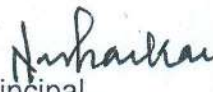


Army Public School

Rajiv Gandhi Marg, New Cantt,
Allahabad (Uttar Pradesh)-211001
Email :armyschoolalld@gmail.com
Tele : 0532-2420772

Sealed Tenders are invited for procuring the Robotics/Mini Tinkering Lab equipment their installation and training from the Vendors, Manufactures or their authorized dealers. The tender documents, tender rules and list of equipment can be downloaded from <http://armypublicschoolalld.org>

Click here to download Tender document
last date of tender submission 11 Dec 19


Principal
Army Public School,
New Cantt, Allahabad

ARMY PUBLIC SCHOOL, (NEW CANTT, ALLAHABAD)
EMAIL : armyschoolalld@gamil.com
Tele : 0532-2420772

TENDER FORM FOR ROBOTICS/ MINI TINKERING LAB

DATE OF SALE OF TENDER FORM FROM 09 Nov 2019 TO 11 DEC 2019 BETWEEN
1000 HOURS TO 1300 HOURS

1. The School is interested in buying **ROBOTICS/ MINI TINKERING LAB.**
2. List of ROBOTICS/ Mini Tinkering Lab specifications as Appendix. A.
3. Technical Bid and Terms and conditions is attached as Appendix. B.
4. Commercial Bid is attached as Appendix. C.
5. You are requested to submit your quotation in a sealed envelope and drop in the Box placed at the Reception Centre, APS, New Cantt, Allahabad by 1300 hours on **11 Dec 19**. The technical specifications for above items are attached as Appendix.
6. The school reserves its right to alter the quantities/items or reject any quotation without assigning any reasons whatsoever.
7. Items are to be supplied against a supply order. Payment will be released by cheque once the items have been received and checked for correctness by a Board of officers/Teachers.

Yours faithfully,



(Neena Shankar)
Principal
APS, New Cantt, Allahabad

File No : 5077/Robotics /APS

09 Nov 2019

Appendix 'A'
(Refers to Para 2 of Tender Form)

TECHNICAL SPECIFICATIONS ROBOTICS/ MINI TINKERING LAB

Ser NO	Make/Model	Specification	Compliance (Yes/No)	Remarks
1	Avishkaar / Robotronics/ any other reputed brand	<p>Programmable and Modular Robotics Kit with following functionality as minimum per kit</p> <p>A. <u>Programmable Brick or Brain Specifications</u></p> <ul style="list-style-type: none"> a. Programmable brain with inbuilt Wi-Fi Capability b. Inbuilt LCD display to indicate various parameters c. Connection of Sensors and Motors with prefab high-quality RJ 11/RJ45 Cables d. Connection of Minimum 4 Sensors and 4 Actuators/Motors with one programmable brain using RJ11/RJ45 Connectors e. Provision to Connect Wired Remote Controller with Programmable Brain f. Graphical Programming Language with drag and drop blocks-based program to help students learn programming concepts g. It Should Support remote through Bluetooth h. Rechargeable Battery pack <p>B. <u>Sensors with RJ 11/ RJ45 Connectors Each Two in Numbers</u></p> <ul style="list-style-type: none"> a. Ultrasonic Sensor with b. Touch Sensor c. Sound Sensor d. IR Sensor e. Humidity and Temperature Sensor f. Color Sensor <p>C. <u>Open Source Connectors (2 Nos Each)</u> (They should allow us to use standard Sensors Without RJ 11/RJ45 Ports to be connected with BRICK /BRAIN, also they should allow the Motors and Sensors of Robotics Kits to be utilized with Arduino)</p> <ul style="list-style-type: none"> a. Open Sensor Connectors b. Open Motor Connectors <p>D. <u>Construction SET (High Quality Metal Construction Set) 4 Nos Each</u></p> <ul style="list-style-type: none"> a. Long U Strips b. Short U Strips c. Long L Strips d. Short L Strips e. Flexible Strips f. Long Rectangular Plates 		

