Request for Proposal (RFP) for Selection of Implementing Partner for Supply, Installation and Implementation of Robotic Lab in Secondary Schools in Odisha.

RFP No.- OCAC-SEGP-INFRA-0025-2023-23129 Dtd. 29/12/2023



Odisha Computer Application Center

Odisha Computer Application Centre (Technical Directorate of E&IT Department, Government ofOdisha), N-1/7-D, Acharya Vihar, PO- RRL, Bhubaneswar – 751013, EPBX: 0674-2567280 / 2567064 /2567295 / 2567283

1 Disclaimer

The information contained in this Request for Proposal (hereinafter referred to as "RFP") document provided to the Bidders, by the Odisha Computer Application Centre (OCAC) Odisha, or any of its employees, is provided to the Bidder(s) on the terms and conditions set out in this RFP document and all other terms and conditions subject to which such information is provided.

The purpose of this RFP document is to provide the Bidder(s) with information to assist in the formulation of Proposals. This RFP document does not aim to hold all the information each Bidder may require. This RFP document may not be appropriate for all persons, and it is not possible for the Odisha Computer Application Centre (OCAC) Odisha and its employees to consider the business/investment objectives, financial situation and particular needs of each Bidder who reads or uses this RFP document. Each Bidder should conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP document and where necessary obtain independent advice from appropriate sources. Odisha Computer Application Centre (OCAC) Odisha and it's employees make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in the Bidding Documents.

Information provided in the RFP Document to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. OCAC/Client Department accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The issue of this RFP Documents does not imply that the OCAC/Client Department is bound to select a Bidder or to appoint the Selected Bidder or Service Provider for the Project and the OCAC/Client Department reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, uploading, expenses associated with any demonstrations or presentations which may be required by OCAC/Client Department or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the OCAC/Client Department 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 Bid, regardless of the conduct or outcome of the Selection process. OCAC may, in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP document.

2 Table of Contents

1 Disclaimer	2
3 Instruction to Bidders for Online Bid Submission	5
3.1 Guidelines for registration:	5
3.2 Searching for tender documents	5
3.3 Preparation of bids	6
3.4 Submission of bids	6
4 Important Dates & Information	8
5 Notice Inviting RFP	9
6 Fact Sheet	10
7 Invitation for Bids	11
8 Project Background Information	11
8.1 Proposed Solution	12
9 Brief scope of work	14
9.1 Requirement, Scope of Work, Deliveries & Timelines	15
9.2 Detailed Requirement under this Project	15
9.3 Detailed Scope under this Project	16
9.4 Warranty & Support	17
9.5 Training & Handholding	17
9.6 Helpdesk and Onsite support	18
9.7 Helpdesk	18
9.8 Onsite Support	19
10 Pre-Qualification/Eligibility Criteria	20
11 Technical Evaluation Criteria	23
12 Project Deliverables, Milestones & Time Schedule	25
13 Service Levels and Penalty Terms	27
13.1 During Project Deployment	27
13.2 During Warranty & Support Duration	27
14 Payment Terms	28
14.1 Payment of Goods & Services Tax	30
14.2 Penalty	30
15 Submission of Bids	30
15.1 Deadline Submission of Bids	31
15.2 Venue for Submission of Bids	31
15.3 Mode of Submission of Bids	32
15.4 Withdrawal, Substitution, and Modification of Bids	32
15.5 Opening of Bids	32
16 RFP Evaluation	33
16.1 Evaluation & Tabulation of Pre-qualification Bid	33
16.2 Evaluation & Tabulation of Technical Bid	34
16.3 Evaluation & Tabulation of Financial Bids	34
17 Acceptance of the successful Bid and award of Project	35

17.1 Award Criteria	35
17.2 Right to Accept Any Proposal and To Reject Any or All Proposal(s)	35
17.3 Purchaser's Procurement Rights	35
17.4 Notification of Award	35
17.5 Issuance of Purchase Order	36
17.6 Performance Guarantee	36
17.7 Issuance of Purchase Order	36
17.8 Failure to Agree with the Terms and Conditions of the RFP	37
17.9 Confidentiality	37
18 General Terms and Conditions of RFP	38
18.1 Definitions	38
18.2 Language	38
18.3 Notices	39
18.4 Governing Law	39
18.5 Scope of Supply	39
18.6 Project Value	40
18.7 Recoveries from Supplier/ Agency	40
18.8 Taxes & Duties	40
18.9 Packing and Documents	41
18.10 Insurance	41
18.11 Transportation	41
18.12 Extension in Delivery Period and Liquidated Damages (LD)42
18.13 Warranty	43
18.14 Termination	43
18.15 Settlement of Disputes	43
19 Annexure	45
19.1 Annexure- 1: Particulars of the Bidders	46
19.2 Annexure 2- Bid Security Declaration	47
19.3 Annexure 3: Self-Declaration	48
19.4 Annexure-4: Project Citation Format	49
19.5 Annexure-5: Manufacturer's Authorization Form (MAF)	50
19.6 Annexure 6: Technical Bid Cover Letter	51
19.7 Annexure-7: Financial Bid Cover Letter	52
19.8 Annexure 8: Financial Bid	54
19.9 Annexure 9: Details of documents to be submitted by the Bidder	56
19.10 Annexure 10: List of Schools	59
19.11 Annexure 11 – Specifications of Robotic Kits and Equipment.	60

3 Instruction to Bidders for Online Bid Submission

e-Nivida is the complete process of eTendering, from publishing of tenders online, inviting online bids, evaluation and award of contract using the system. You may keep a watch of the tenders floated under https://enivida.odisha.gov.in Bidder Enrollment can be done using "Bidder Enrollment".

The instructions given below are meant to assist the bidders in registering on the e-Nivida Portal, and submitting their bid online on the portal as per uploaded bid. More information useful for submitting online bids on the envied Portal may be obtained at:

https://enivida.odisha.gov.in

3.1 Guidelines for registration:

- Bidders are required to enroll themselves on the e-Nivida Portal https://enivida.odisha.gov.in or click on the link "Bidder Enrollment" available on the home page of e-tender Portal by paying the Registration fee of Rs.2,500/- + Applicable GST
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication with the bidders.
- 4. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Only Class III Certificates with signing + encryption key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sift / TCS / node / euchre etc.), with their profile.
- 5. Only valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6. Bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC / e-Token.
- 7. The scanned copies of all original documents should be uploaded in pdf format on e-tender portal.
- 8. After completion of registration payment, bidders need to send their acknowledgement copy on our help desk mail id odishaenivida@gmail.com, for activation of the account.

3.2 Searching for tender documents

1. There are various search options built in the e-tender Portal, to facilitate bidders to search active tenders by several parameters.

2. Once the bidders have selected the tenders they are interested in, then they can pay the Tender fee and processing fee (NOT REFUNDABLE) by net-banking / Debit / Credit card then you may download the required documents / tender schedules, Bid documents etc. Once you pay both fee tenders will be moved to the respective 'requested' Tab. This would enable the e- tender Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

3.3 Preparation of bids

- 1. Bidder should consider any corrigendum published on the tender document before submitting their bids.
- 2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid.
- 3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF formats. Bid Original documents may be scanned with 100 dpi with Color option which helps in reducing size of the scanned document.
- 4. To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g., PAN card copy, GST, Annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" available to them to upload such documents.
- 5. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process. Already uploaded documents in this section will be displayed. Click "New" to upload new documents.

3.4 Submission of bids

- 1. Bidder should log into the website well in advance for the submission of the bid so that it gets uploaded well in time i.e., on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document as a token of acceptance of the terms and conditions laid down by Department.
- 3. Bidder has to select the payment option as per the tender document to pay the Tender Document fee & EMD as applicable and enter details of the instrument.
- 4. In case of BG bidder should prepare the BG as per the instructions specified in the tender document. The BG in original should be posted/couriered/given in person to the concerned official before the Online Opening of Financial Bid.

In case of non-receipt of BG amount in original by the said time, the uploaded bid will be summarily rejected.

- 5. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the yellow Colored (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
- 6. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7. The uploaded bid documents become readable only after the tender opening by the authorized bid openers.
- 8. Upon the successful and timely submission of bid click "Complete" (i.e. after Clicking "Submit" in the portal), the portal will give a successful Tender submission acknowledgement & a bid summary will be displayed with the unique id and date & time of submission of the bid with all other relevant details.
- 9. The tender summary has to be printed and kept as an acknowledgement of the submission of the tender. This acknowledgement may be used as an entry pass for any bid opening meetings.

For any clarification in using e-Nivida Portal:

- 1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2. Any queries relating to the process of online bid submission or queries relating to e-tender Portal in general may be directed to the Helpdesk Support.
- 3. Please feel free to contact e-Nivida Helpdesk (as given below) for any query related to e- tendering.

Phone No. 011-49606060 Mail id: - <u>odishaenivida@gmail.com</u>

4 Important Dates & Information

Information	Details	
Bid Inviting Authority	Odisha Computer Application Center	
	(OCAC) (Technical Directorate of I.T. Dept,	
	Govt. of Odisha)	
Correspondence Address	The General Manager (Admin)	
	Odisha Computer Application Centre (OCAC)	
	(Technical Directorate of I.T. Dept, Govt. of	
	Odisha) N-1/7-D, Acharya Vihar, P.O RRL,	
	Bhubaneswar -751013	
	RFP for Selection of Implementing Partner	
RFP Name	for Supply and Installation of Robotic Lab in	
	Secondary Schools in Odisha.	
Bid Reference No. and Date	OCAC-SEGP-INFRA-0025-2023-23129, dtd:	
	29/12/2023	
Non-Refundable RFP Document	₹ 11,200/- (inclusive of 12% GST) Eleven	
Fee	Thousand Two Hundred Only in the form of	
	Demand Draft drawn on any Nationalized	
	Bank or Scheduled Commercial Bank in favor	
	of "Odisha Computer Application Centre ",	
	payable at Bhubaneswar.	
	The bidder must have submitted the EMD of	
	1 Crore in the shape of Bank	
EMD	Guarantee/Account Payee Demand Draft	
	from any Nationalized / Scheduled	
	Commercial Bank in favor of Odisha	
	Computer Application Centre (OCAC)	
	payable at Bhubaneswar. The EMD should be	
	valid for a minimum period of 90 days from	
	the last date of submission of the Bid.	
Availability of Bid Document in	29/12/2023 at 03:00 PM	
the website (www.ocac.in		
www.odisha.gov.in)		

Last Date and Time for	12/01/2024 by 03:00 PM
Submission of Bid document	
through	
https://enivida.odisha.gov.in	
Date and Time of opening of	12/01/2024 at 04:30 PM
Pre- Qualification Bids (PQ) &	
Technical Bids (TB)	
Date and Time of Technical	To be informed later
Presentation	
Date and Time of Financial Bid	To be informed later

5 Notice Inviting RFP

OCAC invites proposals from reputed Implementing Partner, for execution of Robotics Labas detailed in the Scope of Work in this RFP.

The RFP document can be downloaded from the OCAC websites <u>https://ocac.in,</u> <u>https://enivida.odisha.gov.in and https://www.odisha.gov.in</u> Response to this Request for Proposal (RFP) shall be deemed to have been done after careful study and examination of this document with full understanding of its implications. This and subsequent sections provide general information about the Issuer, important dates for RFP processing, addresses for communication and correspondence, and the overall eligibility, technical evaluation criteria and related terms for the interested bidders.

OCAC reserve the right to cancel any or all the bids without assigning any reason thereof.

<u>Issuer</u>

The General Manager (Admn.) Odisha Computer Application Centre (OCAC) OCAC Building, Plot No.-N-1/7-D, Acharya Vihar Square RRL Post Office, Bhubaneswar -751013 (Odisha)

6 Fact Sheet

This Fact Sheet comprising important factual data of the tender is for quick reference of the Bidder.

