- 9. The scope of work is mentioned in the bid. It is required to be strictly followed during the execution of work during the contract period
- 10. Technical specifications indicated are minimum specification. Bidder/Lead bidder may quote for better solution. The bidder/lead bidder should provide following with the technical bid,
  - a. Make & Model of the product
  - b. Name of Manufacturer
  - c. Technical Brochure / Manufacturer's data sheet.
  - d. Compliance statement from the OEM of the quoted product
  - e. Warranty certificate from OEM
- 11. OEM/bidder should also have spares etc. stored in India.
- 12. The rates quoted by the bidder/lead bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- 13. The tender is liable to be rejected if complete information is not given therein or if the particulars and date (if any) asked for in the scheduled tender are not fully filled in. Particular attention must be paid to delivery date and also to the particulars referred to in the condition of the contract.
- 14. Financial bids will be opened in online format of technically qualified Bidders/Lead bidder only.

- 15. Tenders not complying with the above conditions are liable to be rejected at the sole discretion of GoG/Principal, L. D. College of Engineering, Ahmedabad without any further reference / communication.
- 16. This tender is not transferable.
- 17. **Principal, L. D. College of Engineering, Ahmedabad** reserves the right to choose, accept or reject any or all requests or deviations or offers, in full or part and also reserve the right at any stage to reduce or increase the quantity.
- 18. All or any claim(s), dispute(s) or difference(s) arising out of or in connection with this agreement shall be subject to the jurisdiction of the courts at Ahmedabad only.
- 19. Any loss or damage caused to the article in transit/installation/testing is to be replaced by the supplier free of cost within period of **30 days**.
- 20. If any civil work is required to be done for installation and commissioning, then the supplier shall arrange the essential drawing/documents. For this, prior permission of **Principal,L. D. College of Engineering, Ahmedabad** as an authority is required to be taken by the bidder/lead bidder.
- 21. The bidder/lead bidder shall have to enter into the agreement in the prescribed Performa.
- 22. Technical experts of manufacturers/supplier should provide adequate training to all the staff involved as specified in scope of work and annexure-1.
- 23. Instruments/Equipment/Machines/Goods should be vibration free and provided with vibration absorbing pads as per requirements if required.
- 24. Successful bidder/lead bidder has to visit the site personally and make necessary arrangements to install machine/material/goods/instruments/equipment after receiving the purchase order so that there is no delay in work and timely installation and commissioning is possible.
- 25. No bidder/lead bidder shall withdraw his rates after the tender is opened. If a bidder/lead bidder does so, his tender related deposit/s shall be forfeited, and such Bidder/Lead bidder shall be considered ineligible for work/contract in future.
- 26. Bid Currency: Prices shall be quoted in Indian Rupees only. Payment for the supply of equipment as specified in the agreement shall be made in Indian Rupees only.
- 27. Language of Bid: The bid prepared by the bidder/lead bidder, as well as all correspondence and documents relating to the bid exchanged by the bidder/lead bidder and **Principal, L. D. College of Engineering, Ahmedabad** shall be in English.
- 28. Amendment of Bidding Documents (Corrigendum/s)
  - a. At any time prior to the deadline for submission of bids, Principal, L. D. College of Engineering, Ahmedabad may, for any reason, whether its own initiative or in response to the clarification request by a prospective bidder/lead bidder, modify the bidding documents by amendment/Corrigendum.
  - b. The corrigendum will be published on GeM portal and L. D. College of Engineering, Ahmedabad & GIL website.
  - c. In order to allow prospective Bidders/Lead bidder, reasonable time to take into consideration the amendments while preparing their bids **Principal, L. D. College of Engineering, Ahmedabad**, at its discretion, may extend the deadline for the submission of bids.
- 29. **Delivery & installation**: Supply, Installation, testing of all equipment shall be completed within **90 working** days from the date of confirmed purchase order / site readiness at laboratory location.
- 30. If successful bidder/lead bidder is found breaching any of the condition(s) of bid or supply order/work order, at any stage during the course of supply / installation or warranty period, the legal action as per rules/laws, shall be initiated against the successful bidder/lead bidder and EMD/PBG shall be forfeited, besides debarring and blacklisting the bidder/lead bidder concerned for the time period as decided by Govt., for further dealings with Government of Gujarat.
- 31. Warranty and Performance:
  - a. The Bidder/Lead bidder shall be responsible for the Comprehensive onsite warranty support for a minimum contract period of 5 year from the date of acceptance of goods by purchaser for the equipment to be supplied including subscription of the related software components, if any, as specified in technical specifications. Lead bidder/Bidder shall have to make necessary arrangements for additional warranty beyond manufacturer warranty, if required, for comprehensive onsite warranty.

- b. If any equipment gives continuous trouble, say more than 3 times in one month during the warranty period, the bidder/lead bidder shall replace the same with new equipment without any additional cost to the purchaser.
- c. Bidder/Lead bidder must ensure that the warranty support service should be available at the respective locations to provide repairing cum replacement services of human resource for training and equipment within one-week time and complaint should be acknowledged in 48 hours. Bidder/Lead bidder is required to provide the name & address & contact details of the firm for providing warranty support & repairing cum replacement service up to delivery locations and up to the duration of the contract.
- d. Maintenance Service: Free maintenance services shall be provided by the bidder/lead bidder during the period of warranty and duration of contract.
- e. In case, bidder/lead bidder is not providing satisfactory support & doing unwarranted delay in providing warranty support, **Principal, L. D. College of Engineering, Ahmedabad** reserves right to repair the equipment at risk & cost of the bidder/lead bidder.

