

Nagar Prathmik Shikshan Samiti Ahmedabad

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

October 2024

Tender No.:	Smart School RFP 05-2024
Pre-Bid Meeting:	07/11/2024, 15:00 Hrs.
Last Date Online Price Bid Submission:	19/11/2024 up to 17:00 Hrs.
Last Date of Receipt of Physical Bid:	19/11/2024 up to 17:30 Hrs.
Date of Opening of Bid:	19/11/2024 up to 17:30 Hrs.
Bid Processing Fee:	Rs. 30,000/- (Rupees Thirty Thousand Only)
Bid Security EMD:	Rs. 3,00,00,000/- (Rupees Three Crore Only)

Invited By:
Administrative Officer,
Ahmedabad Municipal Corporation School Board
Scout Bhavan, Near Prabhudas Thakkar College,
Paldi, Ahmedabad, Gujarat- 380007
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DISCLAIMER

The information contained in this Request for Proposal document (“**RFP**”) whether subsequently provided to the bidders, (“**Bidder/s**”) verbally or in documentary form by Ahmedabad Municipal Corporation School Board (henceforth referred to as “**AMC School Board**” in this document) or any of its employees or advisors, is provided to Bidders on the terms and conditions set out in this RFP document and any other terms and conditions subject to which such information is provided.

This RFP document is not an agreement and is not an offer or invitation to any party. The purpose of this RFP is to provide the Bidders or any other person with information to assist the formulation of their financial offers (“**Bid**”). This RFP includes statements, which reflect various assumptions and assessments arrived at by AMC School Board in relation to this scope. This Tender document does not purport to contain all the information each Bidder may require. This Tender document may not be appropriate for all persons, and it is not possible for the Chief Executive Officer, AMC School Board and their employees or advisors to consider the objectives, technical expertise and particular needs of each Bidder. The assumptions, assessments, statements and information contained in the Bid documents, may not be complete, accurate, adequate or correct. Each Bidder must therefore conduct its own analysis of the information contained in this RFP and to seek its own professional advice from appropriate sources.

Information provided in this Tender document to the Bidder 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. AMC School Board accepts no responsibility for the accuracy or otherwise for any interpretation of opinion on law expressed herein.

AMC School Board and their employees and advisors make no representation or warranty and shall incur no liability to any person, including the Bidder under law, statute, rules or regulations or tort, the principles of restitution or unjust enrichment or otherwise for any loss, cost, expense or damage which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, reliability or completeness of the RFP, and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Selection Process.

AMC School Board also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP. AMC School Board may in its absolute discretion, but without being under any obligation to do so, can amend or supplement the information in this RFP.

The issue of this RFP document does not imply that AMC School Board is bound to select a Bidder or to appoint the Selected Bidder (as defined hereinafter), for implementation and AMC School Board 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, expenses associated with any demonstrations or presentations which may be required by AMC School Board or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and AMC School Board 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 for submission of the Bid, regardless of the conduct or outcome of the selection process.

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IMPORTANT DATES

Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city – Phase IV		
1.	Contract Period	3 Years + Implementation Phase of 4 Months
2.	Delivery	Scope – 75 Schools Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city
3.	RFP No.	Smart School RFP 05-2024
4.	Pre-Bid Meeting Date	07/11/2024, 15:00 Hrs
5.	Online Price Bid Submission Date	19/11/2024 up to 17:00 Hrs. (At https://www.tender.nprocure.com .only)
6.	Physical Proposal Submission	19/11/2024 up to 17:30 Hrs. (In Hard Copy with Bid Fee, EMD and other eligibility documents)
7.	Proposal Opening (Un-priced bid)	19/11/2024 up to 17:30 Hrs.
8.	Date & Time of opening of Price Bid	Will be intimated to the qualified bidders later.
9.	Venue of Pre-Bid Meeting, opening of Technical & Commercial Bid/s	Municipal School Board Office Scout Bhavan, near Prabhudas Thakkar College, Paldi, Ahmedabad, Gujarat- 380007
10.	Bid Processing Fees (Non - refundable)	Rs. 30,000/- (Rupees Thirty Thousand only) in form of DD only
11.	Bid security (EMD)	Rs. 3,00,00,000/- (Rupees Three Crore only) in form of Demand Draft or Bank Guarantee in favor of Chairman, Nagar Prathmik Shikshan Samiti, Ahmedabad at Ahmedabad from Nationalized or Scheduled Banks except Co-operative Banks.
12.	AMC School Board Contact email ID	Email ID: aoschoolboard@ahmedabadcity.gov.in aoschoolboard@gmail.com
13.	RFP Document Available at	nProcure Portal, Website of Municipal School Board, Ahmedabad