Clause Reference	Торіс
The Proposal	OCAC invites proposals from reputed Implementing Partner for execution of Robotics Lab in selected Secondary Schools of Odisha.
Method of Selection	Quality Cost Based Selection (QCBS) method shall be used to select the bidder. The bidder is required to submit the bids General (Pre-qualification), Technical & Financial bid in eNivida portal (https://enivida.odisha.gov.in). Technical bid of those bidders who qualify in General Bid shall be opened. Financial bid of those bidders who qualify in Technical Bid by scoring 70% mark or above shall be opened.
	OCAC reserves the right to award the contract to more than one bidder, at L1 price in the interest of speedy implementation of the Project.
RFP Document Fee	The RFP document can be downloaded from the website <u>www.odisha.gov.in</u> or www.ocac.in or https://enivida.odisha.gov.in/. The bidders are required to submit the RFP document fee of Rs 11,200/- inclusive of 12% GST) Eleven Thousand Two Hundred Rupees Only in shape of Bank Draft in favour of Odisha Computer Application Centre and payable at Bhubaneswar from any of the scheduled commercial banks along with the proposal (General Bid) documents.
Earnest Money Deposit (EMD)	The bidder must have submitted the EMD of 1 Crore in the shape of Bank Guarantee/Account Payee Demand Draft from any Nationalized / Scheduled Commercial Bank in favor of Odisha Computer Application Centre (OCAC) payable at Bhubaneswar. The EMD should be valid for a minimum period of 90 days from the last date of submission of the Bid.
Performance Bank Guarantee (PBG)	Performance Bank Guarantee (PBG) @10 % of the cost of the project from any Nationalized/Scheduled Commercial Bank in the prescribed format in favour of the Odisha Computer Application Centre shall be submitted by the successful bidder within 30 days of issue of work order.
Scope of Work	Selected Bidder is expected to deliver the equipment and services listed in Scope of Work as mentioned in this RFP.

Number of Schools to be Covered	500 Schools In Two Clusters of 250 each
Currency	The bidder should quote in Indian Rupees only. The total price inclusive of taxes, levies and duties will be considered for evaluation. The bidder must mention the base price and the tax component separately.
Validity Period	Proposals/bid must remain valid for minimum 180 days from the last date of bid submission.
Bid to be submitted on or	The proposal must be submitted to: The General Manager (Admn.)
before last date of submission at:	Odisha Computer Application Centre (OCAC) OCAC Building, Plot NoN-1/7-D, Acharya Vihar Square, RRL Post Office, Bhubaneswar-751013 (INDIA) Proposals must be submitted on or before 11/01/2024 by 03:00 PM through electronic mode only.

7 Invitation for Bids

Odisha Computer Application Centre (OCAC) invites bids from eligible bidders who have the necessary qualifications for Procurement, Supply, Installation and Commissioning of Five Hundred (500) numbers of Robotics Labs for in Secondary Schools for School & Mass Education Department (S&ME), Government of Odisha for a period of FIVE (05) Years, including Three(03) Year Warranty Support Period & TWO (02) Years Comprehensive Annual Maintenance Support Period (CAMS) as per the "Scope of Work" described in this RFP. The detail school list is attached in this RFP.

The Bid document has been published in the official website of OCAC <u>www.ocac.in</u>, <u>https://enivida.odisha.gov.in</u> and <u>http://www.odisha.gov.in</u>.The tender advertisement has also been published in leading newspapers for wide circulation. Bidders are requested to go through the Bid document carefully and participate in the bidding process with all necessary details as required.

This RFP is issued by OCAC, which is the sole point of contact during the selection process. The Nodal Officer responsible for entire process is General Manager (Admin).

8 **Project Brief:**

Today's technology-driven world demands school students to be well-versed in the subjects such as robotics, artificial intelligence (AI) and machine learning (ML). To keep up with the demands of the tech world and make students ready to take on a future where robots are expected to become a part of their daily lives, this project will induct coding and robotics in curriculum and involve students in hands on practical works. Irrespective of the career path students choose, robotics would help as it enhances analytical, programming, collaborative and critical-thinking skills.

In the Robotics Laboratory, students will get an exposure to robotic, IOT and Al/ML. Each lab will be comprised of four robots, multiple DIY robotic kits, various mechanical electronics components, computers, basic infrastructure and a state of fabrication/prototyping facility. In the lab a 3D printer will be provided where students can prototype their ideas into a physical product. Students can use this laboratory and can learn more than 100 robotics, IOT and Al/ML projects. This facility will enable the students to learn codingat an early stage. Robotics and hands-on learning solutions help students bridge the gap between key theoretical concepts and their real-world applications. The project will have the following objectives:

- Robotics (multi-disciplinary subject) for school students.
- Critical and Creative thinking in Collaboration.
- Coding for school students.
- Authentic Problem solving.
- Team Work and Team Player.
- Transforming Students to Innovator.
- Idea to prototype, prototype to product & Patent.

9 Brief scope of work

Bidder has to supply the followings Robotic Kits to deliver the Robotic Education in schools

Robotics course curriculum standard vi		
DIY Robot KIT 6.0	Project Name's (Without Programming)	
DIY Robot Kit 6.0 (10	Light activated Robot	
Robots for 6 th Standard)	 Shadow follower robot 	
	Fire activated robot	
	Obstacle avoidance robot	
	Object follower robot	
	Edge avoidance robot	
	 Sound activated robot 	
	Black line follower robot	
	 Hand movement following robot 	
	Wall following robot	

Robotics Course Curriculum Standard 6:

Robotics Course Curriculum Standard 7:

DIY Robot KIT 7.0	Project Name's (With Programming)
DIY Robot Kit 7.0 (10 Robots for 7 th Standard)	 Sound activated, different color flashing robot Single sensor-based obstacle avoidance robot Multi sensor obstacle avoidance robot Fire detecting and alarming robot Vibration activated robot Touch activated robot Light following robot Manual firefighting robot Clap activated robot Line follower robot

Robotics Course Curriculum Standard 8:

DIY Robot KIT 8.0	Project Name's (With Programming)
DIY Robot Kit 8.0(10 Robots for 8th Standard)	 Robot Controlled with Joystick Motion following robot Smart firefighting robot Advanced wall follower robot Maze solving robot Bluetooth controlled robot Magnet detector robot with alarm Voice controlled Robot Path planning Robot Dual color line follower robot

Robotics Course Curriculum Standard 9:

DIY Robot KIT 9.0	Project Name's (With Programming)	
DIY Robot Kit 9.0(10 Robots for 9th Standard)	 Smart Robotics dustbin Automatics floor cleaning robot Shock detector robot Anti-theft smart robot with alarm Gas leakage detector robot with alarm Smart phone-controlled robot Human detection robot Soccer Robot Pit detection and avoidance robot with alarm Advance obstacle avoidance robot. 	

Robotics Course Curriculum Standard 10:

DIY Robot KIT 10.0	Project Name's (With Programming)	
DIY Robot Kit 10.0 (10 Robots for 10th Standard)	 Wi-Fi Controlled robot Soil moisture monitoring robot Automatic rain sensing robot Automatic plant watering robot Tilt sensor activated robot Autonomous Pick and place robot Earth quake detection and alarm robot Human detection & avoidance Robot Smart environment monitoring and display robot Automated guided robot. 	

The scope of work primarily focuses on Implementation of Robotics LABs in the selected schools of School & Mass Education Department (S&ME), Government of Odisha which includes procurement, supply, installation, commission, operation & maintenance support of Robotics LABs for a period of FIVE (05) Years which includes THREE (03) Year Warranty Support Period from the date of Final Acceptance Test (FAT) of the Project and TWO (02) Years Comprehensive Annual Maintenance Support (CAMS) after completion of initial THREE Year WarrantySupport Period. All the software and hardware required meet the required to functionalities should be supplied by the selected bidder. The product specifications are mentioned in detail in the **Annexure-3** underminimum technical specification. Please refer to the same for required sizing.

Bidding Process is mentioned below:

1. All the Robotic labs are bifurcated into 2 bidding clusters namely C1 and C2, comprising of equal no. of Schools i.e 250 each.

2. The Bidder shall quote a unit cost of Robotic labs for both clusters separately, taking into account geographical locations of schools.

3. A bidder can quote for **BOTH** clusters but will be allocated only **ONE cluster** even if the bidder is found to have quoted lowest for both the clusters.

4. L1 will be calculated for both the clusters based on overall evaluation Parameters. 5. OCAC shall counter offer the L2 bidder first to match the price to L1's quote (out of both the clusters), if agreed then L2 shall be awarded the second Cluster with L1 cost. However, if disagreed by the L2 bidder then the counter offer will be further extended to L3, L4... until all the two clusters have been awarded to the distinct qualified bidders.

6. Each Bidder is also required to deploy a Robotic Trainer in each School for a period of 5 Years, for which the Bidder will be reimbursed separately on monthly basis based on the L1 rate quoted by all technically qualified bidders.

9.1 Detailed Scope under this Project

The major components factored for the project are listed below: -

a.) Site survey & feasibility is to be undertaken for identification of the classrooms at each school for the establishment of Robotics LABs at respective site.

b.) Handing/taking over the site for physical possession.

c.) Procurement, Supply and installation of Robotics LABs hardware, application software etc. in the selected schools.

d.) Configuration & Set up of Robotics LABs including hardware and software.

e.) The bidder while designing and implementing the LABs, needs to take into consideration that, the Robotics space should be one single room having 350 Sqft area with maximum open space such that one section can be designated for lecturing and mentoring, while another section can simultaneously be used for collaborative project work. The LAB should be located in proximity to the main building of the school.

f.) One entry/exit points (including emergency points) must be clearly identified and labeled within the Robotics LAB.

g.) The Bidder shall ensure the safe delivery of the equipment up to the designated place of installation. Any transit insurance, labor, road permits etc., if required for the same, shall be arranged by the Bidder at no extra cost to OCAC/Client Department.

h.) Testing of the equipment commissioned and ensuring proper functioning at all levels.

i.) Training of teachers for the operation of LAB will be conducted at the school level.

j.) The bidder needs to submit the successful completion of training along with the attendance sheet and acknowledgment of the teachers.

k.) The proposed solution should have latest technology features and standards.

I.) Overall operation and management of the entire project for a period of 5 years including Three (03) Year Warranty Support Period & Two (02) Years Comprehensive Annual Maintenance Support Period (CAMS).

m.) Deployment of requisite manpower with requisite qualification & experience for the operation support of Robotics LAB.

n.) The Bidder will be required to operate and maintain the entire Robotic Equipment with its associated software and is responsible for entire Operation & Management Support of the project during the contract period for 5 years. However, the school's premises upkeep, safety and the electrical maintenance will be the responsibility of the school authorities.

o.) The Bidder must ensure that the IT equipment and accessories supplied and delivered by them to each school are in good condition. Each IT equipment and accessories shall be packed in a non- hazardous packing of appropriate size. If any defect is found pursuant to the post-supply test in respect of the supplied quantity of the IT equipment and accessories, the Bidder shall replace the rejected equipment and accessories for the particular School with the new ones as per the instructions of OCAC Management.

p.) The bidder is responsible to maintain documentation on the progress of the Robotics LAB work and will have to update the same on regular basis to OCAC Management Team.

q.) At least 2 fire extinguishers of 2 Kg Powder Type Fire Extinguisher must be placed at strategic locations inside the Robotics LAB.

r.) Training for teachers on how to use the LAB.

s.) Bidder has to supply content for ROBOTICS LAB. Bidder shall provide the study material for students.

t.) Helpdesk and onsite support for repair and maintenance of Robotics LAB hardware and software.

9.2 Warranty & Support

• The bidder has to provide Three (03) Year Warranty Support Period from the date of Final Acceptance Test (FAT) of the Project and Two (02) Years Comprehensive Annual Maintenance Support (CAMS) after completion of initial ONE Year Warranty Support Period. The bidder should cover the warranty for 5 years from date of Go-Live.

• The bidder should ensure the smooth functioning of all the equipment supplied for Robotics LAB during the warranty & support period and to achieve the highest uptime on the offered solution.

•The bidder shall ensure that the equipment supplied shall not be declared as End of Support / End of Service for a period of five years and the software upgrades if any shall be available for at least five years from the date of commissioning of the device.

• Advanced replacement/repair of hardware. If the school requires repairing of an Robotic equipment, then the bidder should provide a replacement till the time the equipment is fully repaired.

- Software updates and upgrades at no cost to OCAC/Client Department.
- On-site warranty support from the Bidder.
- The bidder needs to develop the supply chain in district wise to supply the required consumable of the quoted equipment.
- Bidder shall provide preventive maintenance services on quarterly/half-yearly basis or as and when required to ensure that all the equipment's are functioning properly till the completion of the project.
- Warranty shall not be applicable in following cases:
 - Defects or malfunction caused intentionally
 - $\circ\;$ Defects or malfunction caused due to Power or Voltage Fluctuation in schools or equipment.
- Defects or malfunction caused by misuse, abuse or improper maintenance, failure to

follow operating instructions, or use with equipment with which it is not intended to be used.