#### 32. Penalty Clause:

Penalties for delay in delivery and installation:

- a. If the bidder/lead bidder fails to deliver and install the requisite devices, equipment, hardware, and other items within **the given time limit**, then a **sum equivalent to 1 % of per site value** shall be deducted from the payment for each calendar week of delay or part thereof.
- b. The amount of penalties for delay in delivery and installation shall be subject to a **maximum limit** of 10% of the total contract value.
- c. **Delay in excess of 5 weeks** will be sufficient for termination of the contract. In that case the Performance Bank Guarantee of the bidder/lead bidder will be forfeited.
- d. In case, the selected bidder/lead bidder does not supply the ordered items for any reason, he will be liable to pay the difference amount to the purchaser, over and above the Performance Guarantee, which purchaser have to pay to the next or other selected bidder/lead bidder for purpose of the said items.
- 33. **Principal, L. D. College of Engineering, Ahmedabad** reserves the right to change any bid condition of any item even after inviting the bids, with/without prior notification.
- 34. **Principal, L. D. College of Engineering, Ahmedabad 's** right to accept any bid and to reject any or all bids: **L. D. College of Engineering, Ahmedabad** reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to awarding the contracts, without thereby incurring any liability to the affected bidder or Bidders/Lead bidder or any obligation to inform the affected bidder or Bidders/Lead bidder of the grounds for such decision.
- 35. Termination of Contract: For Convenience: **principal, L. D. College of Engineering** by written notice sent to Bidder may terminate the contract in whole or in part at any time for its convenience giving one month's prior notice. The notice of termination shall specify that the termination is for convenience the extent to which Bidder's performance under the contract is terminated and the date upon which such termination become effective.

For Insolvency: **principal, L. D. College of Engineering** may at any time terminate the contract by giving written notice to Bidder, if Bidder becomes bankrupt or insolvent. In this event, termination will be without compensation to Bidder, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to **principal, L. D. College of Engineering**. For Non-Performance: **principal, L. D. College of Engineering** reserves its right to terminate the contract in the event of Bidder's repeated failures, say more than 3 occasions in a calendar year to maintain the service level prescribed by **principal, L. D. College of Engineering**. No compensation is entertained in any case.

#### 36. Payment conditions:

#### For Hardware:

- On successful completion of delivery & inspection, 70% payment will be released
- Remaining 30% payment will be released after successful installation & commissioning.

Training and other components payments will be released time to time accordingly as per written schedule provided to L1 bidder

## **TESTING OF EQUIPMENTS AT DEPLOYMENT:**

- The verification/inspection of the supplied items will be carried out in the manner as decided by GIL/GoG. The proper inspection facility has to be provided by the supplier(s) at their cost.
- The bidder will have to offer the inspection in the manner as decided by GIL/GoG before delivering to the respective sites. The cost of the same has to be borne by the supplier. Any deviation found in the specification of the produced goods or delivered goods after inspection from the bid specifications will lead to the cancellation of the order, forfeiture of EMD/PBG and prohibition in the participation in the future purchase of Government of Gujarat. GIL/GoG will not be responsible for any time delay which may arise due to any deviation from the bid technical specification found at the time of inspection and the bidder has to deliver and install the ordered items within prescribed time limit.

#### Bid documents to be attached

All the Bidders/Lead bidder in case of consortium are required to submit the copy of documents as per following sequence:

- 1. Copy of firm Registration is to be submitted
- 2. Copy of Goods and Service Tax (GST) Registration is to be submitted.
- 3. Compliance sheet of specifications item wise as per Annexure-1.
- 4. The bidder/lead bidder has to submit tender document duly filled & signed with the stamp on each page of the tender document and on the enclosures to show that, the Bidders/Lead bidder have read and understood all the details and terms & conditions of the tender thoroughly.
- 5. The list of the useful material and it's quantity, list of useful machines and it's quantity and details of the monitoring system if any required to be used, etc. is required to be included in the presentation.

## Annexure 1:

# Equipment Specifications for Artificial Intelligence and Machine Learning (AI-ML) Lab - Providing items at L. D. college of Engineering, Ahmedabad

# **Summary AI ML Lab items**

Sr No	Item Name	Quantity	Comprehensive onsite Warranty Years
1.	Server	1	5
2.	NAS	1	5
3.	Rack	1	5
4.	UPS	1	5
5.	Network Switch	1	5
6.	Desktop	120	5
7.	Laptop	5	5

# Miscellaneous / site preparation

Sr. No.	Item Name	Item Description	Qty
1	Air Conditioner (split AC with invertor with Min. 3 star rating)	1.5 Ton	2
2	Air Conditioner for Computer Lab ( split AC with invertor with Min. 3 star rating)	2 Ton	11
3	Necessary Electrification with standard ISI make cable/plug/socket /switch to be done in a lab for required items to be supplied under this bid.		260
4	Projector Minimum Specifications:  ✓ Technology: LCD/DLP ✓ Resolution: 1024*768 or higher ✓ Brightness (lumens): 3500 or higher ✓ Type of Projector: Standard Throw / Short throw or higher ✓ 5 Year Warranty	With motorised screen	2
5	Wall Mount Fan		20
6	Multi-functional Duplex printer without fax (Print, scan, Copy)  Minimum Specifications:  ✓ Fax Feature: NO  ✓ Paper Size: A4  ✓ Duplex Feature: Yes  ✓ Printing technology: Laser  ✓ Type of Printing: Mono  ✓ Flatbed Size: A4  ✓ Scanning Feature Availability: Yes  ✓ Network connectivity: Yes  ✓ Original Document Feeder Type: Platen OR DADF/RADF OR ADF  ✓ 20ppm or higher  ✓ 5 years warranty		4
7	Computer Chair	Fix	130
8	Computer Table		60