NOTE: Please address all queries and correspondence to:

The Administrative Officer,
Ahmedabad Municipal Corporation School Board
Scout Bhavan, Near Prabhudas Thakkar College, Paldi, Ahmedabad, Gujarat- 380007
E-mail: aoschoolboard@ahmedabadcity.gov.in , aoschoolboard@gmail.com

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Ahmedabad Municipal Corporation School Board (AMC School Board) invite proposals for Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city. The Authority will enter into agreement with the Successful Bidder selected in accordance with this RFP. The agreements will be in the format specified by the Authority.

Only the bidders matching the pre-qualification criteria will be selected for further evaluation. The bidders are required to meet the minimum threshold limit for technical evaluation mentioned herein, post which their financial bid will be reviewed. The proposal with the lowest cost will be awarded the contract.

The Bidders are required to meet the minimum threshold technical and financial capability criteria, as stated in the Notice Inviting Tenders (“NIT”) advertisement published in the local & National newspapers and as provided herein. Pursuant to that, the Bidders would be evaluated on the basis of detailed technical and financial proposals and qualify for undertaking the Project as set out in this RFP.

The RFP document contains information about the Project, bidding process, proposal submission, qualification, and financial proposal requirement. Proposal in the form of BID is requested for the item(s) in complete accordance with the documents/attachments as per following guidelines.

Instruction to the bidders for bid submission:

- ✓ Tender documents are available only in electronic format which Bidders can download free of cost from the website www.ahmedabadcity.gov.in and <https://tender.nprocure.com>
- ✓ Bidder shall upload their financial bid on <https://www.tender.nprocure.com>.
- ✓ Bidder shall submit technical proposal (both at <https://tender.nprocure.com> and in hard copy) with eligibility documents, non-refundable bid processing fees bid fee and bid security EMD
- ✓ in separate sealed envelopes super scribed with title and packaged all together in big envelope with tender number to AMC School Board Office.
- ✓ The bid shall specify time schedule of various activities.
- ✓ Bids complete in all respects should be submitted on or before the BID DUE DATE.
- ✓ Services offered should be strictly as per requirements mentioned in this Bid document.
- ✓ Please spell out any unavoidable deviations, Clause/ Article-wise in your bid under the heading Deviations.
- ✓ Once quoted, the bidder shall not make any subsequent price changes, whether resulting or arising out of any technical/commercial clarifications sought regarding the bid, even if any deviation or exclusion may be specifically stated in the bid. Such price changes shall render the bid liable for rejection. However, AMC School Board reserve the right to revised financial offer.
- ✓ The duration of the Contract period for this activity will be of **3 Years _ Implementation Period of 4 months.**
- ✓ Bidders who wish to participate in this bid will have to register on <https://tender.nprocure.com>. Further bidders who wish to participate in online bids will have to procure Digital Certificate as per Information Technology Act 2000 using which they can sign their electronic bids. Bidders can procure the same from (n) code solutions – a division of GNFC Ltd., or any other bidder licensed by Controller of Certifying Authority, Govt. of India. Bidders who already have a valid Digital Certificate need not procure a new Digital Certificate.
- ✓ In case of any clarifications required, please contact on email ID of AMC School Board.

SECTION: 1 PROJECT PROFILE

1.1. Introduction and Background

Ahmedabad Municipal Corporation (AMC) runs municipal schools in the city. The AMC School Board is governing and managing body to run operations of municipal schools. In last few years AMC School Board has implemented several innovative projects to upgrade the school infrastructure and modernize the teaching process.

AMC School Board has already developed more than 100 smart schools to introduce Activity Based Learning method along with technological interventions in government schools running under Ahmedabad Municipal Corporation (AMC) to transform the teaching-learning process, improve learning outcome and foster curiosity, creativity, and imagination in young minds.

