एडसिल (इण्डिया) लिमिटेड
(भारत सरकार का मिनी रत्न श्रेणी - I सीपीएसई)
(आई एस ओ 9001 : 2015 तथा 14001 : 2015 प्रमाणित कम्पनी)
जी एस टी नं : 09AAACE0575F1ZU

एडसिल EdCIL
Education • Innovation • Transformation

EdCIL (India) Limited
(A Mini Ratna Category - I CPSE, Govt. of India)
(An ISO 9001 : 2015 & 14001 : 2015 Certified Company)
GSTIN No. : 09AAACE0575F1ZU

PO. No.: EdCIL/EIS & EPS/PROC/2023-24/ २०४५ 20.12.2023

To,

M/s STEM Learning Pvt Ltd,
1205,Marathon Icon,
Marathon Nextgen Campus,
Opp.G.K.Marg,Lower Parel (W)
Mumbai.

Subject: Installation of STEM Lab under FY 2023-24 under CSR at NTPC Kawas

Ref: 1.NIT No: EdCIL/EIS & EPS/PROC/2022-23/04 Dated: 11.01.2023

Dear Sir,

1. Your above-mentioned Bid offer submitted on 03.02.2023 has been accepted by the Competent Authority in EdCIL for the "**Installation of STEM Lab under FY 2023-24 under CSR at NTPC Kawas"** at a total amount of **Rs. 8,62,995/-** (Rupees Eight Lakhs Sixty-Two Thousand Nine Hundred Ninety-Five Only) Inclusive of taxes.

2. The Scope of **"Installation of STEM Lab under FY 2023-24 under CSR at NTPC Kawas"** with warranties shall be governed as mentioned in the NIT No: EdCIL/EIS & EPS/PROC/2022-23/04 Dated: 11.01.2023.

3. The STEM Lab items /equipment has to be Supplied and Installed at school identified by NTPC Kawas Unit.

4. This letter shall form a part of the Contract along with the tender document and all Corrigendum/Addendum, correspondence made for this tender. The agreement has to be signed between **EdCIL (India) Limited & M/s STEM Learning Pvt. Ltd., Mumbai**, on Rs.100 (Rupees One Hundred only) non-judicial stamp paper as per the format given in **Annexure XII** of the Tender Document.

5. As Per Clause No. 11 of Chapter-V 'Instruction to Bidders' (Delivery Schedule), the Supply ,installation and commissioning should be completed within 45 days from the issuance of the Purchase Order. The "Time Schedule" for the broad activities till completion of work to be submitted to EdCIL (India) Limited within 3 (three) days from the date of issue of this Purchase Order.

6. **Service Period:** The duration of the service period shall be from the date of issuance of Purchase Order i.e from **15.12.2023 to 14.03.2024.**

निगमित कार्यालय : एडसिल हाऊस, 18ए, सेक्टर 16ए, नौएडा–201301 उ.प्र.(भारत)
दूरभाष : +91-0120-4156001, 4156002, 4154003, 2970206, 2970207 फैक्स : +91-0120-2970209
ई–मेल : edcilsupport@edcil.co.in
पंजीकृत कार्यालय : विजया बिल्डिंग, पांचवां तल, 17–बाराखम्बा रोड़, नई दिल्ली–110001
सीआईएन नं. : U74899DL1981GOI011882

Corporate Office : EdCIL House, 18A, Sector 16A, Noida-201301 U.P. (INDIA)
Tel : +91-0120-4156001, 4156002, 4154003, 2970206, 2970207 Fax : +91-0120-2970209
E-mail : edcilsupport@edcil.co.in
Regd. Office : Vijaya Building, 5th Floor, 17-Barakhamba Road, New Delhi-110001
CIN No.: U74899DL1981GOI011882

7. **Payment Terms:**

i) 80% payment (of total PO value) shall be released after completion of Delivery & Installation of equipment, Baseline Survey and, Teacher Training.

ii) 20% payment (of total PO value) shall be released after completion of the project.

Note:

a) The ownership of supplied items shall be with EdCIL/EdCIL's Client and as such EdCIL will process the Invoice of the Supplier only after the receipt of payment from EdCIL's Client for the respective stages.

b) Valid GST invoice should be prepared and Billed to EDCIL India Limited quoting EDCIL's GST NO and **Place of Delivery is**.
-1020 Kawas Gas Power Project
P.O.Aditya Nagar ,Surat
Gujarat – 394 516

8) **Warranty**

8.1 Comprehensive Warranty should be for a minimum period of **One (01) years** from date of successful delivery, installation, commissioning & handing over of STEM Lab at the designated location/schools as per the Tender Document Clause No. 26 of Chapter-V (Instruction to Bidders) and amendment if any.