	T	T	T
9	Soft Board for Lab	3 feet x4 feet	8
9	SOIL BOALD FOI LAD	3 feet x4 feet	٥
10	White Board for Lab	2 feet x2 feet	4
11	Civil Work	Partitioning for Lab and	
		faculty cabin at	
		different locations	
12	COPIER MACHINE		1
13	Steel cupboard		10
	Market and Constitution		
	Minimum Specifications:		
	Without locker/drawer conforming to IS-3312/84 having 1950±10 mm (H) x 910±10 mm (W) x 490±05 mm depth. Each		
	cupboard will have four adjustable shelves of 1.2 mm thick		
	MS CRCA sheet, making five compartments. Shelf supports on		
	four brackets of 1.2 mm thick MS CRCA Sheet. Pedestal is of		
	peripheral type of 125±5 mm (H) having thickness of 1.2 mm		
	made from MS CRCA sheet. Door panels, side & back panels		
	shall be made out of 1.2 mm MS thick sheet. Sheet must be		
	conforming to IS-513/1994.		
	Cabinet should be fitted with 3 way bolting device and with		
	six precision cut ISI Mark –Brass Heavy duty lever lock		
	conforming to IS 729/79 (Reaffirmed 2001) with chrome		
	plated handle conforming to IS 742/1981 (is must). The lock		
	should be as per IS and key should not be interchangeable.		
	The locking arm must be pass from two guideways on both		
	side. The locking plate thickness is 2.00 mm.		
	Phosphate Traeatment: the unit is to be Epoxy Polyester		
	Powder coated to the thickness of 50 micron (+/- 5). Sheets to		
	undergo 6 tank of Anti-Rust Pre-treatment: Degreasing		
	(Protective Oil layer), Water Rinse (Removes the chamicals),		
	Phosphating (Form an insoluble metal phosphate surface),		
	Passivation (Reduce the corrossion rate of metal surface). The Pre-treated sheet then to be powder coated.		
	Pre-treated sheet then to be powder coated.		
	Powder Coating: Surface coating to be applied in the form of		
	powder and on curing to produce a protective coating of dark		
	grey structure finish shade with more than 50 microns thick		
	layer.		
	Poor workmanship may be one of the reason to reject the		
	sample and goods.		
14	Required network cabling with 4 no. 24 port switch with all		1
	accessories along with cable laying. (including I/O, Patch cords		
	etc) for 80 points at various locations with 5 year warranty		

# **TECHNICAL SPECIFICATIONS**

Bidder must quote/offer product with min. specifications as mentioned below only and evaluation will be carried out on following specifications:

Server	
Processor	Intel / AMD based processor (2.0 GHz, 100MB L3 cache, 20 core)
	The server proposed should support a minimum of 40 parallel simultaneous threads per socket
Memory	latest Red Hat License Core Count of quantity - 40 Min. 256GB DDR4 memory @ 2400Mhz scalable to 2048GE
GPU	Up to 2 x NVIDIA Tesla GPUs with 32 GB GPU Memory based on the NVIDIA SXM2 form factor connectors.  Required Number of GPUs – 2
	Rated at 125 TFLOPs per GPU for deep learning, with mew 640 Tensor Cores per GPU
Disk	Should support NVLink 2.0  The server should support SSD and SATA storage as well as a hybrid pool
Storage	Internal disks should support RAID 1+0 4 no. 2TB 7.2k RPM 5xx SATA SFF
I/O Subsystem	4 x PCle Gen4 slots
	The server shall support maximum of 100 Gb/s EDR
	Functional redundancy at an adapter level should be provided
Containerization and	The server should support virtualization through KVM
Orchestration	The server should support containerization through Docker
	The server should support the use of Kubernetes as an open-source container orchestration system
Miscellaneous	The server should have dedicated system management port(s).
	System management should be through a dedicated adapter / integrated system management port.
Operating System	The server should be OEM certified to run one of the following operating systems: RHEL, & Ubuntu
Power & Cooling	The maximum rated power (watts) and cooling (BTU/hr) fo the server should be provided. Two Power Cord 4.3m (14.10-foot), Drawer to PDU, 250V/16A
Management Console	Single management console shall be offered.  The management console must be on server-class system & Ethernet adapters or integrated on the host server
	Management console should be located in the same data center as the servers.
	The management console shall be capable of managing multiple physical servers at the same time.