- It doesn't cover cosmetic or incidental damages.
- Also. the warranty will not apply to damage caused by unauthorized alteration, modification or repair of the product at the school.

9.3 Training & Hand holding

Key training requirements of the Bidder are listed below: -

- i. Conduct training need assessment and prepare a detailed training strategy. Such strategy shall provide training set-up details, training approach and methodology, training plan etc.
- ii. Training Materials, Applications, User Manual and Completion Reports.
- iii. Bear the expenses towards training, quoted as part of the Financial Proposal submitted. iv. Provide hands-on training on the hardware, software application suchthat users are conversant with the functionalities, features and processes built in thesolution.
- v. Submit Attendance Record of the attendees (in Hard copy) along with the session plan for the day.
- vi. Deploy adequate training resources.
- vii. Deployed trainers should be fluent in speaking Hindi, English & Odia.
- viii. The Bidder shall responsible for training and handholding of the school teachers/headmaster so they can further train the other teachers accordingly.
- ix. The Bidder has to develop a training manual for each of the Robotics LAB activity for the teachers in Odia & English language, which should act as a ready reckoner for reference by the teachers at school level.
- x. Bidder has to train minimum three teachers at each school. Training to the teachershall be conducted in batches at centralized location or at respective site school.

9.4 Help desk and Onsite support

The Bidder shall be required to set up a centralized Helpdesk support at OCAC /OSEPA Bhubaneswar office for logging issues and complaints from various stakeholders and resolving them in time bound manner.

The Bidder shall deploy adequate manpower including IT Coordinators / operators and IT Managers who would provide day to day operation & management support.

Bidder shall deploy manpower at schools at field level (Robo Trainer). Minimum qualification for manpower shall be any ITI/Diploma with good Computer, Hardware, Electronics, Robots and communication skills (both Hindi, English & Odia) who can manage LAB hardware and software components on site and provide training as well as hand holding to different stakeholders. List of all Manpower to be submitted within 30 working days from the date of issuance of Work Order.

9.5 Help desk

The helpdesk service will serve as a single point of contact for all the support related to Robotics LAB. The Helpdesk shall undertake the following activities: -

1.Log issues /Complaints/Grievances related to Robotics LAB components including Hardware, Software & Application etc. at each location identified by the department, 2.Track each issue/complaint/Grievance to resolution.

3.Escalate the issue/complaints/Grievances to OCAC/Department Authorities if necessary, as per the escalation matrix defined in discussion with the department 4.Provide feedback and resolution to the callers.

5.Helpdesk Phone Numbers to be provided by the department and Specific e-mail account for day to day support to be set up by the Department/OCAC.

It is required that IT Managers are deployed at the Helpdesk center, who will be responsible for handling all Level-1 IT and Hardware issues related to the different components of Robotics LAB. The IT manager shall be responsible for providing remote assistance to schools if required, and further assigning the call to district level IT support team, for personal visit in cases where the remote assistance is not possible to resolve the issue. On getting the required information about the issue from the IT manager, the district level Field Engineer should provide all necessary assistance in resolving the IT issues onsite and log the status update with the Helpdesk for closure.

9.6 Onsite Support

Bidder will provide Three (03) Year Warranty Support Period from the date of Final Acceptance Test (FAT) of the Project and Two (02) Years Comprehensive Annual Maintenance Support (CAMS) after completion of initial THREE-Year Warranty Support Period at respective school. In addition, the Bidder shall ensure the following:

1. Set up Service Centers one in the state which would be responsible for any kind or repair, configuration, installation, replacement of parts or whole, etc. to all LAB components that may be brought by the Resident Field Engineer.

2. Deploy Five Hundred (500) Nos of Robo Trainers (1 for each School) for all Schools who shall be responsible for providing support and training to all schools within their School for any kind of after sales support, in coordination with centralized Helpdesk support team.

3. Any kind of handholding, orientation, training supp ort, as needed by the intended users. It is planned that all such sessions shall be conducted at the school level however the IT Coordinators should be able, willing and flexible to visit any government school if required.

4. If manpower cost is non-exclusive of any statutory stipulation it will be treated as non-responsive bid. Bidder shall also arrange to repair / replace the defective device as per defined Response and Resolution times of placing a call. At least 5% of critical hot spares should be maintained till the completion of the warranty contract period.

Manpower	Qualifications	Duration
Project Manager	Minimum Qualification: BCA	Deployment + Warranty
	/ B.Sc (Computers)/ B.E. / B- Tech	
	/ MBA	
	Minimum Experience Required:	
	5 Years of Extensive High-Level	
	Professional Experience & Skills in	
	the fields of IT Infrastructure	
	Management / Program or Project	
	Management in Govt. /	
	PSU / Private Sector in India.	
Training and	Minimum Qualification: BCA	Training Phase
Change	/ B.Sc (Computers)/ B.E. / B- Tech	
Management	/ MBA	
Expert	Minimum ExperienceRequired: -	
	5 Years of Extensive High-Level	
	Professional Experience & Skills in	
	the fields of imparting training to	
	the users on IT Infrastructure/	
	Hardware	
	Equipment/ SoftwareApplication in	
	Govt. / PSU/ Private in India.	
Central Helpdesk	Graduate/Diploma in anydiscipline	Warranty Duration
Support Staff	with proficiency in English, Hindi	
	and Odia and shall have minimum	
	2 to 3 years and above experience	
	in	
	STEM Support Service Centre.	
Robo Trainer	Any Diploma/ITI Robotics	Project Duration
	skilled certified Personal.	

Evaluation Criteria: The bid process will follow Quality Cost Based Selection. This will consist of:

- 1.1 Pre-Qualification Evaluation (Pre-Qualification evaluation)
- 1.2 Technical Evaluation of Technical Bid Documents of the bidders qualifying in Pre-Qualification Evaluation
- 1.3 Presentation by bidders qualifying in Pre-Qualification Evaluation (as part of Technical Evaluation)

A presentation along with Robotics Lab Equipment's Demo will be given by each bidder qualifying in the Pre-Qualification stage for Technical Evaluation as a part of Technical Evaluation, as mentioned under the above point No.2.1 of the Key Dates. The Presentation will be given by bidder/bidder's team in person. This presentation should include their technical proposal highlighting their background and experience of organization, their team profile and experience, approach, proposed methodology of delivering the assignment and workplan. The Bidder should not include/disclose directly or indirectly, any information pertaining to their financial bid/proposal in this presentation.

- 1.4 Financial Evaluation of Bidders qualifying in Technical Evaluation.
- 1.5 Final Composite Score calculation based in Technical and Financial score to arrive at L1 Rate for each Cluster.

10. Pre-Qualification/Eligibility Criteria

Pre-Qualification Evaluation Criteria				
SI. No.	PQ Criteria	Description of the Criteria	Documents to be Submitted	
1.	Legal Entity	The Bidder must be:	Incorporation certificate	
		A Company as registered under Indian	along with MoA (or	
		Companies Act, 2013	similar legal document)	
		OR	should be furnished as	
		A Partnership Firm registered under the	documentary proof.	
		Indian Partnership Act, 1932		
		OR	In case the bidder is a	
		A Limited Liability Partnership registered	Firm/entity: - Certified	
		under The Limited Liability Partnership	copy of the Registration	
		Act, 2008.		
		OR	Bidder to submit Power	
		A Proprietorship Firm	of Attorney for	
		The bidder should have been registered for	Authorized Signatory	
		at least 3 years from the date of		
		Incorporation as on 31 st March 2023.		
2.	Statutory	The bidder should have following	Copies of relevant	
	Registrations	documents listed below:	Registrations/certificati	
		(1) PAN	ons shall be enclosed as	
		(2) GST Registration in Odisha- if not	proof.	
		registered, the bidder should submit		
		undertaking to register in Odisha within		
	3 months of receipt of Purchase Order /			
		Prior to raising invoice, whichever is		
		earlier.		
		(3) EPF Registration and Latest Challan		
3.	Blacklisting /	A self-certified letter by the authorized	Self-declaration /	
	Terminations	signatory of the bidder, that the bidder	signed Undertaking as	

		does not continue to be debarred/	per Annexure-4
		blacklisted by any Central / State	
		Government Department/PSU on corrupt	
		or fraudulent practices as on date of	
		Bidding.	
4.	Financial	Average annual turnover of the bidder shall	CA Certificate along
	Turnover	be at least Rupees 7 Cr. from IT/ITES	with UDIN clearly
		during last three financial years (FY 2020-	defining the related
		21, FY 2021-22 and FY 2022-23) as per	turnover as per
		audited balance sheet.	format given along
			with Audited Financial
			Statements (Balance
			sheet & Profit & Loss
			statement) (FY2020-
			21,FY 2021-22 and FY
			2022-23)
5.	Net Worth	The company must have positive net	- Certificate from the
		worth in last three financial years ending	Statutory Auditor
		at 31st March 2023. Net-worth should be	
		as per the definition mentioned in the	
		section 2(57) of Companies Act 2013.	
		Bidder should have positive net profit for	
		the last (3) financial years i.e., 2020-21,	
		2021-22 & 2022-23.	
6.	Experience in	The Bidder must have established	Copy of Work Order
	Training	Robotics Lab / Tinkering Lab/ STEM Lab	with Completion
	Teachers	basing on Science, Technology,	Certificate and Payment
		Engineering and Mathematical Tools	Proof from Govt. to be
		have imparted Training to School	attached.
		Teachers in Robotics/Tinkering/STEM	
		subject for at least similar no. of	
		State/Central Govt. Schools min. 200	

		Nos. of Schools in a Single work order in	
		Last 3 Financial Years.	
7.	Experience	The bidder should have completed project	Copy of Work Order
		of Supply, Installation, Maintenance and	with Completion
		Training of Robotics Lab / Tinkering Lab/	Certificate OR Payment
		STEM Lab basing on Science, Technology,	Proof from the
		Engineering and Mathematical Tools in	Purchase Order issuing
		Govt. Schools in India having minimum as	Authority to be
		per the following in last 3 Financial Years.	attached.
		i. One project of minimum value of Rupees	Note:
		17 Cr., or	a. The ongoing projects
		ii. Two projects of minimum value of Rupees	, can be considered if the
		13 Cr., or	bidder has received
		iii. Three projects of minimum value Rupees	minimum 60% of the
		8.5 Cr.	project cost as
			payment which should
			be clearly substantiated
			by Client Certificate or
			Chartered Accountant
			certificate with UDIN.
8.	OEM	The bidder must attach Manufactures	OEM Manufactures
	Authorization	Authorization certificate and end of life	Authorization certificate
	& Eligibility	certificate within next 3 years specific to	as per Annexure-6
		this tender and must submit Standard OEM	
		Warranty Certificate post completion of	End of Life Certificate to
		commissioning of the equipment's at	be furnished by
		locations.	respective OEM.
		- Robotics Equipment's	
		- Laptop	
		- 3D Printing Machine	
		OEM ELIGIBILITY CRITERIA (Laptop	
		Only)	

		1. ISO 9001, 14000 & ISO 27000/20001.	
		2.ENERGY STAR 8.0 /ROHS/ Epeat India/ TCO	
		certified/ MIL Standard & BIS.	
		3. Latest list of Authorized service center in	
		Odisha.	
9	Local	The bidder should have an office	Relevant Documents
	Presence	in Odisha. However, if the presence is not	supporting office
		there in the state, the bidder should give an	addresses/ Undertaking.
		undertaking for establishment of a project	
		office, within one month of award of the	
		contract. Bidder should deploy 30 Engineers	
		in 30 Districts for seamless support.	
10	RFP fee	The bidder must have made a payment	The RFP document fee
		of ₹11,200.00 (Eleven Thousand Two	must be in favor of
		Hundred Only) towards RFP document fee.	Odisha Compute
			Application Centre from
			any Nationalized /
			Scheduled Commercial
			Bank payable at
			Bhubaneswar.
11	EMD	The bidder must have submitted the EMD of	Demand Draft /Bank
		Rs. 1 Crore in the shape of Bank	Guarantee /Online
		Guarantee/Account Payee Demand Draft	mode through eNivida
		from any Nationalized / Scheduled	
		Commercial Bank in favor of Odisha	
		Computer Application Centre (OCAC)	
		payable at Bhubaneswar/ Online mode	
		through eNivida. The EMD should be valid	
		for a minimum period of 90 days from the	
		last date of submission of the Bid.	