1.2. Project Summary

The project intends to transform Seventy-Five (75) municipal school to smart school by adopting the modern technologies and improved physical infrastructure in government schools of Ahmedabad. In learning by doing teaching method learners willingly with enthusiasm internalize and implement concepts relevant to their needs. Their senses get stimulated which help in retaining of lessons. It is a child-centered approach, where child is actively involved in participating mentally and physically. This method will inculcate essential 21st-century skills which will help a child in developing their professional and personal skills.

Each of the 75 selected schools will have a Math and Science Labs with working Models with Teachers Training (with LED T.V), 3D Educational Charts, Future class with Benches and other supporting physical infrastructure like furniture, 3D walls paint etc.

1.3. Project Objective & Envisaged Benefits

The Smart School Project has been conceptualized to improve the classroom interaction, upgradation of school infrastructure resulting into curiosity & learning eagerness among students. In same line the project objectives have been identified and will act as guiding framework for entire project duration.

1.3.1. Objectives

The key project objectives broadly are as follows:

- i. To foster curiosity, creativity, and imagination in young minds and increase knowledge assimilation and retention amongst school children of Municipal/Government Schools
- ii. To modernize education infrastructure and provide quality teaching at public schools.
- iii. To enhance classroom interactivity through advancement in teaching-learning process through visualization and learning by doing kit.
- iv. To build the student's self-confidence by giving reality to learning and group exercises.

1.3.2. Envisaged Benefits & Outcome of Project

The benefits and outcomes of project are as follows:

- i. Improved learning outcome of students with state, national & global standards.
- ii. Increase in student enrollment.
- iii. Reduction in dropout rate.
- iv. Increase in average student attendance.
- v. Enhanced classroom interactivity through advancement in teaching-learning process.
- vi. Increased level of confidence & curiosity among students.

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- vii. Branding of AMC schools in innovative infrastructure & learning modules for AMC schools.
- viii. Exposure to newer technologies and hands-on experience on routine syllabus.

1.4. Stakeholders

The implementation and successful execution of this project will require support and involvement from multiple stakeholders. It is therefore important to understand the various stakeholders envisioned to be part of this project and the role that they are expected to play. Following are the critical stakeholders whose involvement will drive the project and enable the establishment of a strong project governance:

- Project Execution – AMC School Board, AMC, Implementation Agency and Concerned Departments of AMC
- Beneficiaries – Students, Parents, Teachers, Principals, Teaching Support Staff, Administrative Team
- External Stakeholders – Education Dept. Office of District, State, SSA and other schemes implementing agencies of central & state govt., Education Research and Training Institutions, NGOs, Community, Health, Revenue, Social Welfare, Higher Education

1.5. Key Considerations for Project

Keeping the objective of project in center there are certain areas of which the implementing agencies should take notice during project inception and implementation phase. In order to make this project successful these points need to be addressed in project design irrespective of scope of work for the projects.

- It is of utmost importance to conduct proper stakeholder consultation, orientation and handholding during project implementation.
- User Behavior - Treating teaching aid and equipment as a priced possession in school, kept out of reach of teachers & Students instead of a tool to be used by them.
- Possible overlap of different initiatives and programs of government in pedagogy & curriculum may lead to confusion among stakeholders.
- Low adoption of data driven decision making and the usage of Learning support services.
- Limited number of Quality Digital Content Suppliers & Approval authorities
- Need of a holistic approach including civil, building infrastructure, curriculum, pedagogy, teacher training and technology interventions as an integrated solution.
- Need to strengthen the institutional capability of school management committee, adequate pupil-teacher ratio, teaching support staff and budget for AMC school operations.
- Transformation in pedagogy, teaching-learning methodology usually take long gestation period and required capacity building, behavior change and advocacy of new system among stakeholders.

SECTION 2: ELIGIBILITY CRITERIA

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The bidder must possess the requisite experience, strength, and capabilities in providing services necessary to meet the requirements as described in the RFP document. Keeping in view the complexity and volume of the work involved, following criteria are prescribed as the eligibility criteria for the bidder interested in undertaking the project.

The bidder must also possess technical know-how and financial ability that would be required for implementation of scope of work described in this RFP as per AMC School Board's requirement for the entire contract duration.