		The management console shall be capable of connecting to the physical servers over the LAN or a out-of-band vLAN.
		Connection to the management console shall be secure using SSH protocols.
	Software	Red Hat Enterprise Linux 8 for Power (Academic edition)
		Two Supply - RHEL 8 for Power
		Two Per Svr 1 Skt pair w 1 PN and up to 2 VN w 5yr PRM
		Sub
		Support Line for Linux on Power - 5 Year
		5 Yr Support Line for Linux 24x7 per Server
		OEM of the product quoted should be ISO 9001:2008
		Process Certified OEM for manufacturing
2	NAS	
	Form Factor	2U rack-mount system
	Processor	Intel Xeon Bronze 3204 1.9G, 6C/6T, 9.6GT/s, 8.25M Cache, No Turbo, No HT (85W) DDR4-2133
	Chassis	Chassis with up to 12 x 3.5" HDDs on BP, 4 x 3.5" HDDs on MP
	Memory	and 2 x 3.5" HDDs Flexbay, 1 and 2CPU Configuration 16 GB (Single Module) or higher
	HDD	5 x 8TB 7.2K RPM NLSAS 12Gbps 512e 3.5in Hot-plug Hard Drive
		2 x 480GB SAS 12Gbps 2.5in Flex Bay Hard Drive, 3.5in HYB CARR
	Raid Controller	Standard Raid Controller with 2 GB NV Cache
	NIC	Dual Port 10GbE BASE-T & Dual Port 1GbE BASE-T
	File Access	CIFS, NFS, FTP, SMB3.0, SMB Direct (RDMA)
	Protocols	
	Block Access Protocols	Microsoft iSCSI target
	Operating	Microsoft Windows Storage Server 2019 Standard Edition or
	System	Academic edition
	Power Supply	Redundant hot-plug 750W or better
	Fans	High-performance redundant fans
	Warranty	5 Yr 24x7 Onsite Support & OEM Warranty
		OEM of the product quoted should be ISO 9001:2008 Process Certified OEM for manufacturing
3	Rack	
	Rack Size :	
		Omm, with front and back perforated door, levelling feet & castors, with
	Side Panel and Bot	•
	Rack Cable Manage	er:
		lanager for 800mm Wide 42U
	1U Depth Adjustab	le Fixed shelf 250Lbs Black (Qty 1)
	Rack Power:	16A 220V Vortical (20) IEC C12
		, 16A, 230V, Vertical, (20) IEC C13, wer cord with 2P+E (IP44), Black
	Rack Standard Incl	
	*Single flat front m	
	*Double flat rear n *Roof top with cab	
	-	nels, top and bottom
		vertical mounting rails

- \*4 fast deploying levelling feet and 4 casters
- $^{*}$ 2 x Vertical PDU / cable management tray ready for dual PDU mounting
- \*All rack panels are inherently grounded
- \*50 sets of captive M6 nuts and M6 screws
- \*1 set of Integrated baying kit
- \*Open bottom area (optional cover)

#### Shelf:

1U Depth Adjustable Fixed shelf 250Lbs Black

OEM of the product quoted should be ISO 9001:2008 Process Certified OEM for manufacturing