Note: Purchase Order (PO) provided for Prequalification and Technical Evaluation should be in the name of bidder only. Consortium Purchase orders

will not be considered

11. Technical Evaluation Criteria

11.1 Technical Evaluation will have total of **100** marks. This will be split as follows:

Sr. No.	Description	Scoring Criteria	Maximu m Score	Supporting Document
1	Existence of the Bidder- No. of Years of experience of the Bidder in education Sector	More than 3 Year – Up to 5 Years- 5 Marks More than 5 Years- Up to 8 Years-10 Marks More than 8 Years-15 Marks	15	Copy of Incorporation Certificate
2	Average annual turnover of the bidder shall be at least Rs 7 Crores from Supply, Installation and Training of Robotics Lab / Tinkering Lab/ STEM Lab basing on Science, Technology, Engineering and Mathematical Tools related Kits in Govt. Schools in India during last three financial years (FY 2020-21, FY 2021- 22 and FY 2022-23) as per audited balance sheet.	Minimum Rs. 7 crores	10	CA Certificate along with UDIN clearly defining the related turnover as per format given along with Audited Financial Statements of last three financial years i.e., FY 2020- 21, 2021-22 and FY 2022-23. As per audited balance sheet. (Balance sheet & Profit & Loss statement to be submitted)
3	Experience - The bidder experience in the implementation of Robotics Lab / Tinkering Lab/ STEM Lab basing on Science, Technology, Engineering and Mathematical Tools with Training in School Education Sector for Govt. Schools/ Central / State Government Schools in India having minimum as per following in last 3 Financial Years	5 Marks 201- 300 Schools - 7 Marks 301-400 Schools- 10 Marks More then 400 Schools	15	Related Work orders/ Agreements/ Purchase Order along Completion Certificate from end Client for such work / Payment receipt proof from the end Client Note: a. The ongoing projects can be considered if the bidder has received. minimum 50% of the project cost as

				payment which should be clearly substantiated by Provisional Client Certificate or Chartered Accountant certificate with UDIN
4	Bidder's capability for Teacher Training in Robotics Lab / Tinkering Lab/ STEM Lab basing on Science, Technology, Engineering and Mathematical Tools. Bidder with maximum number of Govt. School Teacher trained in a Single Project as Robotics Trainer in last three years i.e. after 1st April 2020	5 Marks	15	Copy of work order/ MOU or Completion certificate from Client.
5	 Presentation on scope of work with (2 marks on each of the following): i. Background of the bidder/firm. ii. Robotics related Projects undertaken so far. iii. Understanding of Robotics Lab concept and approach. iv. Approach and Methodology for Robotic Lab with Trainer deployment v. Past experience in Teachers' Training Content and methodology. vi. Teacher handbooks/ manuals, lab manuals, activity books. 		25	 a. Bidder need to submit Technical presentation on ppt or pdf mode. b. Presentation to be submitted to OCAC one day before the presentation date by email c. Bidder Need to submit hard copy and soft copy of guide books in Odia and English versions for Robots and DIY Kit.

	with specifications) TOTAL	100	
2.5	Demonstration of Technical Quality of all the Equipment samples (One of each category that can be displayed/managed. For heavy or fixed items videos of the same can be shown	20	Demonstration of quality of Equipment to be supplied.
	work plan, deliverable and timeline of implementation. x. Book with Odia & English Language to cover projects		
	ix. Work Plan: Cluster/Zone wise		
	viii. Maintenance and Support plan for Robotics Lab for next 5 years after the project roll out.		
	vii.Online support and in- the- field maintenance; turn- around time		

Note: -

- 1. All the bidders who secure a Technical Score of 70 marks out of total 100 marks i.e., 70 % of total marks or more will be declared as technically qualified.
- 2. Bidder who scores less than 70 marks would be disqualified and considered as non-responsive.
- 3. Bidders those who are responsive in the Demonstration shall be considered as Technically responsive and eligible for financial bid opening and Financial evaluation of the qualified bidders shall be done as per Evaluation Criteria mentioned in this RFP.
- 4. Final evaluation shall be done in QCBS Mode where 80% Weightage to Technical Score and 20% Weightage to Financial Score.
- 5. The Bidders who qualify for the technical demonstration process shall have to sign a declaration of acceptance for providing the same equipment and all other training materials during the implementation of Labs, if selected. No deviation shall be accepted.

11.2 Along with Technical Proposal in the tender document, the bidders to prepare a technical presentation. Purpose of this presentation is to facilitate committee members to effectively comprehend the proposed solution, bidder's capability, additional services and compliance on technical evaluation parameters. The presentation should include the following components:

- i. Introduction of bidder
- ii. Experience of similar projects.
- iii. Details of Proposed Solution and Implementation Plan.
- iv. Strategy for conducting Robo trainer deployment & training, teacher training including schedule, as well as outline of content of training modules.
- v. Details on lab facilitation service that will be provided to students/teachers at school for the period of 5 years.
- vi. Any other services provided in addition to the scope of RFP.
- vii. Compliances on Technical Evaluation Parameters with reference to Technical Proposal submitted with the bid documents.
- viii. Physical samples of the items listed in technical specification are required to be placed for demonstration and evaluation of their technical quality(refer table under Technical bid).
- ix. Item samples will be returned to bidders after evaluation of technical and financial proposal to the bidders except for the successful bidder.
- x. For successful bidder, sample items will be returned after installation of equipment in all the cluster schools, subject to verification through random inspection and recommendation by the empowered committee.

12 Project Deliverable, Milestones & Time Schedule

The milestones, deliverable and time schedule for the implementation of project shall be as follows: -

- 1. The time specified for delivery and other activities as mentioned in the table below shall be deemed to be the essence of the contract and the successful bidder shall arrange supplies and provide the required services within the specified period.
- 2. It should be noted that any delay in the project timelines shall attract Liquidated Damages to the Agency.

SI.	Milestone	Deliverables	Timeline
No			(in weeks)
1	Delivery of Kits and Other equipment at centralized districtlocation	 Delivery of Robotic Kits and Other equipment forLAB at centralized district location in all location Sign-off for deliveryfrom District Education Officer 	12 Weeks
2	Commissioning andInstallation of Equipment at schools	 Commissioning and Installation of Equipment at schools from Centralized District Location Sign-Off from school in- charge 	8 Weeks
3	Training to the teachers/ Capacity Building	 Training to the teachers at centralizedlocation. Attendance record, training material 	8 Weeks
4	Go-Live and Sign Off	 Sign-off from the schools. 	4 Weeks (G is Go- Live)

Note: Total time for completion of the contract / project is 32 weeks.

13. Service Levels and Penalty Terms

13.1 During Project Deployment

The bidder must be careful in maintaining the quality of work as well as adhering to the prescribed time schedule for the activity. If at any time during performance of the Contract, the party fails to maintain the prescribed time schedule then they should promptly notify in writing of the fact of the delay, it's likely duration and its cause(s). Within a reasonable time after receipt of the notice, Education Department, Government of Odisha will evaluate the situation and may, at its discretion, extend the time for performance in which case the extension shall be ratified by the parties in writing.

	Project Delivery Service levels				
Service Category	Target	Penalty			
Milestone completion as per the plan	12 Weeks fromthe date of award	Slippage of any milestone by 30% of the allocated timelines as per mutually agreed project plan submitted as a part of the contract draws a penalty of 0.25% of that milestone payment. However, this shall be waived off, if there is no slippage in overall delivery / Go- Live. <i>For the Project Deployment Phase</i>			
		<i>total penalty is capped at 5% of the Hardware Cost</i>			

13.2 During Warranty & Support Duration

SI. No.	Service Description	Measurement parameter	Target	Penalty
1	Repair / Replacement of Failure	Downtime of an equipment	<= 3 Working Days	NA

hardware	> 3 - 10	Penalty of
device by	Working days	Rs. 50 per
System		school from
Integrator		4th
		Working
		day
		onwards till
	> 10 Working	Penalty of
	days	Rs. 100 per
		school from
		11th
		Working
		day
		onwards till
		problem is
		resolved.
		 Bidder
		must
		ensure that
		resolution
		time per
		school
		should not
		be more
		than 30
		days. All
		the lodged

14. Payment Terms

- The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, Delivered, Installed, and Operationally Report, training period and material by documents submitted to fulfillment of obligations stipulated in the Contract.
- 2. All payments shall be made in Indian Rupees.
- 3. Payment shall be released as per report of supply and operational of the activity.

SI. No.	Milestone	Deliverables	Timeline (in weeks)	Payment Terms
1	Delivery of Kits and Other equipment at centralized district location	 Delivery of Robotic Kits and Other equipment for LAB at centralized district location in all location Sign-off for delivery from District Education Officer 	T + 12	70 % of Hardware Cost (Per 100 Locations)
2	Commissioning and Installation of Equipment at schools	 Commissioning and Installation of Equipment at schools from Centralized District Location Sign-Off from school in-charge 	T + 16	20 % of Hardware Cost (Per 100 Locations)
3	Training to the teachers/ Capacity Building	 Training to the teachers at centralized location. Attendance record, training material 	T + 18	100 % of Training Cost
4	Go-Live and Sign Off	 Sign-off from the schools. 	T + 20 (G is Go Live)	10% of HardwareCost (Entire milestone payment shall be released on covering 100% of location)

* Payment Milestone: Hardware Payment is divided in 2 zones/clusters as per locations (Annexure-12). After completion of Minimum **100 locations** the bidder can raise payment for Hardware cost.

** In case Site not ready, OCAC reserves the right regarding release of payment after 30 days, on submission of appropriate documents.

13.1 Payment of Goods & Services Tax

GST shall be shown extra by the bidder in their invoices for the items applicable. The same shall be paid by OCAC as per actual after verification If there is any tax savings, the same shall be reduced from the payable amount. In case of any new incidence of tax or increase in existing tax rates taking place during the Project Period, that shall be borne and payable by the OCAC over and above the agreed price for each item as may be applicable as per the Invoice raised by the agency on the OCAC. Similarly, any reduction in taxes shallbe to the benefit of OCAC.

13.2 Penalty

Penalty will be charged @ 0.5% of the Project value per week subject to maximum of 5% of total order value, in case of delayed in supply of stipulated time period. Similarly, 0.5% will be deducted from the PBG on each time there is a delay in providing support in terms of Repair/replace of equipment's per hour beyond the minimum support assistance response period of 48 Hrs.

13.3 Submission of Bids

a) The bidders should submit their responses as per the format given in this RFP in the following manner.

- Pre-qualification Proposal- in first File
- Technical Proposal- in second File
- Commercial/ Financial Proposal in third File

b) The Response to Pre-Qualification criteria, Technical Proposal and Commercial Proposal (as mentioned in previous paragraph) should be submitted through online mode only in e-Nivida Portal.

c) Please Note that Prices should not be indicated in the Pre-Qualification Proposal or Technical Proposal but should only be indicated in the Commercial Proposal.

d) The three envelopes containing Pre-Qualification Proposal, Technical Proposal and Commercial Proposal should be marked as "Request for Proposal (RFP) for Supply and Installation of Robotic Lab in Secondary Schools in Odisha, RFP Ref. No. OCAC-SEGP-INFRA-0025-2023-23129 Dated 28-12-2023.

e) All the pages of the proposal must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the Bid.

f) All pages of the bid shall be signed and stamped by the authorized person or persons who sign the bid.

13.4 Deadline Submission of Bids

- a) Bidder must ensure to submit their response on or before the deadline date as mentioned in "Important Dates & Information" section of this RFP.
- b) Normally, the date of submission and opening of Bids will not be extended. In exceptional circumstances or when the bidding documents are required to be substantially modified as a result of discussions in pre-bid meeting/ conference or otherwise and the time with the prospective bidders for preparation of Bids appears insufficient, the date may be extended by the procuring entity. In such case the publicity of extended time and date shall be given in the manner, as was given at the time of issuing the original Bidding Document.
- c) It shall be ensured that after issue of corrigendum, reasonable time is available to the bidders for preparation and submission of their Bids. Department shall also publish such modifications in the bidding document in the same manner as the publication of initial bidding document. If the last date of submission or opening of Bids is a non- working day, the Bids shall be received or opened on the next working day.