2.1. Pre-Qualification (PQ) Criteria

Sr No	Description	Minimum Requirement	Documentary Evidence to be submitted
PQ 1	Consortium	1.1 Lead Bidder can submit their proposal either as a sole bidder or in consortium. 1.2 Consortium is allowed for participation in this tender. Consortium should be of maximum of two (2) parties. 1.3 Collectively they should meet the aggregate requirement for financial, experience and technical capability as asked in this table for Pre-Qualification Criteria. 1.4 The lead bidder in consortium shall have min. 51% stake and should have demonstrable experience in setting up school/education institutes/Anganwadi.	a) Original or Notarized Copy of consortium partnership with clearly defined stake and scope of each partner. b) Undertaking by lead bidder of consortium to be sole responsible for execution of work defined in RFP and meeting the performance criteria.
PQ 2	Legal Entity	2.1 Lead Bidder and consortium partners should be an Indian firm. 2.2 Lead Bidder and consortium partners should be registered under the Companies Act 1956/2013 in India or a Limited Liability Partnership Firm under Limited Liability Partnership Firm Act 2008 at the time of the bidding. 2.3 Lead Bidder/consortium partners should have a registered number of, GST, Income Tax / Pan number. 2.4 Lead Bidder/consortium partners should be in operation in India for a period of at least 3 years as on publication of bid	a) Copy of certification of incorporation issued by competent authority/ Registration Certificate/ Shop & Establishment certificate. b) Copy of PAN card c) Copy of GST registration
PQ 3	Financial Capability	3.1 The bidder should have average annual turnover of work Rs. 100 Cr. from last three financial years ending 31 March 2024, i.e. (FY 2021-22, FY 2022-23, and FY 2023-24). 3.2 The Lead bidder and Consortium members must have positive net worth and should be Profit making as on 31st March 2024. 3.3 In case of consortium both parties should collectively meet the turnover requirement. 3.4 In case bidder does not have the audited balance sheet for FY 2023-24; they may submit the provisional CA certificate.	a) Copy of audited Balance Sheet, audited Profit & Loss statements for each of the last 3 financial years as on 31st March 2024. b) Copy of Certificate from the statutory auditor / Chartered Accountant (CA) clearly specifying the annual turnover and net worth for each of the last 3 financial years as on 31st March 2024.
PQ 4	Bidder's Experience	4.1 The bidder should have -: At least three (3) similar projects not less than total project value of 40 Cr OR Two (2) similar projects not less than of total	Documentary evidence: <ul style="list-style-type: none"> • Copy of work order/ Copy of Contractual agreement with client • Completion Certificates from

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Sr No	Description	Minimum Requirement	Documentary Evidence to be submitted
		<p>project value of Rs. 50 Cr OR One (1) similar project not less than of total project value of Rs. 80 Cr</p> <p>4.2 Only those projects will be considered as similar projects where project scope include Supply, Installation, Commissioning for Schools/Anganwadis/Education Institutes for govt. entity in India in last five years as on bid publication date. And should have min. 4 out of 6 below mentioned components.</p> <p>I. Smart Classroom - Projects with components like computer, projector, projection screen or smart panel.</p> <p>II. Future classroom - Projects with digital devices like computer/laptop, projector/smart panel, digital content and with software for classroom management (online assignment, assessment attendance etc.)</p> <p>III. Mathematics and Science Lab with working models and kits</p> <p>IV. Supply/Creation/Customization of Digital Contents</p> <p>V. Projects with components like 3D Educational Charts, 3D wall paintings/posters for education messages.</p> <p>VI. Projects with school campus improvement with components similar to Building as a Learning Tool (BaLa) or educational play area development in school/Anganwadis/Education Institutes.</p> <p>4.3 In case of consortium both partners should meet the aggregate experience asked in PQ 4.1. The eligible projects of each partner should have min 4 out of 6 components as mentioned in PQ 4.2. Only project value aggregation will be considered for PQ qualification of consortium partners.</p> <p>4.4 In case of on-going projects, only those projects where implementation phase has been completed and the project is in operation & maintenance phase.</p> <p>4.5 Client certificate clearly specifying the completion of implementation phase is required.</p>	<p>client</p> <ul style="list-style-type: none"> Project Citation
PQ 5	Mandatory Undertaking	<p>The bidder and consortium partners should:</p> <p>5.1 Not have been blacklisted by Central Government / Any State Government / Urban Local Body (ULB) / PSU in India as on the date of bid submission.</p> <p>5.2 Not be insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and must not be the subject of legal proceedings for</p>	<p>Self-declaration by the Bidder, Consortium and OEM duly signed and stamped by the authorized signatory in format described in RFP.</p>