On UP (m UP etc all Enc 1)/ Certifications UP Bypass Switch Ma pro UP Switching Sw Device Sw UP cor vol Rating The	All ine UPS with PWM Technology suitable for single Phase AC input voltage  PS shall be housed in rugged enclosure made of M.S. Sheet 1.2 mm  Ininimum) thick, aesthetically finished, duly pre-treated and powder coated.  PS shall be free from workmanship defects, sharp edges, nicks, scratches, burs  C. All fasteners shall be fixed properly. The equipment shall be complete with  parts and all parts shall be functional  closures shall conform to protection requirement of IP2L1 to ISI:3947 (Part  /1993 (reaffirmed 1998)  PS should meet CE and ROHS standards (PIs submit certificates along with bid)  anual and Static by-pass switch shall be provided for maintenance of UPS with  ovision for Enable/Disable of Bypass mode  PS shall supply output power and charging current at the same time  vitching Device shall be IGBT  vitching frequency shall be 19 KHz or above  PS shall be provided with USB & serial communication port RS 232 for  mputer interface for data exchange of electrical parameters of UPS like
UP (m UP etc all En( 1)/ Certifications UP Bypass Switch Ma pro UP Switching Sw Device Sw UP con vol Rating The INPUT Voltage Range 166	PS shall be housed in rugged enclosure made of M.S. Sheet 1.2 mm hinimum) thick, aesthetically finished, duly pre-treated and powder coated. PS shall be free from workmanship defects, sharp edges, nicks, scratches, burs coally finished properly. The equipment shall be complete with parts and all parts shall be functional closures shall conform to protection requirement of IP2L1 to ISI:3947 (Part 1993) (reaffirmed 1998) PS should meet CE and ROHS standards (PIs submit certificates along with bid) annual and Static by-pass switch shall be provided for maintenance of UPS with ovision for Enable/Disable of Bypass mode PS shall supply output power and charging current at the same time vitching Device shall be IGBT vitching frequency shall be 19 KHz or above
UP (m UP etc all En( 1)/ Certifications UP Bypass Switch Ma pro UP Switching Sw Device Sw UP con vol Rating The INPUT Voltage Range 166	PS shall be housed in rugged enclosure made of M.S. Sheet 1.2 mm hinimum) thick, aesthetically finished, duly pre-treated and powder coated. PS shall be free from workmanship defects, sharp edges, nicks, scratches, burs coally fasteners shall be fixed properly. The equipment shall be complete with parts and all parts shall be functional closures shall conform to protection requirement of IP2L1 to ISI:3947 (Part /1993 (reaffirmed 1998) PS should meet CE and ROHS standards (PIs submit certificates along with bid) anual and Static by-pass switch shall be provided for maintenance of UPS with ovision for Enable/Disable of Bypass mode PS shall supply output power and charging current at the same time vitching Device shall be IGBT  Vitching frequency shall be 19 KHz or above PS shall be provided with USB & serial communication port RS 232 for
(m UP etc all En 1)/ Certifications UP Bypass Switch Ma pro UP Switching Sw Device Sw UP con vol Rating The	prinimum) thick, aesthetically finished, duly pre-treated and powder coated. PS shall be free from workmanship defects, sharp edges, nicks, scratches, burs and all parts shall be fixed properly. The equipment shall be complete with parts and all parts shall be functional closures shall conform to protection requirement of IP2L1 to ISI:3947 (Part /1993 (reaffirmed 1998)  PS should meet CE and ROHS standards (Pls submit certificates along with bid) anual and Static by-pass switch shall be provided for maintenance of UPS with ovision for Enable/Disable of Bypass mode  PS shall supply output power and charging current at the same time vitching Device shall be IGBT  Vitching frequency shall be 19 KHz or above  PS shall be provided with USB & serial communication port RS 232 for
UP etc all Enc 1)/ Certifications UP Bypass Switch Ma pro UP Switching Sw Device Sw UP con vol Rating The INPUT Voltage Range 166	PS shall be free from workmanship defects, sharp edges, nicks, scratches, burs c. All fasteners shall be fixed properly. The equipment shall be complete with parts and all parts shall be functional closures shall conform to protection requirement of IP2L1 to ISI:3947 (Part /1993 (reaffirmed 1998) PS should meet CE and ROHS standards (Pls submit certificates along with bid) anual and Static by-pass switch shall be provided for maintenance of UPS with ovision for Enable/Disable of Bypass mode PS shall supply output power and charging current at the same time vitching Device shall be IGBT  Vitching frequency shall be 19 KHz or above PS shall be provided with USB & serial communication port RS 232 for
UP etc all End 1)/ Certifications UP Bypass Switch Ma pro UP Switching Sw Device Sw UP con vol Rating The INPUT Voltage Range 166	PS shall be free from workmanship defects, sharp edges, nicks, scratches, burs c. All fasteners shall be fixed properly. The equipment shall be complete with parts and all parts shall be functional closures shall conform to protection requirement of IP2L1 to ISI:3947 (Part /1993 (reaffirmed 1998) PS should meet CE and ROHS standards (Pls submit certificates along with bid) anual and Static by-pass switch shall be provided for maintenance of UPS with ovision for Enable/Disable of Bypass mode PS shall supply output power and charging current at the same time vitching Device shall be IGBT  Vitching frequency shall be 19 KHz or above PS shall be provided with USB & serial communication port RS 232 for
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Certifications UP Bypass Switch Ma pro UP Switching Sw Device Sw UP cor vol Rating The INPUT Voltage Range 166	closures shall conform to protection requirement of IP2L1 to ISI:3947 (Part /1993 (reaffirmed 1998)  PS should meet CE and ROHS standards (Pls submit certificates along with bid) anual and Static by-pass switch shall be provided for maintenance of UPS with ovision for Enable/Disable of Bypass mode  PS shall supply output power and charging current at the same time vitching Device shall be IGBT  Vitching frequency shall be 19 KHz or above  PS shall be provided with USB & serial communication port RS 232 for
Certifications UP Bypass Switch Mapro UP Switching Sw Device Sw UP Con vol Rating The INPUT Voltage Range 166	V1993 (reaffirmed 1998) PS should meet CE and ROHS standards (Pls submit certificates along with bid) anual and Static by-pass switch shall be provided for maintenance of UPS with ovision for Enable/Disable of Bypass mode PS shall supply output power and charging current at the same time vitching Device shall be IGBT  vitching frequency shall be 19 KHz or above PS shall be provided with USB & serial communication port RS 232 for
Certifications UP Bypass Switch Ma pro UP Switching Sw Device Sw UP con vol Rating The INPUT Voltage Range 166	PS should meet CE and ROHS standards (Pls submit certificates along with bid) anual and Static by-pass switch shall be provided for maintenance of UPS with ovision for Enable/Disable of Bypass mode PS shall supply output power and charging current at the same time vitching Device shall be IGBT  Vitching frequency shall be 19 KHz or above PS shall be provided with USB & serial communication port RS 232 for
Bypass Switch Mapro UP Switching Sw Device Sw UP con vol Rating The INPUT Voltage Range 166	anual and Static by-pass switch shall be provided for maintenance of UPS with ovision for Enable/Disable of Bypass mode PS shall supply output power and charging current at the same time vitching Device shall be IGBT  Vitching frequency shall be 19 KHz or above PS shall be provided with USB & serial communication port RS 232 for
Switching Sw Device Sw UP cor vol Rating The INPUT Voltage Range 166	ovision for Enable/Disable of Bypass mode PS shall supply output power and charging current at the same time vitching Device shall be IGBT  vitching frequency shall be 19 KHz or above PS shall be provided with USB & serial communication port RS 232 for
Switching Sw Device Sw UP con vol Rating The INPUT Voltage Range 166	PS shall supply output power and charging current at the same time vitching Device shall be IGBT vitching frequency shall be 19 KHz or above PS shall be provided with USB & serial communication port RS 232 for
Switching Device Sw UP con vol Rating The INPUT Voltage Range 166	vitching Device shall be IGBT vitching frequency shall be 19 KHz or above PS shall be provided with USB & serial communication port RS 232 for
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Sw UP cor vol Rating The INPUT Voltage Range 166	PS shall be provided with USB & serial communication port RS 232 for
Rating The INPUT Voltage Range 166	PS shall be provided with USB & serial communication port RS 232 for
Rating The INPUT Voltage Range 166	· · · · · · · · · · · · · · · · · · ·
Rating vol  INPUT  Voltage Range 166	mputer interface for data exchange of electrical parameters of UPS like
Rating The INPUT Voltage Range 160	
INPUT Voltage Range 16	ltage, current, frequency, charging status, mode of operation etc.
Voltage Range 160	e rating specified is a unity power factor
Frequency 50	0 V – 280 V
. requeries 30	Hz +/- 10% Hz
Range	
Phase Sin	ngle Phase AC
OUTPUT	
Voltage 230	0 V +/-2% (with alternative setting for 220V +/- 2%)
Regulation	
Output 50	Hz +/- 1 Hz Single Phase (In inverter mode)
Frequency	
Voltage Fro	om on load to full load Should be within +/-1% in both the cases, UPS shall
regulation als	so have facility for operation in synchronous mode in which output frequency
sha	all be same as that of mains frequency
Harmonic 3%	6 max. on resistive load
Distortion	
	Ily functional SNMP card required; RS 232 & USB port with software for UPS atus monitoring
	t rated Output voltage and Frequency
•	% (min)
	% (min)
Power Factor	•••
Load Power Ber	