		<p>g. Short Rectangular Plates</p> <p>h. Square Plates</p> <p>i. L Angle</p> <p>j. Adjustable Spacers</p> <p>k. Nuts and Bolts</p> <p>l. Couplers</p> <p>m. Castor Wheels</p> <p>n. Axle Shafts Long</p> <p>o. Axle Shafts Short</p> <p>p. Shaft Stopper</p> <p>E. <u>Movement Parts 4 Nos Each (Compatible with Brain/Brick)</u></p> <p>a. 80 RPM Geared Motors with Variable Speed</p> <p>b. Wheels with Belt</p> <p>c. Gear Pack (Small,medium, Large, rack)</p> <p>d. Fillers</p> <p>e. Hook</p> <p>f. Three Hole Connectors</p> <p>F. <u>Other Parts</u></p> <p>a. Connecting Cables</p> <p>b. Controller Cable</p> <p>c. Wired Remote which allows you to move in four directions</p> <p>d. Charger</p>		
2	Avishkaar / Robotronics	<p>Programmable Robotics Brain/Brick with circuit designing & following components</p> <ul style="list-style-type: none"> • Integrated Breadboard • 6-Pin Connecting Cable-8 • LED Red(5mm)-10,LED Green (5mm) – 10 • Variable 10K Metal-1 • PIRSensor - 1, Keypad 4*4 - 1, LCD 16*2 - 1, BC-547 Transistor PTH- 2 • Buzzer - 1, 7-Segment Display Unit - 1, Resistor Pack – 1 • Servo Motor - 1, Relay 6V - 1, LDR 5 mm - 2, DIP Switch – 1 • Trigger Switch – 1 • Jumper Wires: Male to Male connector Wire - 10, Male toFemale connector Wire - 10 • Programmable with an easy to use GUI based coding software. 		

Ser NO	Make/Model	Specification	Compliance (Yes/No)	Remarks
3	Avishkaar / Robotronics/any other brand	<p>Electronic Development/Microcontrollerboardwith accessories</p> <p>Features:</p> <ul style="list-style-type: none"> • GPIOs: 4 PWM pins, 2 ADC pins, 1 VCC pin, 2 GND, 1 Vin • Communication: Micro USB Port / Bluetooth 2.0 (HC-05) • On-Board Components: 5x5 LED Matrix, 4 Push Buttons, Buzzer, Reset Switch, TX & RX LED, Power Indicator LED • Support for IOT, Sensor Interfacing & development of Wearable Electronics • Compatible with MIT App Inventor • Support for almost all open analog / digital sensors modules. • Programmable with an easy to use GUI based coding software. <p>Bundled Components:</p> <ul style="list-style-type: none"> • Green LEDs - 5 • SG-90 Servo Motor - 1 • Soil Moisture Sensor - 1 • LDR Sensor - 1 • MQ-135 Air Quality Sensor - 1 • Capacitive Touch Switch - 1 • Male to Male Jumper Wires - 10 • Male to Female Jumper Wires - 10 • Female to Female Jumper Wires - 10 • Mini-Breadboard (400 point) - 1 • 9V Battery - 1 • Alligator Connectors - 10 		
4		Training: Cost of Trainer includes assuming 7 days , 5-6 hours per day training in school.		
5	Warranty (Free Support)	1 Year		

Note.

1. Complete installation on site as per school plan.
2. On site visit during school hours only.
3. Prices quoted must be inclusive of all taxes, duties and levies.

Appendix 'B'

(Refers to Para 3 of Tender Form)

TECHNICAL BID**TENDER DOCUMENTS AND TERMS OF CONDITIONS FOR TECHNICAL BID FOR
PROCUREMENT OF ROBOTICS/ MINI TINKERING LAB TO APS, NEW CANTT, ALLAHABAD**

The following documents and specification will also be submitted with Technical Bid:-

<u>S No</u>	<u>Documents/ Features of Items</u>	<u>Document Produced by Vendor Yes/ No</u>	<u>Remarks</u>
1	No of years of experience in Supply of Robotics/ Mini Tinkering Lab		
2	ITCC for last two years.		
3	List of establishments/organization where your firm is executing supply along with a zerox copy of work order/certificate of satisfactory performance		
4	Profile of company.		
5	Feature and Specification Brochure for each item and each Brand are enclosed		
6	Terms and conditions accepted or not		

Appendix C

(Refers to Para 4 of Tender Form)

COMMERCIAL BID**COMMERCIAL BID FOR TENDER DOCUMENTS FOR PROCUREMENT OF ROBOTICS/
MINI TINKERING LAB, TO APS NEW CANTT, ALLAHABAD**

S NO	Make/Model	Specification	Quantity	Unit Price incl all taxes & duties	Total Price incl all taxes & duties
1	Avishkaar / Robotronics	Programmable and Modular Robotics Kit (As per specifications asked in the tender)	25		
2	Avishkaar / Robotronics	Programmable Robotics Brain/Brick with circuit designing Kit (As per specifications asked in the tender)	12		
3	Avishkaar / Robotronics	Electronic Development/Microcontroller board with accessories	10		
4	Avishkaar / Robotronics	Post Installation/ Delivery Training Cost	07 Days		
5		Freight & Installation			
	Any other brand				
6	Any other brand				
	Any other brand				
	Any other brand				
	Any other brand				
	Any other brand				
	Warranty (Free Technical Support)	1 Year			

1. Complete installation on site as per school plan.
2. Price for each item quoted separately.
3. Prices quoted inclusive of all taxes, duties and levies.