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Sr No	Description	Minimum Requirement	Documentary Evidence to be submitted
		<p>any of the foregoing reasons.</p> <p>5.3 The Lead Bidder should have at least one office in Ahmedabad / Gandhinagar and preferably support centers/logistics for the entire state. If the Lead Bidder is not having any office in Ahmedabad / Gandhinagar, then Lead Bidder should submit a letter of undertaking to open the office in Gujarat within 45 days from the date of issue of work order if he is awarded the work.</p> <p>5.4 Not have their directors and officers convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified.</p>	

Note:

- i. The Lead Bidder must attach valid documents in support to their Pre-Qualification as mentioned above. Without proper supporting documents, the bid proposals are liable to be rejected. The Pre-qualification proposal should be submitted in hard copy with soft version stored in pen drive.
- ii. For all cited projects under bidder's experience criteria; the bidders have to submit LoI/work order with complete BoQ, contract agreement, go-live / completion certificate as a supporting document for each project. Sub-contracted projects by bidder will not be considered for evaluation.
- iii. The Lead Bidder needs to provide contact detail (email & phone number) of senior official from client.
- iv. AMC School Board (or the nominated party) reserves the right to check/validate the authenticity of the information provided in the Pre-qualification and Technical evaluation criteria.
- v. The Bid Evaluation Committee (BEC) may invite each bidder to make a presentation may require written clarifications from the bidders to clarify ambiguities and uncertainties arising out of the evaluation of the Bid documents.
- vi. In case of conditional bid or major deviations from the RFP requirements, AMC School Board may at its discretion reject the respective bid and will not be considered for further evaluation process.
- vii. The Lead Bidder should submit authorization certificate of Original Equipment Manufacturer (OEM) (or multiple OEMs) specific to the bid. The Lead Bidder should have a support agreement/arrangement for services including supply of spare parts etc. which includes the post-sales support activities for the entire project period.

2.2. Technical Qualification (TQ) Evaluation Parameters

For technical evaluation, all the pre-qualified bidders would be required to develop 1 (One) model school in accordance with the scope mentioned in this RFP.

- AMC school board will allocate school to each PQ qualified bidders. List of schools are given in this section so that bidder can do the site survey and feasibility assessment.
- The eligible bidders will have to implement all components asked in the BoQ and scope in model school for the evaluation by the bid evaluation committee as per RFP specification.
- Ten (10) days of time will be given to qualified bidders; therefore, it is advisable to participating bidders to make prior necessary arrangement for model schools.

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- The bidders who participate in model schools preparation and is unsuccessful during financial evaluation will be paid for the model school development as per the L1 rates discovered in this tendering process. The payment would be in proportion to the materials deployed by the vendor and their quality of workmanship approved by BEC.
- It is mandatory to submit the OEM authorization certificate for future classroom and science lab components and for 3D chart.

Details	Scope	Evaluation Criteria
Preparation of Model School	The pre-qualified bidder/s must build a model school in accordance with the exact scope as mentioned in this tender document. Ahmedabad school board would allocate one school to every pre-qualified bidder/s and the bidder/s have to complete the model classroom.	<ul style="list-style-type: none"> • Quality of workmanship • Quality of the materials • Complete adherence to the scope as mentioned in the RFP