Facto	or			
UPS power		Better than 0.9 lagging		
factor				
Over	load	UPS shall withstand 20% overload for 5 minutes and 50% overload for 1 minute		
ENVI	RONMENT	Noise Level – less than 55 db at a distance of 1 meter		
Prote	ection	Over voltage, short circuit and overload at UPS output terminal, Under voltage		
		at battery terminal, Overshoot and undershoot shall not be greater than 4% of		
		rated voltage for duration of 60 msec		
Indic	ators	Mains Presence, Battery Charging and Discharging, Low battery voltage		
Digita	al meters	"Input AC Voltage, Output AC Voltage, I/o Frequency, O/p Frequency, Output		
		Current, Battery Voltage, Load Percentage, Battery Backup available in		
		percentage, (with LED \ LCD display)"		
Misc		ECO Mode Operation with Enable/Disable function		
		Emergency Power Off (EPO)		
		UPS to be compatible with DG supply		
		Cables: With all necessary cables and plug and Battery links		
		Rack: Suitable Metallic Rack for housing of SMF Batteries to be provided		
Batte	ry Detail	8000 VAH for 5 KVA - 60 min		
Batte	ery Type	Sealed Maintenance Free ( VRLA)		
Batte	ery Make	Battery Sr. No on OEM Letter Head with Warranty Assurance of 1 years at the		
		time of delivery)		
5	Network S	witch ( 24 port )		
	Form Fac	tor Switch should be 1U and rack mountable in standard 19" rack.		
	Ports	2 x Switch must have :		
		<ul> <li>20x 10G 10GBase-T copper ports</li> </ul>		
• 4x 10G SFP+ uplinks		• 4x 10G SFP+ uplinks		
	Stack Cab	ole 4 x Stack Cable		
	Power Su	pply Switch should have internal Power supply		
6	Desktop			
	• 10th G	eneration Intel® Core™ i7 OR AMD Ryzen 7 Processor or higher		
		ated Graphics		
	_	DDR4 (Single Module) RAM		
		SSD & 1Tb SATA drive		
		or: 23.8" or higher wide screen LED Backlit based TFTs, Resolution – 1920*1080		
or better, T		ter, TCO Displays 8.0 certified or better		
		onitor, Keyboard and Mouse should be of the same OEM as offered CPU.		
		0/1000 on board Integrated Gigabit Port		
USB Wired Optical Scroll Mouse     104 Keys USB wired keyboard		·		
104 Keys USB wired keyboard  Interval BYO B (M) Mailer				
Internal DVD R/W Writer  Ports - Total C USB port with at least 3 USB 3 0 port (min 3 at front) VCA (UDA)		•		
Ports: Total 6 USB port with at least 2 USB 3.0 port (min. 2 at front), VGA/HDN port Audio in out				
port, Audio in/out				
Internal Speaker     Minimum 3 PGI/PGIo clate		•		
Minimum 2 PCI/PCIe slots     Cabinat forms fortune SEE / Towns on bottom				
Cabinet form factor : SFF/ Tower or better				
		ting System: Factory preloaded from OEM Windows 10 Professional 64 Bit OS		
with Latest service pack .		·		
		cation: Windows 10 Certification		
		nty: 5 years On-site Comprehensive OEM Warranty (Warranty must be visible in		
	OEM w	vebsite in respect to each product serial number)		

OEM of the product quoted should be ISO 9001:2008 Process Certified OEM for

✓ Intel core i5 processor OR AMD Ryzen 5 processor or higher,

manufacturing

Laptop

7

- ✓ Compatible chipset
- √ 2GB Graphics card
- ✓ 16GB RAM,
- ✓ 500GB or higher HDD/SSD,
- ✓ Windows 10 Prof. OS,
- ✓ 14" Non Touch display
- ✓ Inbuilt Wifi and Bluetooth connectivity, LAN Port, HDMI port, Inbuilt Speaker & Mic, Inbuilt Webcam
- ✓ 5 years warranty

OEM of the product quoted should be ISO 9001:2008 Process Certified OEM for manufacturing

Note: All the proposed hardware should be compatible with offered software framework/tool/module/application to impart the training as proposed in scope of work.