13.5 Venue for Submission of Bids

Physical Submission of Bids is not required. However, the bidder has to submit the EMD and Document Fee (if submitted in the form of DD/ BG) must be submitted to OCAC at the address specified below:

Address To	General Manager (Admin)
	Odisha Computer Application Centre
	N-1/7-D, Acharya Vihar Square,
	Bhubaneswar – 7510130disha

Telephone	0674-2567280/ 2567064/ 2567295
Fax	0674-2567842
Email id	gm_ocac@ocac.in

13.6 Mode of Submission of Bids

The bid documents as asked in this RFP shall submitted only through online mode in e-Nivida Portal. The Financial Bids to be submitted both in Excel (provided in eNivida) and PDF format.

13.7 Withdrawal, Substitution, and Modification of Bids

- a) If permitted by the Department, a Bidder may withdraw its Bid
- or re-submit its Bid as per the instructions/ procedure prescribed
- by the Department.
- b) Bids withdrawn shall not be opened and processed further.

13.8 Opening of Bids

- a) The Bids shall be opened by the Evaluation Committee in the presence of the bidders or their authorized representatives who choose to be present.
- b) The committee may co-opt experienced persons in the committee to conduct the process of Bid opening.
- c) The committee shall prepare a list of the bidders or their representatives attending the opening of Bids and obtain their signatures on the same. The list shall also contain the representative's name and telephone number and corresponding bidders" names and addresses. The authority letters, if any, brought by the representatives shall be attached to the list. The list shall be signed by all the members of Bid opening committee with date and time of opening of the Bids.
- d) The committee shall conduct a preliminary scrutiny of the opened technical Bids
- e) To assess the prima-facie responsiveness and ensure that the: -
- Bid is accompanied by bidding document fee, bid security or bid securing declaration, and processing fee (if applicable).
- Bid is valid for the period, specified in the bidding document.
- Bid is unconditional and the bidder has agreed to give the required performance security and other conditions, as specified in the bidding document are fulfilled.

- Any other information which the committee may consider appropriate.
- f) No Bid shall be rejected at the time of Bid opening except the Bids not accompanied with the proof of payment or instrument of the required price of bidding document, processing fee and bid security.
- g) The Financial Bid cover shall be kept unopened and shall be opened later on the date and time intimated to the bidders who qualify in the evaluation of technical Bids.
- h) Financial quote against manpower should meet all the statutory stipulations like minimum wage, PF etc otherwise the bid will be considered unresponsive.

15RFP Evaluation

15.1 Evaluation & Tabulation of Pre-qualification Bid

- a) Determination of Responsiveness: The designated committee of the Department shall determine the responsiveness of a Bid on the basis of bidding document and the provisions of prequalification/ eligibility criteria of the bidding document.
- b) A responsive Bid is one that meets the requirements of the bidding document without any material deviation, reservation, or omission where: -
- "Deviation" is a departure from the requirements specified in the bidding document.
- "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
- "Omission" is the failure to submit part or all of the information or documentation required in the bidding document.
- c) A material deviation, reservation, or omission is one that, if accepted, shall:-
- Affect in any substantial way the scope, quality, or performance of the subject matter of procurement specified in the bidding documents; or
- Limits in any substantial way, inconsistent with the bidding documents, the procuring entity's rights or the bidder'sobligations under the proposed contract; OR
- If rectified, shall unfairly affect the competitive position of other bidders presenting responsive Bids.

d) The designated committee of department shall examine the technical aspects of the Bid in particular, to confirm that all requirements of bidding document have been met without any material deviation, reservation or omission.

15.2 Evaluation & Tabulation of Technical Bid

The Technical evaluation committee will evaluate the technical response submitted by the Bidder. The Technical bid response includes the below details:-

- a) The Technical Bid response will be initiated with the Technical Bid Cover letter in specified format as mentioned in the RFP
- b) Detailed Compliance Sheet of the Technical Specification asked in the RFP dully signed in Company Letter Head.
- c) In case of deviation while evaluating the Technical Bid response based upon the criteria, the bid will be subjected for rejection.
- d) All supporting documents as mentioned in the RFP document.

15.3 Evaluation & Tabulation of Financial Bids

- a) The evaluation will be done on the basis of QCBS (Technical Marks: Financial Marks Weightage-80:20) Selection as follows
- b) All bidders who get more than and equal to 70 marks would be considered as technically qualified and shall be eligible for further evaluation.
- c) The Financial Proposal of only those bidders who qualify the PQ cum Technical Evaluation will be opened on a specified date and time to be intimated to the respective bidders and the same will be evaluated by a duly constituted Committee.
- d) The financial bid shall include all duties, levies, taxes except for GST, which shall be payable as per extra on the basis of the prevailing tax rates

16 Acceptance of the successful Bid and award of Project

16.1 Award Criteria

Department will award the Project to the successful bidder whose proposal has been determined to be substantially responsive and has been determined as the most responsive bids as per the process outlined above.

16.2 Right to Accept Any Proposal and To Reject Any or All Proposal(s)

Department reserves the right to accept or reject any proposal, and to annul the tendering process / Public procurement process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for such action.

16.3 Purchaser's Procurement Rights

Without incurring any liability, whatsoever to the affected bidder or bidders, the Purchaser reserves the right to:-

- Amend, modify, or cancel this tender and to reject any or allproposals without assigning any reason.
- Change any of the scheduled dates stated in this tender.
- Reject proposals that fail to meet the tender requirements.
- Increase or decrease the quantity of the hardware items
- Remove any of the items at the time of placement of order.
- Increase or decrease no. of resources supplied under this project.
- Should the Purchaser be unsuccessful in negotiating a contract with the Agency, the Purchaser will begin contract negotiations with the next best value bidder in order to serve the best interest.
- Make typographical correction or correct computational errors toproposals
- Request bidders to clarify their proposal.

16.4 Notification of Award

Prior to the expiry of the validity period, department will notify the successful bidder in writing or by fax or email, that its proposal has been accepted. In case the tendering process / public procurement process has not been completed within the stipulated period, department may like to request the bidders to extend the validity period of the bid. The notification of award will constitute the formation of the contract. Upon the successful bidder's furnishing of Performance Bank Guarantee, department will notify each unsuccessful bidder.

16.5 Issuance of Purchase Order

The department shall reserve the right to negotiate with the bidder(s) whose proposal has been ranked best value bid on the basis of Technical and Commercial Evaluation to the proposed Project. On this basis the Purchase order would be issued.

16.6 Performance Guarantee

The department will require the Agency to provide a Performance Bank Guarantee, within 30 days from the Notification of award, for a value equivalent to 10 % of the total cost of ownership i.e. total order value excluding taxes. The Performance Guarantee should be valid for a period of 5 Years and 3 months. The Performance Guarantee shall be kept valid till completion of the project and Warranty period. The Agency shall be responsible for extending the validity date and claim period of the Performance Guarantee as and when it is due on account of non-completion of the project and Warranty period. In case the Agency fails to submit performance guarantee within the time stipulated, the department at its discretion may cancel the order placed on the Agency after giving prior written notice to rectify the same. department shall invoke the performance guarantee in case the selected Service Provider fails to discharge their contractual obligations during the period or department incurs any damages due to Service Provider's negligence in carrying out the project implementation as per the agreed terms & conditions.

16.7 Issuance of Purchase Order

After the department notifies the successful bidder that its proposal has been accepted, department shall issue a Purchase Order to the successful bidder taking into account the relevant clauses of RFP, pre-bid clarifications, Corrigendum, the proposal of the bidder in addition to other agreed clauses.

16.8 Failure to Agree with the Terms and Conditions of the RFP

Failure of the successful bidder to agree with the Terms & Conditions of the RFP and the Proposal submitted by the successful bidder, despite the deviations submitted by the Bidder are adequately considered and mutually agreed, shall constitute sufficient grounds for the annulment of the award, in which event department may award the Project to the next best value bidder or call for new proposals from the interested bidders.

16.9 Confidentiality

- a) Notwithstanding anything contained in this bidding document but subject to the provisions of any other law for the time being in force providing for disclosure of information, a procuring entity shall not disclose any information if such disclosure, in its opinion, is likely to: -
- Impede enforcement of any law;
- Affect the security or strategic interests of India;
- Affect the intellectual property rights or legitimate commercial interests of bidders;
- Affect the legitimate commercial interests of the procuring entity in situations that may include when the procurement relates to a project in which the procuring entity is to make a competitive bid, or the intellectual property rights of the procuring entity.
- b) The procuring entity shall treat all communications with bidders related to the procurement process in such manner as to avoid their disclosure to competing bidders or to any other person not authorized to have access to such information.
- c) The procuring entity may impose on bidders and sub-contractors, if there are any for fulfilling the terms of the procurementcontract, conditions aimed at protecting information, thedisclosure of which violates (a) above.
- d) In addition to the restrictions specified above, the procuring entity, while procuring a subject matter of such nature which requires the procuring entity to maintain confidentiality, may impose condition for protecting confidentiality of such information.

17 General Terms and Conditions of RFP

Bidders should read these conditions carefully and comply strictly while submitting their bids.

17.1 Definitions

For the purpose of clarity, the following words and expressions shall have the meanings hereby assigned to them: -

a) "Request for Proposal (RFP)", means this detailed notification seeking a set of solution(s), services(s), materials and/or any combination of them.

b) "OCAC", shall mean the Odisha Computer Application Centre, the Designated Technical Directorate of Information Technology Department, Government of Odisha.

c) "GM" shall mean the General Manager of Odisha Computer Application Centre or any authorized officer to act on his behalf for a specified work.

d) "Authorized Representative" shall mean any person authorized by either of the parties.

e) "Agency/Vendor/Bidder" means any firm offering the solution(s), service(s) and /or materials required in the RFP. The word Vendor/Bidder when used in the pre-award period shall be synonymous with Bidder, and when used after award of the Work shall mean the successful Bidder or Agency to whom OCAC issues the Purchase Order for rendering of sales & services.

f) "Service" means provision of Contracted service as per this RFP.

g) "Site" shall mean the location(s) for which the Order has been issued and where the service shall be provided as per Scope mentioned in the RFP.h) "Termination Notice" means the written notice of termination of the Purchase Order issued by one Party to the other in terms hereof.

17.2 Language

a) The Proposal should be filled by the bidders/Agency in English language only. For purposes of interpretation of the documents, the English translation shall govern. All Proposals and accompanying documentation will become the property of OCAC and will not be returned.

b) The Purchase Order as well as all correspondence and documents relating to the Project exchanged by the successful/ Agency and the Purchaser, shall be written in English language only. Supporting documents and printed literature that are part of the Project may be in

another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the special conditions of the contract, in which case, for purposes of interpretation of the Project, this translation shall govern.

c) The successful Bidder/Agency shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.

17.3 Notices

a) Any notice given by one party to the other pursuant to the Project shall be in writing to the address specified in the Purchase Order. The term "in writing" means communicated in written form with proof of dispatch and receipt.

b) A Notice shall be effective when delivered or on the Notice"s effective date, whichever is later.

17.4 Governing Law

The Project shall be governed by and interpreted in accordance with the laws of the Govt. of Odisha/Govt. of India unless otherwise specified in the Purchase Order.

17.5 Scope of Supply

a) Subject to the provisions in the bidding document and Purchase Order, the Goods/Equipment and related services to be supplied shall be as specified in the bidding document (RFP).

b) Unless otherwise stipulated in this document, the quantity and specifications are for minimum quantity and configuration respectively. The bidder may supply higher configuration.

c) Unless otherwise stipulated in the Purchase Order, the scope of supply shall include all such items not specifically mentioned in the Purchase order but that can be reasonably inferred from the Contract as being required for attaining delivery and completion of the goods and related services as if such items were expressly mentioned in the Contract.

d) The bidder shall not quote and supply hardware/ software that is likely to be declared as End of Sale and End of Service/ Support for theperiod as mentioned in BoM **(Annexure -2)** from the last date of bid

submission. OEMs are required to mention this in the MAF for all the quoted hardware/ software. If any of the hardware/ software is found to be declared as End of Sale/Service/ Support, then the bidder shall replace all such hardware/ software with the latest ones having equivalent or higher specifications without any financial obligation to the purchaser.