8.2 The warranty should be comprehensive on site with responsibility of the agency to ensure attending the warranty queries/issues received from NTPC/schools time to time within the Warrantee Period . Supplier should give written information (about the Engineers/ technical representative name and cell numbers) before handing over of the STEM Lab to the Consignee and to the end client's nominated representative/s to attend the issues related to the warranty of the goods supplied under the contract.

8.3 The period for correction of defects in the warranty period is 02 days. If the supplier having been notified fails to remedy the defects within 02 days, the consignee should proceed to take such remedial action as should be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the consignee should have against the supplier under the contract.

9) **Performance Security:** The successful bidder should be required to deposit Performance Bank Guarantee equivalent to **03% of contract value/work order** to EdCIL **within 15 (Fifteen) days** from the date of receipt of Purchase Order. The Performance Bank Guarantee should be issued by a **Nationalised Bank/Scheduled Bank** in favour of "**EdCIL (India) Limited. Noida**". This Performance Bank Guarantee should be retained throughout the currency of the contract and should be extended by the bidder from time to time, as required by EdCIL.
This guarantee shall be valid for a period of **90 days beyond the Three-year warranty period from the date of commissioning and successful handing**

over. (Refer Clause No. 8 of Chapter-V, Instructions to Bidders of Tender Document and Annexure IX Format of PBG Enclosed).

10) **Delayed Delivery:** If the delivery is not made within the due date for any reason under the control of the successful bidder, the EdCIL reserves the right to impose Liquidated damages (LD) @ 0.5 % plus GST per week effective from 31st day from the date of issuance of PO and the maximum deduction of 10% of the contract value/ rate. The LD shall be applied only on the portion of items not delivered within the stipulated time period for reasons under the control of the supplier. Applicable GST on LD amount would also be charged additional.

Once the maximum is reached, EdCIL has the right to terminate the contract without any liability to cancellation charges and encash the submitted performance guarantee/s submitted by successful bidder. **(Refer Clause No. 16 of Chapter-V, Instructions to Bidders of Tender Document).**

11) **The Baseline Survey Report shall contain** : **1.** Title/Cover Page **2.** Table of Contents **3.** Executive Summary **4.** List of acronyms and abbreviations **5.** List of tables and figures **6.** List of photos **7.** Introduction **8.** Survey Methodology-detailed **9.** Findings **10.**Conclusion **11.** Annexures (List of Documents reviewed, survey tools/questionnaires, etc.)

12) **The Endline Survey Report shall contain** : **1.** Background **2.** Purpose **3.** Research Objectives **4.** Methods, Study Location, Selection Criteria, Sampling Procedure, Sample Size, Survey tools/instruments, Survey team, required consent form **5.** Data Collection-data entry and analysis, timeline, ethical considerations, consent **6.** Findings and Recommendations **7.** References

13) You are advised to contact immediately to the DGM (EIS & EPS), EdCIL House, 18-A, Sec-16A, Noida (U.P.)- 201301 for further directions and submission of schedule, Contract Agreement, & Performance Bank Guarantee and Duplicate Signed copy of this Purchase Order.

14) This letter is sent with a duplicate copy of this letter, you are advised to return duplicate copy duly signed & stamped from the authorized representative as a token of your acceptance for the said work order within 3 days time. An advance copy is sent on official email id as mentioned in bid submitted i.e. **meera.dhanuka@stemlearning.in.**

15) Kindly acknowledge the receipt of Purchase Order.

Thanking You,

Yours Faithfully

(Nandeesh Babu MG)
DGM (EIS & EPS)

Enclosure:

1. BOQ on Accepted Rates (Annexure-I).
2. Contract Agreement form.
3. Performance Bank Guarantee Format.

42	Area of triangle	Area of triangle	Simple illustration of derivation of Area of Triangle	1	No.	6,050	6,050	18	1,089	7,139
43	Area of parallelogram	Area of parallelogram	Simple illustration of derivation of area of parallelogram	1	No.	7,800	7,800	18	1,404	9,204
44	Coupled Pendulum	Coupled Pendulum	Resonant frequency. The resonant frequency depends on the pendulum's length. Longer pendulums have lower frequencies.	1	No.	8,100	8,100	18	1,458	9,558
45	Solar Light	Solar Light	Conversion of solar energy into electricity. Application of renewable energy sources. Solar panel, semiconductors.	1	No.	9,800	9,800	18	1,764	11,564
46	Wind Mill	Wind Mill	Working of wind mill. Conversion of wind energy into electricity.	1	No.	7,900	7,900	18	1,422	9,322
47	Shape of earth due to rotation	Shape of earth due to rotation	Shape of earth Rotational force Centrifugal force	1	No.	8,300	8,300	18	1,494	9,794
48	KE PE Track	KE PE Track	Conversion of energy. Potential and Kinetic energy.	1	No.	9,300	9,300	18	1,674	10,974
49	Loop The Loop	Loop The Loop	Conservation of energy. The minimum speed necessary to complete the loop without falling.	1	No.	4,190	4,190	18	754	4,944
50	Rope Puzzle	Rope Puzzle	Logic and Mathematical shapes study of surfaces	1	No.	8,900	8,900	18	1,602	10,502
51	Refraction Cylinder	Refraction Cylinder	Refraction of light Alphabet symmetry	1	No.	8,300	8,300	18	1,494	9,794
52	Newton's Cradle	Newton's Cradle	Conservation of energy, conservation of momentum and friction.	1	No.	9,300	9,300	18	1,674	10,974
53	Reflection Transmission	Reflection Transmission	Application of laws of reflection. Reflection and Transmission of light.	1	No.	7,300	7,300	18	1,314	8,614
54	Hand Battery	Hand Battery	Electric potential difference. Electric battery. Chemical effect of electric current	1	No.	8,000	8,000	18	1,440	9,440
55	Day and Night	Day and Night	Cycle of day and night on earth. Shadows, Seasons, angle of tilt.	1	No.	7,650	7,650	18	1,377	9,027
56	Cone Run Uphill	Cone Run Uphill	Centre of mass,Gravity pulls on the centre of mass of objects.	1	No.	9,600	9,600	18	1,728	11,328
57	Tower Of Pisa	Tower Of Pisa	Center of mass, Centre of gravity, Gravitation, Stability of structure.	1	No.	6,100	6,100	18	1,098	7,198
58	Lever	Lever	Simple Machines Lever. Type of lever.	1	No.	9,300	9,300	18	1,674	10,974
59	Pulley Block	Pulley Block	Pulley- simple machine. Combination of pulley. Mechanical Advantage.	1	No.	8,100	8,100	18	1,458	9,558
60	Wheel and Axle	Wheel and Axle	How it is easy to rotate wheel when force is applied at a point distant from center.	1	No.	7,000	7,000	18	1,260	8,260
61	Heat Absorption	Heat Absorption	Black Body, Heat Absorption and Reflection, Colour Temperature	1	No.	9,300	9,300	18	1,674	10,974
62	Conductors and Insulators	Conductors and Insulators	Electrical conductivity Types of conductor and insulator	1	No.	9,500	9,500	18	1,710	11,210
63	Viscosity Tube	Viscosity Tube	Buoyancy. Viscosity. Density	1	No.	9,700	9,700	18	1,746	11,446
64	Rock and Minerals	Rock and Minerals	Different types of rock and mineral samples. Difference between them.	1	No.	5,280	5,280	18	950	6,230
65	DNA	DNA	Double helix structure of DNA. A-T and G-C pairs.	1	No.	8,300	8,300	18	1,494	9,794
66	Lateral Shift	Lateral Shift	Refraction of light, deviation in path.	1	No.	7,300	7,300	18	1,314	8,614
67	Force & types of friction	Force & types of friction	Friction, speed due to surface texture. Rolling Friction.	1	No.	4,280	4,280	18	770	5,050
68	Funny mirrors	Funny mirrors	Distorted mirror. Convex and concave mirrors	1	No.	4,380	4,380	18	788	5,168
69	Marble Slide	Marble Slide	Conservation of momentum.	1	No.	6,050	6,050	18	1,089	7,139
70	Resonance	Resonance	Frequency and length of object, resonating frequency.	1	No.	6,050	6,050	18	1,089	7,139
71	Centrifuge Puzzle	Centrifuge Puzzle	Centripetal and Centrifugal force.	1	No.	6,050	6,050	18	1,089	7,139
72	Area of Trapezium	Area of Trapezium	Area of trapezium using parallelogram	1	No.	4,280	4,280	18	770	5,050
73	Sum of angles of Quadrilateral	Sum of angles of Quadrilateral	Sum of angles of Quadrilateral Complete angle	1	No.	6,050	6,050	18	1,089	7,139
74	(A+B)^2 -(A-B)^2 = 4AB	(A+B)^2 -(A-B)^2 = 4AB	Geometric illustration of basic algebraic identity.	1	No.	7,300	7,300	18	1,314	8,614
75	Electric bell	Electric bell	Electric Circuit, Electromagnet and magnetic effects of current	1	No.	6,050	6,050	18	1,089	7,139
76	Human Torso	Human Torso	Human Body Anatomy Organs Functions of Body parts	1	No.	6,100	6,100	18	1,098	7,198
77	Ear & Eye	Ear & Eye	Sense organs Functions of body parts Vision Hearing	1	No.	9,650	9,650	18	1,737	11,387
78	Human Joints	Human Joints	Types of joint In human body Bones and ligaments	1	No.	10,100	10,100	18	1,818	11,918
79	Plant Cell	Plant Cell	Eukaryotic cells Difference between cells Parts of cell	1	No.	11,750	11,750	18	2,115	13,865
80	Animal Cell	Animal Cell	Difference between cells, Parts of cell	1	No.	8,700	8,700	18	1,566	10,266
			Sub Total				**5,95,170**		**1,07,131**	7,02,301
111		TRAINING OF TEACHERS	*Total - 2 visits*	2	No.	17,500	35,000	18	6,300	41,300
112		INFRASTRUCTURE	MDF Board (2 ft width) 45 pcs Iron Brackets 5 pcs Electric Casing Switch and Socket 20pcs each 10 pcs socket box Wodden Bit 14 pcs of 7.5 ft Steel wall nails (2kg) Red & Black Wire 40 mtr Each 1 MCB 100 pcs Screw (1inch)	1	No.	66,182	66,182	18	11,913	78,095
114		Base line & Endline Survey		1	No.	35,000	35,000	18	6,300	41,300
			Total Amount				7,31,352		1,31,643	8,62,995