1	Training	
	Overall Program	Shall offer program courses on futuristic technologies and domains, in the field of Computer Science which are in-demand and industry aligned. The applying OEM should have 10+ years of experience at multiple universities across India and other countries.  The applying OEM should be both the Software & Hardware (Server) service provider.  These program courses shall be offered to students (from both
		Engineering and Non-Engineering domains) in varying formats and duration in the field of AI/ML  The labs for each of these specialization areas and courses should be on Open-Source Software.
	Support for Board of Studies & Curriculum	Subject matter experts to be made available to present / discuss / design industry aligned programs and curriculum. The Curriculum / Syllabus should be well researched, up-to-date and contemporary, as
	Workshop	per Technology / Business Domain requirements & emerging trends.  All the Programs offered should be outcome based and shall be extremely interactive, much similar to the real-life scenario where a professional is judged against some set parameters at every stage. This shall help in honing up skills and communication in a systematic manner.
	Global Recognition for the Certificate / Digital Badge for Students:	The coveted Digital Badge directly issued by the industry partner and recognized globally shall be awarded to all students passing the program. The students shall be able to display/showcase the Digital badge on their email closing information, Social media platforms and Electronic resume.
	Train the Teachers' program:	Train the Teachers' program conducted by industry subject matter experts (on each of the specialization subjects) for selected faculty members, who will also be awarded certificates on successful competition of Train the Teacher's program, to ensure smooth transition, delivery and management to the new curriculum.
	Lab Guidance & Support:	Industry experts' guidance in setting up the required Labs.
	Project Based Learning:	The focus on projects and applied learning shall be offered from the very beginning. The theory courses shall be augmented by adequate project and applied work, which will help the students apply the knowledge they gain in classroom.
	Vibrant Concurrency of Courseware:	The programs and courses offered shall be regularly reviewed and adjusted at the periodic intervals for their concurrency.
	Online & Printed Courseware	The program courseware must be made available to participating students in online mode and a set of printed copies of the courseware

availability: made available for faculty reference. The online platform must have the ability to accurately track how much of the course has been completed by the student. The online platform must produce a course report displaying the student's grade on each of the activities along with the date of completion. It must be able to support interactive self-assessment for each of the courses. Facilitate online Discussion Forum. It must have the ability for online submission of Assignments by the students. Must have the ability to track the course completion by the student. Online / Offline Faculty and student learning shall be further enhanced by providing Discussions adequately structured discussion forums against relevant topics / Forums: subjects. Visits by industry professional / subject matter experts, facilitating **SME Visits** (Seminars & experiential learning. Webinars) & There will be adequate interaction planned during these visits so that it Interaction: becomes an interactive learning experience for the students. Online / face-to-face sessions shall be offered through industry guest lectures. Online Learning Make available an online learning and industry collaboration ecosystem and Industry platform for the Institution benefiting the participating faculties & Collaboration students enrolled into the program. Ecosystem This platform shall facilitate students to interact with industry subject Platform: matter experts to acquire applied knowledge and skills. Students An online ecosystem system portal platform shall track the work the Monitoring & student performs and provides access to student courseware and Tracking System: industry interactions. The platform must include project scope - which is industry and technology aligned. Project Team: Making provision and available a Project Manager, and Delivery Team, which will ensure the smooth delivery of the program throughout the lifecycle of the student project throughout the program The OEM should have trained on these courses in at least 2 Skills initiative from Central & State Govt's levels The OEM should have trained on these courses in at least 2 Public Universities The OEM should have trained on these courses in at least 3 international Universities Courses and Course Material should be developed and delivered by Globally renowned Organizations in the IT field Course Module Training must be provided to participants in two phases each consist of two sub modules. Phase -1(Basic): • Module-1 (Introduction to Artificial Intelligence and Machine Learning – Mathematics related to ML & DS) Duration: 40 Hrs.(too much time for introduction) • Module-2 (Machine Learning) Duration: 40 Hrs.

## Phase -2(Advanced):

- Module-3 (Deep Learning/Neural Networks)
  Duration: 40 Hrs.
- **Module-4** (Project: Industry related problem) Duration: 40 Hrs.

Content of each module is finalized through collaboration of faculties and industry experts.

Total participants for Phase-1: 180 (120 students + 60 faculties)

Participants who successfully complete the phase-1 training will be allowed for phase-2 training.

Total participants for Phase-2: 90 (60 students + 30 faculties)

In phase-2 training, at least 70% time must be allotted for live project based hands on training.

## A) Hardware Cost:

Sr No	Item Name	Quantity	Unit price in Rs. With tax	Total Price in Rs. With tax
1.	Server	1		
2.	NAS	1		
3.	Rack	1		
4.	UPS	1		
5.	Network Switch	1		
6.	Desktop	120		
7.	Laptop	5		
	Total A			

# B) Miscellaneous / site preparation Cost :

Sr. No.	Item Name	Item Description	Qty	Unit price in Rs. With tax	Total Price in Rs. With tax
1	Air Conditioner (split AC with invertor with Min. 3 star rating)	1.5 Ton	2		
2	Air Conditioner for Computer Lab ( split AC with invertor with Min. 3 star rating)	2 Ton	11		
3	Necessary Electrification with standard ISI make cable/plug/socket /switch to be done in a lab for required items to be supplied under this bid.		260		
4	Projector	With motorised screen	2		
5	Wall Mount Fan		20		
6	Multi-functional printer without fax ( Print , scan , Copy)		4		
7	Computer Chair	Fix	130		
8	Computer Table		60		
9	Soft Board for Lab	3 feet x4 feet	8		
10	White Board for Lab	2 feet x2 feet	4		
11	Civil Work	Partitioning for Lab and faculty cabin at different locations	1		
12	COPIER MACHINE		1		
13	Steel Cupboard		10		
14	Required network cabling with 4 no. 24 port switch with all accessories along with cable laying. (including I/O, Patch cords etc) for 80 points at various		1		
	locations with 5 year warranty				

Total B	

# C ) Training Cost

Sr. No.	Item Name	price in Rs. with tax
1	Training for faculty and students:	
	180 students and 90 faculty for the period of 3 years	
	Total C	

Grand total (A+B+C)	
Grand total (ATBTC)	

Note: For QCBS evaluation, lowest of Grand total (A + B + C): L1 will be awarded 100% score.