Sr. No.	Evaluation Criteria	Sub-Criteria	Max. Marks	Marking Guidelines
1	Experience of Bidder in Smart Schools	Lead Bidder should have demonstrable experience in construction and Operation & Maintenance of smart school	30	<p>Experience of Bidder in Smart Schools</p> <ul style="list-style-type: none"> ▪ 0-20 Smart Schools – 10 Marks ▪ 21-40 Smart Schools – 15 Marks ▪ 41-60 Smart Schools – 20 Marks ▪ 61-80 Smart Schools – 25 Marks ▪ 81 Smart Schools and more – 30 Marks <p><i>(Bidder needs to submit workorder/certificate from client/official communication as evidence of work completed by the agency)</i></p>
2	Financial Capability	The bidder (or consortium members collectively) should have average annual turnover of work Rs. 100 Cr. from last three financial years ending 31 March 2024, i.e. (FY 2021-22, FY 2022-23, and FY 2023-24).	10	<ul style="list-style-type: none"> ▪ >=100 cr. to <150 cr. of Turnover–4 Marks ▪ >=150 cr. to <200 cr. of Turnover- 06 Marks ▪ >=200 cr. to <250 cr. of Turnover-08 Marks ▪ >=250 Cr of turnover - 10 Marks
3	Approach and Methodology (Presentation to bid evaluation committee)	Methodology and Action Plan detailing how the bidder shall deliver and manage the scope of project.	10	<ul style="list-style-type: none"> ▪ Understanding of Scope – 2 Marks ▪ Project Team CV – 2 Marks ▪ BoM Details with make and model and technical

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Sr. No.	Evaluation Criteria	Sub-Criteria	Max. Marks	Marking Guidelines
				compliance – 2 Marks. <ul style="list-style-type: none"> ▪ Implementation & Risk Mitigation Plan – 2 marks ▪ O&M Plan with training & capacity building – 2 Marks ▪ Quality of presentation and response to the query of bid evaluation committee – 2 Marks
4	Model School	Proof of Concept (PoC) of the solution being proposed by the Lead Bidder for this project. Selected Model School: 1. Bapunagar Gujarati School No. 16 2. Lotus Public School 3. Shahpur Gujarati School No. 11 4. Vasna Gujarati School No. 1 5. Adinathnagar Public School	50	Quality of Material, workmanship & Adherence to specification mentioned in RFP BoQ. <ul style="list-style-type: none"> ▪ Component 1 Future Classroom: 10 Marks ▪ Component 2 Science Math Lab: 10 Marks ▪ 3D Chart: 10 Marks ▪ 3D Paint: 10 Marks ▪ Civil work: 10 Marks

Note:

- Minimum absolute technical score to qualify for commercial evaluation is 70 marks out of total 100 marks.
 - The Lead Bidder must submit the above information along with the required supporting documents for technical bid evaluation. Technical bid document without supporting document will be liable for rejection.
- The detail assessment methodology and scoring criterion shall be shared with PQ qualified bidders and the Bid Evaluation Committee will assess the model school accordingly.
 - Lead Bidder must submit all the documentary evidence to understand their capabilities against all the criteria mentioned in PQ & TQ section.
 - Lead Bidder shall have to submit compliance checklist on bidder's letterhead stating compliance against each of the product.
 - Lead Bidder shall have to submit unpriced BoQ along with the proposed Make and Model against each of the line item. Please note that this is not restricted to only major BoQ line items, as bidder shall have to submit Make and Model against each of the sub line item, as mentioned in Annexure B, section IV of this RFP.
 - Lead Bidder shall have to submit datasheet against each of the products being procured under this RFP.
 - In case of conditional bid or major deviations from the RFP requirements, AMC may at its discretion reject the respective bid and will not be considered for further evaluation process.
 - Lead Bidder/Consortium must submit all the documentary evidence to understand their capabilities against all the criteria mentioned in RFP.

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- Electronic Devices (Laptop, Smart Panel, TV, Projector etc.) - The bidder shall submit the test report of product along with the technical proposal
- For 3D chart bidder is required to submit test report assuring child health safety.
- The cost towards the testing of sample devices shall be borne by OEM/Bidder only.
- The Lead Bidders shall get the testing of the devices from the Testing Agency in accordance with the Indian Standards - 14896:2001 as amended from time to time and with the Technical Specification as specified in the RFP.
- It is the sole responsibility of the Bidders to submit the samples and get the testing completed as per the requirement of bid evaluation committee.
- The financial bid will be opened to only those bidders who pass the technical evaluation criterion.

SECTION 3: EVALUATION OF BID

3.1. Bid Submission

Financial Bid

- The financial bid must be submitted online on <https://tender.nprocure.com>. It should not be sent physically, if submitted physically the bid shall be rejected.