17.6 Project Value

a) The Project value (PO Amount) shall be paid as specified in the Purchase Order subject to any additions and adjustments thereto, or deductions there from, as may be made pursuant to the Project.

b) Prices charged by the Supplier/ Agency for the Goods delivered and the Related Services performed under the Project shall not vary from the prices quoted by the Supplier/ Agency in its bid, with the exception of any price adjustments authorized in the special conditions of the Project.

17.7 Recoveries from Supplier/ Agency

a) Recovery of liquidated damages, short supply, breakage, rejected articles shall be made ordinarily from bills.

b) OCAC shall withhold amount to the extent of short supply, broken/ damaged or for rejected articles unless these are replaced satisfactorily. In case of failure to withhold the amount, it shall be recovered from performance security deposit of AGENCY available with OCAC.

c) The balance, if any, shall be demanded from the Supplier/ Agency and when recovery is not possible, OCAC shall take recourse to law in force.

17.8 Taxes & Duties

a) The GST if applicable shall be deducted at source.

b) For goods/Equipment supplied from outside India, the successful/ Agency shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the country. c) For goods/Equipment supplied from within India, the successful Agency shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

d) If any tax exemptions, reductions, allowances or privileges may be available to the successful Agency in India, OCAC shall use its best efforts to enable the successful Agency to benefit from any such tax savings to the maximum allowable extent.

17.9 Packing and Documents

a) The Agency shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Purchase Order. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme atmospheric temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the final destination of the Goods and the absence of heavy handling facilities at all points in transit.

b) The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Project, including additional requirements, if any, specified in the Purchase Order, and in any other instructions ordered by OCAC.

17.10 Insurance

The Agency should be responsible for undertaking comprehensive insurance including liability insurance, system and facility insurance and any other insurance for the personnel, Assets, data, software, etc relating to this assignment.

17.11 Transportation

The Agency shall be responsible for transport by sea, rail and road or air and delivery of the material in the good condition to the consignee at project locations. In the event of any loss, damage, breakage or leakage or any shortage the bidder shall be liable to make good such loss and shortage found at the checking/ inspection of the material by the consignee. No extra cost on such account shall be admissible.

17.12 Extension in Delivery Period and Liquidated Damages (LD)

a) Except as provided under clause "Force Majeure", if the supplier/ selected bidder fails to deliver the related Services within the period specified in the Purchase Order, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Purchase Order Price, as liquidated damages, a sum equivalent to the percentage specified in Section "Service Level Standards" for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in the bidding document and/ or Purchase Order. Once the maximum is reached, the Purchaser may cancel the Purchase Order pursuant to clause "Termination".

b) The time specified for delivery in the bidding document shall be deemed to be the essence of the Project and the supplier/ selected bidder shall arrange goods supply and related services within the specified period.

c) Delivery period may be extended with or without liquidated damages, if the delay in the supply of goods or service is on account of hindrances beyond the control of the selected bidder:

i. The selected bidder/Agency shall request in writing to the Purchaser giving reasons for extending the delivery period of service, if he/she finds himself/herself unable to complete the supply of goods or service within the stipulated delivery period or is unable to maintain prorate progress in the supply of goods or service delivery. This request shallbe submitted as soon as a hindrance in delivery of goods and service occurs or within 15 days from such occurrence but before expiry of stipulated period of completion of delivery of goods and service after which such request shall not be entertained.

ii. The Purchaser shall examine the justification of causes of hindrance in the delivery of goods and service and the period of delay occurred due to that and recommend the competent authority on the period of extension which should be granted with or without liquidated damages.

Normally, extension in delivery period of service in following circumstances may be considered without liquidated damages:

• When delay has occurred due to delay in approval by OCAC.

• When the delay has occurred in providing space or any other infrastructure, if OCAC was required to provide the same as per the terms of the Bid.

iii. If the competent authority agrees to extend the delivery period/ schedule, an amendment to the Purchase Order with suitable denial clauses and with or without liquidated damages, as the case may be, shall be issued. The amendment letter shall mention that no extra price or additional cost for any reason, what so ever beyond the contracted cost shall be paid for the delayed supply of goods and service.

17.13 Warranty

a) The bidder must execute back-to-back support contract with OEM for the period of five years from the date of UAT.

b) The bidder shall either repair or replace the defective goods or parts thereof with brand new genuine/ authentic ones having similar or higher specifications from the respective OEM as per the time period specified.

17.14 Termination

OCAC may at any time terminate the Purchase Order by giving written notice to the Bidder if the Bidder becomes bankrupt or otherwise insolvent. In this event, termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to OCAC. OCAC reserves the right to cancel the Purchase Order in the event of happening one or more of the following Conditions:-

a) Failure of the successful bidder to accept the contract.

b) Delay in delivery beyond the specified period.

c) In addition to the cancellation of the contract, OCAC reserves the right to appropriate the damages through encashment of Bid Security / Performance Guarantee given by the Bidder.

d) OCAC would not be liable to pay any damages to the Agency in cases comprising termination for default.

17.15 Settlement of Disputes

a) General: If any dispute arises between the supplier/ Agency and OCAC during the execution of a Project that should be amicably settled by mutual discussions. However, if the dispute is not settled by mutual discussions, a written representation will be obtained from

the supplier/ Agency on the points of dispute. The representation so received shall be examined by the concerned Committee which sanctioned the tender. The Procurement Committee may take legal advice of a counsel and then examine the representation. The supplier/ Agency will also be given an opportunity of being heard. The Committee will take a decision on the representation and conveyit in writing to the supplier/ Agency.

Standing Committee for Settlement of Disputes: If a question, difference or objection arises in connection with or out of the Order issued or the meaning of operation of any part, thereof or the rights, duties or liabilities of either party have not been settled by mutual discussions or the decision of tender sanctioning Procurement Committee, it shall be referred to the empowered standing committee for decision.

18.Annexure

SI. No.	Information Sought	Details to be Furnished
1	Name of the bidding Company	
2	Address of the Company	
3	Incorporation status of the firm(Public limited / Private limited, etc.)	
4	Year of Establishment	
5	Date of registration	
6	RoC Reference No.	
7	Details of company registration	
8	Details of registration with appropriate authorities for GST	
9	Name, Address, e-mail ID, Phone nos. and Mobile Number of Contact Person	
10	Roles & Responsibilities	

18.1 Annexure- 1: Particulars of the Bidders

18.2 Annexure 2 - Bid Security Declaration

Τo,

The General Manager (Admn.) Odisha Computer Application Centre (OCAC) OCAC Building, Plot No.-N-1/7-D, Acharya Vihar Square, RRL Post Office, Bhubaneswar-751013 (INDIA)

Whereas << name of the bidder >> (hereinafter called the Bidder) has submitted the bid for Submission of RFP # << RFP Number >> dated << insert date >> for << name of theassignment >>(hereinafter called "the Bid") to Education Department, Government of Odisha.

Know all Men by these presents that we <<>> having our office at << Address >> (hereinafter called "the Bank") are hereby submitting the Bid Security Declaration letter to the Education Department (hereinafter called "the Purchaser") which binds our organization, its successors and assigns by these presents under the following obligations.

The conditions of this obligation are:

- 1. Fails to submit PBG.
- 2. Withdraws his participation from the bid during the period ofvalidity of bid document; or
- 3. Modify the bid during period of bid validity.

We undertake to accept the suspension for a specific period as decided by the Purchaser due to it owing to the occurrence of oneor both of the two conditions, specifying the occurred condition orconditions.

(Authorized Signatory of the Bidder) Seal: Date:

18.3 Annexure 3: Self-Declaration for Non Blacklisted

То

The General Manager (Admin) Odisha Computer Application Centre (Technical Directorate of I.T. Dept, Govt. of Odisha) N-1/7-D, Acharya Vihar P.O. - RRL, Bhubaneswar - 751013

Sir,

In response to the RFP No.<Insert RFP no> dated <insert date> for RFP titled as an owner/ partner/ Director of (organization name), I/We hereby declare that presently our Company/ firm is not under declaration of blacklisting/banned/debarred for corrupt & fraudulent practices by any State/ Central government/PSU.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/our security may be forfeited in full and the tender if any to the extent accepted may be cancelled.

Thanking you,

Signature (Authorised Signatory)

Seal:	
Date:	
Place:	
Name of the	Bidder:

18.4 Annexure-4: Project Citation Format

(To be filled by the Bidder)

Relevant Project Experience	
General Information	
Name of the project	
Client for which the project was executed	
Name and contact details of the client	
Project Details	
Description of the project	
Scope of services	
Other Details	
Total cost of the project	
Duration of the project (no. of months, start	
date, completion date, current status)	

18.5 Annexure-5: Manufacturer's Authorization Form (MAF)

Manufacturer's Authorization Form (MAF)

Letter No. _____

То

The General Manager (Admin.) Odisha Computer Application Centre Plot No. - N-1/7-D, Acharya Vihar P.O. -RRL, Bhubaneswar – 751013

Sub: OEM Authorization Letter RFP Ref No: <Insert RFP no> dated <insert date>

Sir / Madam,

We, (Name of OEM or the authorized partner of the OEM in case the OEM has no authorized office in India), having its registered office at (Address of OEM or the authorized partner of the OEM in case the OEM has no authorized office in India), who are established and reputable manufacturers / producers do hereby authorize M/s (Name and address of bidder) to submit, quote, negotiate and supply of against the above Bid Invitation.

The standard service warranty shall be applicable for the products offered as per OEM standard policy. This MAF authorization shall be valid for _____.

Yours faithfully, (Name) (Name of Producers/Manufacturer/Authorised Partner)

Note: This letter of authority should be on the letterhead of the manufacturer /authorised partner and should be signed by a person duly authorized in a power of attorney. The Bidder in its Bid should include it.

18.6 Annexure 6: Technical Bid Cover Letter

То

The General Manager (Admn.) Odisha Computer Application Centre (OCAC) OCAC Building, Plot No.-N-1/7-D, Acharya Vihar Square, RRL Post Office, Bhubaneswar-751013 (INDIA)

Subject: Technical Proposal for Request for Proposal (RFP) for Selection of Implementing Partner for Supply and Installation of Robotic Lab in Secondary Schools in Odisha.

Dear Sir,

We, the undersigned, offer to provide our services against your RFP enquiry no. <Insert RFP no> dated <insert date>. We are hereby submitting our Proposal, which includes this Technical Bid sealed in the envelope.

We hereby declare that all the information and statements made in this Technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We agree to abide by all the terms and conditions of the tender document. We would hold the terms of our bid valid for 180 days as stipulated in the RFP document. We also agree that you reserve the right in absolute sense to reject all orany of the products / services specified in the bid response without assigning any reason whatsoever.

It is hereby confirmed that I/We are entitled to act on behalf of our corporation/company /firm/organization and empowered to sign this document as well as such other documents which may be required in this connection.

Thanking you.
Name of the Bidder:
Authorized Signatory:
Signature:
Seal:
Date:
Place:

18.7 Annexure-7: Financial Bid Cover Letter (To be filled by the bidder and signed in Company Letter Head)

Τo,

The General Manager (Admn.) Odisha Computer Application Centre (OCAC) OCAC Building, Plot No.-N-1/7-D, Acharya Vihar Square, RRL Post Office, Bhubaneswar-751013 (INDIA)

Subject: Financial Proposal for Request for Proposal (RFP) for Selection of Implementing Partner for Supply and Installation of Robotic Lab in Secondary Schools in Odisha.

Dear Sir/Madam,

We, the undersigned, offer to submit our financial proposal for Request for Proposal (RFP) for Selection of Implementing Partner for Supply and Installationof Robotic Lab in Secondary Schools in Odisha. Our attached Financial Proposal is for the sum of <<Amount in words and figures>>inclusive ofall duties.

1. Price and Validity

All the prices mentioned in our RFP are in accordance with the terms as specified in the RFP documents. We declare that our Bid Price is for the entire scope of the work as specified in the appropriate section in the RFP. All the prices and other terms and conditions of this Bid are valid minimum for a period 180 days from the date of opening of the Bid. Subject to further extended period as mutually agreed upon.

We understand that the actual payment would be made as per the existing tax rates during the time of payment.

2. Unit Rates

We have indicated in the relevant forms enclosed, the unit rates for the purpose of on account of payment as well as for price adjustment in case of any increase to / decrease from the scope of work under the contract.

3. Qualifying Data

We confirm having submitted the information as required by you in your Instruction to Bidders. In case you require any other further information/documentary proof in the department this regard before evaluation of our bid, we agree to furnish the same in time to your satisfaction.