In financial bid, bidders will have to submit detailed price breakup for item wise rates quoted as per Performa given in above tables.

Criteria	Maximum score
TEAM STRUCTURE & EMPLOYEE DETAILS & Company Profile	300.0
a) Details about the business clients (national and international) that the sole bidder/ lead bidder in case of consortium/training provider is closely engaged with-in various capacities in the different Industries/Universities/Institutes.	
b) The proposal suggests a suitable team will be employed to deliver the required works for installation and configuration.	05
c) The Tenderer's proposals for managing the different stages of the Contract are appropriate and adds value.	05
QUALITY ASSURANCE	
a) Providing the effective way of utilizing all equipments/items/software and a 'round the clock' call handling service with commitment from OEM	10
b) Access to equipment/item/materials in case of failure of such item and Systematic work plan for post-inspections, and performance assessment.	05
c) Commitment to delivering a quality service and support from OEM	05
SERVICING & MAINTENANCE	
<ul> <li>a) Bidder/OEM have sufficient knowledge to service, and diagnose of faults in equipments, training modules and debugging the code.</li> </ul>	10
b) Previous experience of providing the required services of similar nature to sites with a varying range of customer counts.	10
Training, Post Training REPORTING and support	
a) The sole bidder/ any consortium member in case of consortium/training provider provided the training modules which are state of art/as per industry requirements.	5
b) The trainer has relevant certificates in the training modules specified.	5
c) Training plan, Evaluation process and Post evaluation feedback reports available.	10
d) Availability of tools for statistical analysis of participants who undertook training.	05
e) The details such as the number of trainees trained, employed / job opportunities	
generated, feedback of trained participants	05
f) Courses and Course Material should be developed and delivered by Globally renowned Organizations in the IT field.	10

Bidder should get Minimum 60 marks in technical evaluation to qualify for opening of financial bid.

## Lead Bidder and Consortium Member (if applicable) Details to be submitted at the time of bidding:

<<To be printed on Lead Bidder Company's Letterhead and signed by Authorized Signatory>>

1/YYYY

		Date:DD/
To, < <name dept.="" of="">&gt;</name>		
Subject:Lead Bidder and Consortium		
Dear Sir,		
Pleasefindbelowdetailsofleadbidderandothercord no".  NOTE:Tobefilledfortheleadbidderandeachconsortium		ersforparticipationin"
Particulars	LeadB idder	Consortiu m Member
NameoftheOrganization		
TypeofOrganization(PrivateLtd./PublicLimited)		
CountryofRegisteredOffice		
AddressofRegisteredOffice		
CompanyRegistrationDetails		
DateofRegistration		

PAN/Equivalent Address of Registered Of fice in IndiaNo.ofYearsofOperationinIndia StakeinConsortium(%) AuthorizedSignatoryName AuthorizedSignatoryDesignation

Thanking you, Yours faithfully

GSTNumber

(Signature of the Authorized signatory of the Bidding

Authorized Signatory Contact Details

Details of any Global Certifications (ISO/ITIL/Commaetc.

Organization) Name: Designation

Date :
Company Seal :
Business Address :

Undertaking as per Office Memorandum No.: F. No.6/18/2019-PPD dated 23.07.2020 & Office Memorandum No.: F.18/37/2020-PPD dated 08.02.2021 of Ministry of Finance, Dept. of Expenditure, Public Procurement division :

Bidders are requested to kindly go through the Office Memorandum No.: F. No.6/18/2019-PPD dated 23.07.2020 & Office Memorandum No.: F.18/37/2020-PPD dated 08.02.2021 of Ministry of Finance, Dept. of Expenditure, Public Procurement division related restrictions on procurement from border countries. As per this GR, bidders are required to quote/offer the product which adheres to this GR. The undertaking as from bidder as well as from offered product OEM is required to be submitted along with bid as per given Performa.

#### On letterhead of Bidder

Sub: Undertaking as per Office Memorandum No.: F. No.6/18/2019-PPD dated 23.07.2020 & Office Memorandum No.: F.18/37/2020-PPD dated 08.02.2021 of Ministry of Finance, Dept. of Expenditure, Public Procurement division

<u>Procurement division</u>					
Ref: Bid	Ref: Bid Number:				
I have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India. I certify that we as a bidder and quoted product from following OEMs are not from such a country or, if from such a country, these quoted products OEM has been registered with competent authority. I hereby certify that these quoted product & its OEM fulfils all requirements in this regard and is eligible to be considered for procurement for Bid number:					
No.	Item Category	Quoted Make & Model			
1					
2					
In case I'm supplying material from a country which shares a land border with India, I will provide evidence for valid registration by the competent authority, otherwise GIL/End user Dept. reserves the right to take legal action on us.					
(Signature) Authorized Signatory of M/s << Name of Company>>					

## On letterhead of OEM

Sub: Undertaking as per Office Memorandum No.: F. No.6/18/2019-PPD dated 23.07.2020 & Office Memorandum No.: F.18/37/2020-PPD dated 08.02.2021 of Ministry of Finance, Dept. of Expenditure, Public Procurement division

Ref: Bio	Number:	
Dear Sir	г,	
with Incountry these q	read the clause regarding restriction on procurement from a bidder of dia. I certify that our quoted product and our company are not from a bidder of the configuration of the co	m such a country, or if from such a spetent authority. I hereby certify that
No.	Item Category	Quoted Make & Model
	I'm supplying material from a country which shares a land border with tion by the competent authority; otherwise GIL/End user Dept. reserve	•
(Signatu	ure)	
Authori	ized Signatory of M/s < <name company="" of="">&gt;</name>	