PRICE BID

Sr. No.		Model Name/ Principle	Specification	Qty.	Unit	Rate/unit (in Rs.)	Amount (Exclusive of Tax) (Rs.)	Taxes. (%)	Taxes in (Rs.)	Amount (Inclusive of Tax) (Rs.)
A	80 Modules for (5-10)	Integrated Science, Maths Lab								
1	Constellation Viewer	Constellation Viewer	Identification and study of Indian constellations About Constellations Stars Pattern	1	No.	8,100	8,100	18	1,458	9,558
2	Newton's Disc	Newton's Disc	White light is made up of 7 colours (VIBGYOR). Splitting of white light.	1	No.	4,800	4,800	18	864	5,664
3	Colour Shadow	Colour Shadow	Combinations of colour lights. Additive mixture of colour. Primary colours.	1	No.	8,430	8,430	18	1,517	9,947
4	Periscope	Periscope	Application of laws of reflection. Angle of incidence and angle of reflection	1	No.	8,910	8,910	18	1,604	10,514
5	Kaleidoscope	Kaleidoscope	Multiple reflection. Symmetric imagoo. Patterno duo to reflection	1	No	4,780	4,780	18	860	5,640
6	Laws of Reflection	Laws of Reflection	Laws of reflection for plane mirror. Angle of incidence = angle of reflection.	1	No.	4,780	4,780	18	860	5,640
7	Corner Mirror	Corner Mirror	Multiple reflection. Image formula (N=360/A - 1) Angled mirrors.	1	No.	7,730	7,730	18	1,391	9,121
8	Infinity Well	Infinity Well	Multiple reflections. Image formation in parallel mirrors.	1	No.	8,320	8,320	18	1,498	9,818
9	Magic Water Tap	Magic Water Tap	Optical illusion. Refractive index of medium, refraction	1	No.	8,680	8,680	18	1,562	10,242
10	Total Internal Reflection.	Total Internal Reflection.	Total internal reflection, bending of light ray. Optical fibre	1	No.	8,320	8,320	18	1,498	9,818
11	Fun with Magnets	Fun with Magnets	Types of magnets Magnetic field and properties of field lines.	1	No.	4,780	4,780	18	860	5,640
12	Law of Inertia	Law of Inertia	Newton's first law. Inertia is opposing change in state of rest.	1	No.	8,910	8,910	18	1,604	10,514
13	Circle and Ball	Circle and Ball	Newton's first law. Inertia is opposing change in motion. Centripetel force.	1	No.	8,900	8,900	18	1,602	10,502
14	Action and Reaction	Action and Reaction	Newton's 3rd law of motion. For every action there is equal opposite and reaction	1	No.	7,730	7,730	18	1,391	9,121
15	Parrot in the Cage	Parrot in the Cage	Persistence of vision. Frames per second. The basic concept of animation.	1	No.	6,550	6,550	18	1,179	7,729
16	Zoetrope	Zoetrope	Persistence of vision. Frames per second. The basic concept of motion picture.	1	No.	8,320	8,320	18	1,498	9,818
17	Pin screen	Pin screen	Pressure Inverse relation of Pressure Area Representation of pixels	1	No.	8,800	8,800	18	1,584	10,384
18	Floating Ball	Floating Ball	Bernoulli's principle. Pressure difference and lift.	1	No.	7,730	7,730	18	1,391	9,121
19	Floating Fan	Floating Fan	Bernoulli's principle. Air pressuredifference	1	No.	8,670	8,670	18	1,561	10,231
20	Tornado	Tornado	Atmospheric disturbances, currents, storms. Vortex of wind.	1	No.	7,230	7,230	18	1,301	8,531