**TERMS AND CONDITION FOR PROCUREMENT OF
ROBOTICS/ MINI TINKERING LAB TO APS, NEW CANTT, ALLAHABAD**

1. Delivery Periods should be maximum **15 days** from the date of purchase order.
2. The Vendors should provide 1 year of comprehensive warranty (Annual Maintenance Contract) at no additional cost, wherever applicable and clearly indicate the terms and conditions of the same.
3. It is mandatory for the successful bidder to provide free installation and equipment training at school site at no additional cost after the delivery of the equipment.
4. The vendor should have local office/supporting nearby areas for immediate support and should have been operating for minimum 3 years.
5. The repair of any item must be done onsite within maximum three working days and work of the machine/item must within maximum seven working days. If the repair is not possible onsite the machine/item must be replaced and taken offsite or repair.
6. The vendor should provide curriculum at no additional cost.
7. **Terms and Conditions of payment.** 90% After installation and physical verification by board of officers. 10 % after one year from the date of installation.
8. Location of the Tender Box: Reception Cell, APS, New Cantt, Allahabad
9. **Forwarding of Bids.** Bids should be forwarded by Contractors on the prescribed format attached with the tender separately as technical and price bids. The technical bid should include the following details:-
 - (a) Technical specifications.
 - (b) e-mail address of office.
 - (c) GST number.
 - (d) Bank Account Number with IFSC Code No.
 - (e) Bank Address.
 - (f) Complete Postal Address of Office.
 - (g) Office Landline and Mobile Phone Nos.
10. **Rejection of Bids.** Canvassing by the Contractors in any form, unsolicited letter and post tender correction may invoke summary rejection with forfeiture of Earnest Money Deposit (EMD). Conditional tenders will be rejected.
11. **Validity of Bids.** The Bids should remain valid for 6 months from the date of submission of bids.

12. **Earnest Money Deposit.** The tenderers have to deposit Rs 50,000/- in the form of Bank Draft/ Multicity cheque in favour of "ARMY SCHOOL, NEW CANTT, ALLAHABAD" payable at Allahabad. EMD of the unsuccessful Contractors will be returned to them without any interest at the earliest on or before the 30th day after the award of the contract.
13. Tax will be deducted at the time of any payment as per defined / eligible tax rate and authority will give proper document of depositing the same amount to suppliers.
14. The tenderers have to quote their rates both in figures and words. The rates quoted in the tender should be inclusive of all freight, taxes and other incidental charges if any (i.e. F.O.R. School campus).
15. Every page of the tender should be signed (full signature) and rubber stamped by the tenderer. It should also be signed wherever there is overwriting and cutting.
16. All work services will be according to specification as per tender paper or subject to approval by the Board of Officers.
17. The successful contractor is solely responsible for the materials and labour necessary for the completion of work.
18. The firm is responsible for periodic cleaning of the site during the work and removal of all material and debris at all time necessary, during and at the end of construction period.
19. The contractor is responsible for ensuring all safety and security measure to be adhered to on site during the construction process including the safety of all students, staff and workmen along with the security of the site.
20. The contractor is required to ensure that measures are put in place to mitigate against all potential social and environmental impacts that can arise as a result of the use of equipment and machinery associated with the project.
21. The contractor shall be deemed to have examined all documents, conditions of contract and to have acquainted himself with the detailed descriptions of the work to be done and the way in which they are to be carried out.
22. The contractor shall be deemed to have visited the site before preparing his tender and to have examined for himself the conditions under which the works will proceed and all other matters affecting the carrying out of the work and cost thereof.
23. The contractor will maintain records of minimum wages to their labour any dispute in this regards will be dealt with directly by him and not by the school.
24. The contractor whose tender is accepted, will be required to furnish performance guarantee of five percent (5%) of the tendered amount. A sum @ 5% of the gross amount of the bill shall be deducted from final bill and will be kept for one year.

25. In case the work does not complete within the stipulated time frame, demurrage charges Rs 100/- per day will be imposed on the contractor. The contractor will also provide a fresh date of completion which if not achieved the demurrage will increase to Rs 150/- per day. This amount will be adjusted against the security deposit/ performance guarantee money held with the school.

26. The competent authority doesn't bind to accept the lowest or any other tender and reserves right to reject any or all the tenders received without the assignment of a reason.

27. **Dispute and legal jurisdiction.** In case of any dispute, directions of the Chairman, APS, New Cantt, Allahabad will be binding to both parties. Jurisdiction of any legal dispute will be Allahabad

Narhanka