4. Bid Price

We declare that our Bid Price is for the entire scope of the work as specified in the RFP. These prices are indicated at Price Bid attached with our bid as part of the Bid. We understand you are not bound to accept any tender you receive.

We hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief.

We understand that our bid is binding on us and that you are not bound to accept a bid you receive.

Thanking you, Yours sincerely, Authorized Signature: Name and Title of Signatory: Name of Firm: Address:

I. FIXED COST						
SI. No.	Items/Activities	Quantity (a)	Unit cost (b)	Taxes (in Rs.) (c)	Total Cost(in Rs.) (d= b + c)	Total Amount (in Rs.) (e = a x d)
	A: Robots-Component Deta	ails				
1	Hybrid Humanoid Robot	1				
2	Robotic Arm	1				
3	Interactive Intelligent Robot	1				
4	Hexapod Robot	1				
	B. Robotics Do It Yourself	(DIY) Kit	s: Compo	nent De	tails	1
5	Robotic Kits & Equipment for Standard 6	10				
6	Robotic Kits & Equipment for Standard 7	10				
7	Robotic Kits & Equipment for Standard 8	10				
8	Robotic Kits & Equipment for Standard 9	10				
9	Robotic Kits & Equipment for Standard 10	10				
10	C: Innovative ProjectComponent	1				
11	D: Prototyping Tools per Lab (Component details)	1				
12	E: Furniture for per Lab	1				
13	F. One Time Delivery &	1				
	Installation Cost					
	Total Cost Including	GST @ 0	ne Roboti	ic LAB		
	Total Cost Including GST for 250 Robotic LABs					

18.8 Annexure 8: Financial Bid (CLUSTER WISE FORMAT)

	II. R	ECURF	RING C	OST		
G: Con	sumables per Lab- Compone	ents (Rec	curring fo	or every	year)	
SL. No.	Item	Quantit y(a)	Unit Cost(in Rs.) (b)	Taxes (in Rs.) (c)	Total Cost (in Rs.) (d = b + c)	Total Amount (in Rs.) (e = a x d)
14	Consumables per Lab- Components (Recurring for every year)	1				
	Cost Including GST @ One Ro					
	tal Cost Including GST for 2					
[H-1] I	Manpower Cost for 250 Nos	of Robot	1	1		
SL. No.	Item	Quantity (a)	Unit Cost (in Rs.) (b)	Taxes (in Rs.) (c)	Total Cost (in Rs.) (d= b + c)	Total Amount (in Rs.) (e = a x d)
i	IT Manager	1				1
ii	Central Helpdesk Support/ IT	3				1
iii	Robo Trainer	250		+	1	1
Total M	anpower Cost Including GST fo	or 250 No:	s of Robot	tic LAB Fo	or 1st Year	1
[H-2] I	Manpower Cost for 250 Nos					
SL. No.	Item	Qua ntity (a)		Taxes (in Rs.)(c)	Total Cost (in Rs.) (d= b + c)	Total Amount (in Rs.) (e = a x d)
i	IT Manager	1	+			
ii	Central Helpdesk Support/ IT	3		+	1	1
iii	Robo Trainer	250	1			1
Total M	anpower Cost Including GST fo	or 250 Nos	s of Robot	tic LAB Fo	or 2nd Year	
[H-3] I	Manpower Cost for 250 Nos					
SL. No.	Item		Unit Cost (in Rs.) (b)		Total Cost (in Rs.) (d= b + c)	Total Amount (in Rs.) (e = a x d)
i	IT Manager	1				
ii	Central Helpdesk Support/ IT	3				
iii —	Robo Trainer	250				
	anpower Cost Including GST fo					
[H-4] I	Manpower Cost for 250 Nos	1				<u></u>
SL. No.		Qua ntity (a)	Unit Cost (in Rs.) (b)	Taxes (in Rs.)(c)	Total Cost (in Rs.) (d= b + c)	Total Amount (in Rs.) (e = a x d)
i	IT Manager	1				
ii	Central Helpdesk Support/ IT	3	<u></u>	ļ		
		250				
iii	Robo Trainer					
iii Total M	anpower Cost Including GST fo Manpower Cost for 250 Nos	or 250 Nos				

					(d= b + c)	(e = a x d)
i	IT Manager	1				
ii	Central Helpdesk Support/ IT	3				
iii	Robo Trainer	250				
Total Manpower Cost Including GST for 250 Nos of Robotic LAB For 5 th Year						
[H] Total Manpower Cost Including GST for 250 Nos of Robotic LAB						
Grand Total Cost i.e. [A] + [B] + [C] +[D] + [E] + [F] + [G] +[H]						
including GST for 250 Nos of Robotic LABs						
NOT						

<u>NOTE: -</u>

• All the above price would be in INR only.

• The Tax rates will be mentioned as per standards.

• The above price would include Compressive OEM Warranty Support for a period of 3 years and additional 2 years of CAMC from the date of FAT.

• The bidder has to compulsorily quote for all items mentioned in the Commercialbid Tables. In case bidder fails to quote for any of this stage, thebid would be summarily rejected.

- No Component of Financial bid should have "ZERO" value.
- Above is indicative, however the quantity may increase or decrease at thetime of placing the purchase order as per actual.
- If manpower cost is non-exclusive of any statutory stipulation it will be treated as non-responsive bid.
- Any bidder can quote for Cluster-I, Cluster-II or both separately.
- Purchase order will be issued including 1st year manpower cost. Purchase order for subsequent years to be issued later as per approval of OSEPA.

SI. No.	Documents to be submitted					
	Pre-qualification bid	Technical Bid	Financial Bid			
1	Pre-Qualification Covering Letter Bid	Technical Bid Covering Letter	Financial BidCove letter and Format			
2	Particulars of the Bidder	All the supporting document as per Technical Evaluation Criteria	Financial Bid			
3	Valid copy of Certificate of incorporation and Registration Certificates Copy of GST registration. Copies of relevant Certificates of Registration, Income Tax/PAN Number from the respective Government Department.	Technical Specification Compliance Documents with all supporting details				
4	Audited Balance Sheets					
5	CA Certificate with CA"s Registration Number & Seal					
6	Valid Copy Certificates of ISO.					
7	RFP Forms and Format					
8	Self-Declaration for Non- Blacklisted					
9	Project Citation Format					
10	Project References					
11	RFP document mentioned fee.					
12	All the supporting documents as per Pre- Qualification Criteria					

Annexure 9: Details of documents to be submitted by theBidder

18.9 Annexure **10**: List of Schools

	District	No. of Schools	Zones
1	ANGUL	14	CLUSTER-I
2	BALASORE	24	CLUSTER-I
3	BHADRAK	30	CLUSTER-I
4	CUTTACK	25	CLUSTER-I
5	DHENKANAL	8	CLUSTER-I
6	JAGATSINGHPUR	12	CLUSTER-I
7	PURI	20	CLUSTER-I
8	NAYAGARH	9	CLUSTER-I
9	KENDRAPARA	14	CLUSTER-I
10	MAYURBHANJ	24	CLUSTER-I
11	JAJPUR	27	CLUSTER-I
12	KORAPUT	18	CLUSTER-I
13	MALKNGIRI	7	CLUSTER-I
14	NABARANGPUR	9	CLUSTER-I
15	BARAGARH	9	CLUSTER-I
	ZONE-I TOTAL	250	
1	KHURDHA	35	CLUSTER-II
2	DEOGARH	4	CLUSTER-II
3	KEONJHAR	10	CLUSTER-II
4	BOLANGIR	23	CLUSTER-II
5	JHARSUGUDA	6	CLUSTER-II
6	SUNDERGARH	26	CLUSTER-II
7	KALAHANDI	21	CLUSTER-II
8	NUAPADA	8	CLUSTER-II
9	KANDHAMAL	5	CLUSTER-II
10	BOUDH	5	CLUSTER-II
11	SAMBALPUR	13	CLUSTER-II
12	SONEPUR	7	CLUSTER-II
13	GAJAPATI	8	CLUSTER-II
14	GANJAM	65	CLUSTER-II
15	RAYAGADA	14	CLUSTER-II
	ZONE-II TOTAL	250	

61

18.10 Annexure 11 – Specifications of Robotic Kits and Equipment. Detailed BOQ having details of list of items consisting of each Robotic Kit for Standard 6, 7, 8, 9 and 10th

SI. No.	A: Robots-Component Details	Quantity
1	Hybrid Humanoid Robot	1
	WMR	
	5 Ft Height	
	High torque, motors	
	Industry grade wheels	
	Fixed hand	
	Mild steel Body	
	Powder coated with white and blue color	
	Wireless Controlled	
	OCU	
	Lead Acid Battery	
	Fixed Head	
	12 Facial Expressions	
	On/Off Switch	
	Battery level Indicator	
	Robot Battery Charger	
2	Robotic Arm	1
	5 DOF Robot Arm	
	4+ Gripper	
	Maximum Reach from Base 310 mm	
	Maximum Payload 90 Grams	
	CNC cut PVC alloy Body	
	USB 18 Servo controller	
	Servo Controller	
	Control Software	
3	Interactive Intelligent Robot	1
	WMR	
	Deep Learning	
	AI Models	
	Emotional Intelligence	
	Touch Screen	
	Wide angle HD Camera	
	Hi-Tech Sensors	
	Distance and edges sensor	
	Voice Recognition	
	Intent response model	

	Tele presence	
	Face Recognition	
	Battery	
	Charger	
4	Hexapod Robot	1
	6 Legged	
	18 DOF	
	Servo Controller	
	Metal Body	
	Lipo Battery	
	Intelligent Balance charger	

SI No.	B. Robotics Do It Yourself (DIY) Kits: Component Details	Quantity
1	Component Details Robot DIY Kit 10.0 (10 Robots for 10 th Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel Add On single Peripheral Board with components (DC Socket, capacitor's, Voltage regulators ,resistor's, IC's, LED's, Transistor's ,Relay's "MIC, Buzzer, Push button's ,Diode's, Variable resistor's , Voltage Display, 7 Segments, LCD Display Controller ATMEGA 328P	10
	On/off Switch on robot platform Multiple sensors	_
2	Robot DIY Kit 9.0(10 Robots for 9th Standard)WIMR 2 level Platform2 geared DC MotorTricycle model2 general purpose Wheel1 Castro wheelAdd On single Peripheral Board with components(DC Socket, capacitor's , Voltage regulators, resistor's, IC's ,LED's, Transistor's, Relay , MIC, Buzzer, Push button's, Diode's, Variable resistor's, Voltage Display, LCD DisplayController ATMEGA 328PMultiple sensors	10
3	Robot DIY Kit 8.0(10 Robots for 8th Standard)WMR 2 level Platform2 geared DC Motor	10