21	Hand Pump	Hand Pump	Application of pressure to pump water. Pressure- volume relation.	1	No.	8,200	8,200	18	1,476	9,676
22	Anamorph	Anamorph	Perspective, Viewpoints Illusion and Graphical projection	1	No.	7,800	7,800	18	1,404	9,204
23	Floating Magnets	Floating Magnets	Properties of magnet. Attraction in opposite poles and repulsion in like poles	1	No.	7,600	7,600	18	1,368	8,968
24	Magnetic Field Tube & Immiscible Fluid	Magnetic Field Tube & Immiscible Fluid	Magnetic field and properties of magnets. Density of liquid	1	No.	7,300	7,300	18	1,314	8,614
25	Moment of inertia	Moment of inertia	Moment of inertia Rotational inertia. Distribution of mass.	1	No.	8,410	8,410	18	1,514	9,924
26	Lazy Tube	Lazy Tube	Magnetic Field and Forces, Eddy current, Lenz Law.	1	No.	6,050	6,050	18	1,089	7,139
27	Hyperbola	Hyperbola	Conic sections. Shape of hyperbola.	1	No.	7,230	7,230	18	1,301	8,531
28	Magnetic effect of electric current	Magnetic effect of electric current	Magnetism Magnetic effects of electric current. Compass deflection. Oesterd's experiment	1	No.	7,820	7,820	18	1,408	9,228
29	Pythagoras Model & Moire Pattern	Pythagoras Model & Moire Pattern	Pythagoras theorem and Interference of Light	1	No.	7,820	7,820	18	1,408	9,228
30	Elliptical Carrom Board	Elliptical Carrom Board	Conic sections. Properties of ellipse.	1	No.	6,050	6,050	18	1,089	7,139
31	Two Congruent Right Triangles	Two Congruent Right Triangles	Comparison of area of different geometric shapes. Congruent shapes.	1	No.	4,280	4,280	18	770	5,050
32	Area of a Circle	Area of a Circle	Simple illustration of derivation of area of circle	1	No.	6,050	6,050	18	1,089	7,139
33	$(a+b)$ $=a+2ab+b$	$(a+b)$ $=a+2ab+b$	Geometric illustration of basic algebraic identity.	1	No.	6,050	6,050	18	1,089	7,139
34	$(a+b+c)=a+b+c+2ab+2bc+2ca$	$(a+b+c)=a+b+c+2ab+2bc+2ca$	Geometric illustration of basic algebraic identity.	1	No.	6,050	6,050	18	1,089	7,139
35	a2-b2=(a+b) (a-b)	a2-b2=(a+b) (a-b)	Geometric illustration of basic algebraic identity	1	No.	7,820	7,820	18	1,408	9,228
36	Sum of the angles of a triangle	Sum of the angles of a triangle	Elementary theorem of math. "Sum of all three angles of any triangle=180 ° Linear pair.	1	No.	6,050	6,050	18	1,089	7,139
37	Tangram	Tangram	Interesting tiling puzzle. Basic geometric shapes.	1	No.	4,190	4,190	18	754	4,944
38	Parking Puzzle	Parking Puzzle	Mathematical logic Algorithm Brain Teaser	1	No.	8,600	8,600	18	1,548	10,148
39	Organ pipes	Organ pipes	Sound of different frequencies and wavelengths. Musical notes.	1	No.	6,050	6,050	18	1,089	7,139
40	Area of rhombus	Area of rhombus	Simple illustration of derivation of area of rhombus	1	No.	9,700	9,700	18	1,746	11,446
41	Transverse wave pendulum	Transverse wave pendulum	Mechanical wave. Basic concepts of transverse wave. Actual Representation of vibrating particles and propagating wave	1	No.	7,820	7,820	18	1,408	9,228