Tricycle model 2 general purpose Wheel 1 Castro wheel Add On single Peripheral Board with components (DC Socket, capacitors, Voltage regulators , resistors, IC's, LED's, Transistor's, Relay's, MIC, Buzzer, Push buttons, Diode's, Variable resistor's, Voltage Display, 7 Segments, LED Dot Matrix) Controller ATMEGA 328P On/Off Switch on robot Platform Multiple sensors 4 Robot DIY Kit 7.0(10 Robots for 7 Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays, MIC , Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p On/off Switch on robot platform Multiple sensors Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 general purpose Wheel 1 Castro wheel 5 Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC,6 Set of LED , 4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) 5 Robot Control board consists of (DC Socket, 5 Set	1		
1 Castro wheel Add On single Peripheral Board with components (DC Socket, capacitors, Voltage regulators, resistors, IC's, LED's, Transistor's, Relay's, MIC, Buzzer, Push buttons, Diode's, Variable resistor's, Voltage Display, 7 Segments, LED Dot Matrix) Controller ATMEGA 328P On/Off Switch on robot Platform Multiple sensors 4 Robot DIY Kit 7.0(10 Robots for 7 Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays, "MIC, Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p On/off Switch on robot platform Multiple sensors Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel 1 Castro wheel 2 general purpose Wheel 1 Castro wheel 2 general purpose Wheel 1 Castro wheel 2 general purpose Wheel 1 C		Tricycle model	
Add On single Peripheral Board with components (DC Socket, capacitors, Voltage regulators , resistors, IC's, LED's, Transistor's, Relay's, MIC, Buzzer, Push buttons, Diode's, Variable resistor's, Voltage Display, 7 Segments, LED Dot Matrix) Controller ATMEGA 328P On/Off Switch on robot Platform Multiple sensors 4 Robot DIY Kit 7.0(10 Robots for 7 Standard) 10 WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC , Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p On/off Switch on robot platform Multiple sensors Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 geared DC Motor			
(DC Socket, capacitors, Voltage regulators, resistors, IC's, LED's, Transistor's, Relay's, MIC, Buzzer, Push buttons, Diode's, Variable resistor's, Voltage Display, 7 Segments, LED Dot Matrix) Controller ATMEGA 328P On/Off Switch on robot Platform Multiple sensors 4 Robot DIY Kit 7.0(10 Robots for 7 Standard) MWR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC, Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p On/off Switch on robot platform Multiple sensors Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 general purpose Wheel 1 Castro wheel Son/off Switch on robot platform Multiple sensors Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 general purpose Wheel 1 Castro wheel 2 general purpose Wheel 1 Castro wheel 2 general purpose Wheel 1 Cas		1 Castro wheel	
On/Off Switch on robot Platform Multiple sensors104Robot DIY Kit 7.0(10 Robots for 7 Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC ,Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p On/off Switch on robot platform Multiple sensors108Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel105Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) On off Switch on robot platform10		(DC Socket, capacitors, Voltage regulators, resistors, IC's, LED's, Transistor's, Relay's, MIC, Buzzer, Push buttons, Diode's, Variable resistor's,	
Multiple sensors 10 4 Robot DIY Kit 7.0(10 Robots for 7 Standard) 10 WMR 2 level Platform 2 geared DC Motor 10 Tricycle model 2 general purpose Wheel 1 1 Castro wheel 1 10 Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC ,Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p 0n/off Switch on robot platform Multiple sensors Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 geared DC Motor Tricycle model 2 geared DC Motor 10 S Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC, 6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) 10 On off Switch on robot platform Multiple Sensors 10		Controller ATMEGA 328P	
Multiple sensors 10 4 Robot DIY Kit 7.0(10 Robots for 7 Standard) 10 WMR 2 level Platform 2 geared DC Motor 10 Tricycle model 2 general purpose Wheel 1 1 Castro wheel 1 10 Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC ,Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p 0n/off Switch on robot platform Multiple sensors Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 geared DC Motor Tricycle model 2 geared DC Motor 10 S Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC, 6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) 10 On off Switch on robot platform Multiple Sensors 10			
4 Robot DIY Kit 7.0(10 Robots for 7 Standard) 10 WMR 2 level Platform 2 geared DC Motor 10 Tricycle model 2 general purpose Wheel 1 1 Castro wheel Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC, Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p 0n/off Switch on robot platform Multiple sensors Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor 2 geared DC Motor 10 S Robot DIY Kit 6.0(10 Robots for 6" Standard) 10 01 WMR 2 level Platform 2 geared DC Motor 7 ricycle model 2 general purpose Wheel 1 1 Castro wheel Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC,6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) 10 0n off Switch on robot platform Multiple Sensors 10			
WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC, Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p On/off Switch on robot platform Multiple sensors Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor,2 set of logic IC,6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) On off Switch on robot platform Multiple Sensors Battery	4		10
Tricycle model2 general purpose Wheel1 Castro wheelAdd On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC ,Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328pOn/off Switch on robot platform Multiple sensorsRobot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel5Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) On off Switch on robot platform100			
Tricycle model2 general purpose Wheel1 Castro wheelAdd On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC ,Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328pOn/off Switch on robot platform Multiple sensorsRobot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel5Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) On off Switch on robot platform100		2 geared DC Motor	
2 general purpose Wheel 1 Castro wheel Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC ,Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p On/off Switch on robot platform Multiple sensors Robot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro Woltage regulator, 5 set of resistor, 2 pdt Relay, MIC, Buzzer, 5 set Push button) On off Switch on robot platform Multiple Sensors Battery		-	
Add On single Peripheral Board with components (DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC, Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328pOn/off Switch on robot platform Multiple sensorsMultiple sensorsRobot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel105Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) On off Switch on robot platform Multiple Sensors10			
DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC ,Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328pOn/off Switch on robot platform Multiple sensorsMultiple sensorsRobot DIY Kit 6.0(10 Robots for 6" Standard) WMR 2 level Platform 2 geared DC Motor Tricycle model 2 general purpose Wheel 1 Castro wheel105Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) On off Switch on robot platform Multiple Sensors Battery10		1 Castro wheel	
Robot DIY Kit 6.0(10 Robots for 6" Standard)WMR 2 level Platform2 geared DC MotorTricycle model2 general purpose Wheel1 Castro wheel1 Castro wheel8 Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC,6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button)0n off Switch on robot platform Multiple Sensors Battery		DC Socket, set of capacitor, set of Voltage regulator, multiple resistance, logic gate IC, set of LED, set of Transistor, Relays "MIC ,Buzzer, set of Push Button, multiple Diodes, 2 Variable resistor, Voltage Display, set of 7 segments Display, Controller ATMEGA 328p	
WMR 2 level Platform2 geared DC MotorTricycle model2 general purpose Wheel1 Castro wheel1 Castro wheel8 Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC,6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button)0n off Switch on robot platform Multiple Sensors Battery			
2 geared DC MotorTricycle model2 general purpose Wheel1 Castro wheel1 Castro wheel5Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC,6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button)On off Switch on robot platform Multiple Sensors Battery	-	Robot DIY Kit 6.0(10 Robots for 6" Standard)	
Tricycle model2 general purpose Wheel1 Castro wheel1 Castro wheel5Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC,6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button)10On off Switch on robot platform Multiple Sensors Battery10		WMR 2 level Platform	
2 general purpose Wheel1 Castro wheel1 Castro wheel5Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC,6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button)10On off Switch on robot platform Multiple Sensors Battery10			
1 Castro wheel5Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC,6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button)10On off Switch on robot platform Multiple Sensors Battery10		-	
5 Robot Control board consists of (DC Socket, 5 Set of capacitor, Voltage regulator, 5 set of resistor,2 set of logic IC,6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button) On off Switch on robot platform Multiple Sensors Battery			
capacitor, Voltage regulator, 5 set of resistor,2 set of logic IC,6 Set of LED ,4 set of Transistor, 2 Dpdt Relay, MIC, Buzzer, 5 set Push button)10On off Switch on robot platform Multiple Sensors Battery10		1 Castro wheel	
Multiple Sensors Battery	5	capacitor, Voltage regulator, 5 set of resistor, 2 set of logic IC, 6 Set of LED , 4 set of Transistor, 2 Dpdt	10
Battery		On off Switch on robot platform	
		Multiple Sensors	
F-F Jumper Wire		Battery	
		F-F Jumper Wire	

SI No.	C: Innovative Project Component	
	DC motor (Assorted) of capacity: 12V Centre shaft	
1	10 RPM -10 No's	80
	30 RPM- 20 No's	

	60 RPM- 20 No's	
	100 RPM - 20 No's	
	150 Rpm -10 No's	
2	Servo motor of capacity: mini servo 180 Degree. Rotation, Plastic gear type 2.5 kg/cm Torque	20
	Switch box (Assorted- total 20 no's of SPDT ,DPDT ,SPST,	
3	Rocker, Slide Push)	2
4	Ultrasonic sensor for distance detection 2 to 400 CM, digital output, 5 volt DC	20
5	IR proximity sensor for distance detection 2 to 25 cm, colour detection, detection angle 35 deg, LM 393 IC	10
6	PIR sensor for motion sensing, detection 3 to 7 Mtr.	10
7	4 Relay module for motor driving, DPDT relay, 4 channel, operating voltage vol-3.3 to 5 volt	10
8	Single Relay module for 1 channel relay board, 5 Volt DC.	10
9	RF module for 433 Mhz radio frequency ,RX IF frq 1 Mhz, Tx Frc 433.92 Mhz	10
10	Motor driver L293D, 4 h bridge up to 4 by directional DC Motor drive.	10
11	Motor driver L298 for 12 v DC dual motor driving	10
12	LCD module for Arduino 16X2 with back light.	10
13	Matrix display RGB for display cascaded 4 dot matrix LED, 4 In one display with 5p line module	5
14	DTF module for MT 8870 based frq. Decoded defects 029, LED notified, 5 V DC.	10
15	APR module for voice recording for 10 Min, 8 channel, current 500 MA	10
16	Buzzer module for operating at 5 V DC, Pitch at 2.54 MM, tone generation range -1-5 to 2.5 khz.	10
17	Assorted multiple sensor box, collection of 36 different types of sensor	1
18	Component store Rack	1
19	Plastic Box of size 30 X 20 X 25 CM	50
20	General purpose wheel of 7X2 cm, 6 MM	40
21	General purpose wheel of 10X 2 Cm, 6 MM	40

SI. No.	D: Consumables per Lab- Components (Recurring for every year)	Quantity
1	Glue gun stick packet	10
2	Metal chassis	40
3	F - F Connector cable	1000
4	M - M connector cable	1000

5	F- M connector cable	1000
6	Soldering lead	40 Pkt
7	Soldering flux	40 Pkt
8	Single stand wire (100 meter)	10
9	Bread Board of 840 points	20
10	Mini breadboard 400 points	20
11	Resistor box of 1 oms to I micro omds	10
12	Capacitor box for educational purpose	10
13	DPDT relay 8 pin 5 v	50
14	DPDT Switch	75
15	DPDT Box - 3 Switch	25
16	7805 IC	50
17	Transistor BC 547	50
18	LED	50
19	LDR 5mm- 25 no's , 8 mm-25 no's	50
20	Op amp(Assorted IC) for educational project use	50
21	10 Coded wire bundle of 50 meter	4
22	Double sided tape	50
23	Black insulating tape	50
24	Red insulating tape	50
25	Paper Cutter	40
26	Sun board 3mm thick in 32 Sq. Ft sheet	4
27	Sun board 5mm thick in 32 Sq. Ft	4
28	Flex Glue 20 ML	50 bottles
29	Miscellaneous components (washer , spacer , nut bolt , L clamp, screw, wheels)	1 Pkt
30	3D printing filament	10 Kg

SI No.	E: Prototyping Tools per Lab (Component details)	Quantity
1	3D printer for educational prototyping	1
2	Screw Driver set	10
3	Drilling machine and tool kits	1
4	Hammer	5
5	Hacksaw	5
6	File Set	2
7	Soldering Iro8-6n	10
8	Soldering iron stand	10
9	Pliers	5
10	Long nose pliers	5
11	Long needle nose mini pliers	5
12	Digital Multi meter	10
13	De Soldering gun	10
14	Glue gun	10

15	Allen key set (10 pieces)	2
16	Variable DC power supply unit 5-25 volt output	10
17	Laptop	2

SI. No.	F: Furniture for per Lab	Quantity
1	Table (SS frame 8/4 ft size with standard ht. top blue sun mica on 20 mm ply)	
L		4
	Stainless steel round stool for each student with SS	
2	frame, blue color foam sheet)	40
3	Table for 3D printer and computer	1
4	Computer chair	1
5	Room layout stickers/posters +doodle painting	1

Laptop Technical Specification:

Item	Specifications
Chipset	Intel/ AMD SoC (System on Chip) platform or better
Processor	Latest 11th or higher, Generation Core I3/Ryzen 3
Memory	4 GB RAM DDR4 @2933 Mhz
DIMM Slots & Expandability	2 DIMM slots with 16 GB DDR 4 expandability
Storage	256Gb SSD
Audio	Stereo speakers, 2W x2, Dolby [®] Audio
Operating System	Microsoft Windows 11 Professional factory pre-loaded
Wi-Fi & BT	802.11ac 2x2 Wi-Fi + Bluetooth 5.0
Web camera & Stand	Inbuilt webcam with privacy shutter, fixed focus
Ports	1x HDMI,1x microSD card reader,1x Ethernet (RJ-45),1x Headphone / microphone combo jack
	2 x USB 3.2,1x USB-C 3.2
Security	Hardware TPM 2.0
Manageability	Drivers should be available on OEM Website for download
Certifications	ENERGY STAR 8.0 /ROHS/ Epeat India/ TCO certified/ MIL Standard
Display	14.0" FHD (1920x1080), IPS Panel/Anti Glare/ Non touch
Warranty	5 Years onsite warranty with battery & Adapter
Battery Backup	3 Cell battery with 48Whr or more capacity
Carry Case	OEM carry Bag or Back pack