Technical Bid

- The Technical Bid must be submitted in hard copy to AMC School Board, strictly by Postal Speed Post or Registered Post or in person by the representative of the bidder. Documents received in any other manner or mode (like email) will not be considered.
 - Envelope 1: RFP Document fee (original DD) & Bid Security/Earnest Money Deposit (EMD) (original DD/BG)
 - Envelope 2: Eligibility documents for Pre-Qualification criterion with all annexures described in RFP.
 - Envelope 3: Support documents for Technical Qualification evaluation with all annexures described in RFP.
 - Envelope 4: Soft copy of Technical Bid in a Pen Drive
- All four envelopes should be packaged all together in big envelope with tender number.
- Each page of the technical bid above should bear the initials of the applicant along with the seal of the Applicant in token of confirmation of having understood the contents. Also, each page of technical proposal should be numbered with a proper index.
- Bidder must submit soft copy of all the documentary evidence along with the hard copy in Pen Drive. This pen drive must be placed in both Envelopes of Pre-Qualification and Technical Qualification. No sensitive information should be available in Pen Drive. Only Soft copy of the bid should be there in Pen Drive.

3.2. Evaluation Process

3.2.1 Stage 1: Pre-Qualification Evaluation

- i. AMC School Board shall validate the - “RFP Document fee & Bid Security/Earnest Money Deposit (EMD)”.
- ii. AMC School Board shall open the bid and check the bidder’s eligibility as per the “Pre-Qualification Criteria”. Each of the Pre-Qualification condition mentioned in above Section is MANDATORY. In case, the Bidder does not meet any one of the conditions, the bidder shall be disqualified.
- iii. Technical and Financial bids for those bidders who don’t pre-qualify will not be opened.

3.2.2 Stage 2: Technical Evaluation

- i. “Technical bid” will be evaluated only for the bidders who succeed in Stage 1 (One).
- ii. Bidders who qualify Pre-Qualification Stage will be asked to develop one model school in precise accordance with the scope mentioned in this RFP.
- iii. Representative from each of all the pre-qualified bidders shall have to take the details of the schools, where in they have to create the model school. An intimation for the same would be sent to all the pre-qualified bidders by AMC school board.
- iv. AMC School Board and its appointed committee will review the developed model school, which would be developed by the pre-qualified bidders and would qualify the work done by pre-qualified bidders as

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satisfactory or unsatisfactory. All the bidder whose work of developing of model school has been found satisfactory by AMC School Board shall be the short-listed bidders whose financial bids would be opened. All the bidders whose work has been found to be unsatisfactory by AMC school board shall be disqualified at authority's discretion and financial bid for these disqualified bidders will not be opened.

- v. Amount incurred in building a model smart school shall be reimbursed by AMC school board at the least rate quoted amongst all the bidders. (Reimbursement at L1 rates) and measurement of actual work. However, the bid evaluation committee will decide on reimbursement of amount based on quality of work and performance during technical evaluation.
- vi. Each Technical Bid will be assigned a technical score out of a maximum of 100 marks. Only the SIs who get an Overall Technical score of 70% or more in the Technical Evaluation Framework as given in above Section will qualify for financial evaluation stage. Failing to secure minimum marks shall lead to technical rejection of the Bid.
- vii. For the model school development, the bidders must provide all the materials, deliveries, solutions, civil/architectural work in precise accordance with the scope and specifications of the RFP, failing to which the bidder/s shall be liable for disqualifications without any warning.
- viii. The Bidders are required to submit a sample of product asked in RFP. The performance of the sample shall be evaluated by the bid evaluation committee to see if it conforms to the project requirement.
- ix. Electronic Devices (Laptop, LED TV, Projector etc.) - The bidder shall submit the test report of product along with the technical proposal
- x. The SIs' technical solutions proposed in the bid document shall be evaluated as per the requirements specified in the RFP and technical evaluation framework as mentioned in above Section.

3.2.3 Stage 3: Financial Evaluation

- i. All the technically qualified bidders will be notified to participate in Financial Bid opening process.
- ii. All the notified bidders shall have to bring bifurcation of cost against all 20-line items (*Reference: Annexure B, Section III*) further divided in multiple line items with varying quantity against each of the sub line item (*Reference: Annexure B, Section IV*) in a sealed envelope. This cover shall be opened only for the winning bidder. Total Cost Quoted on online bid shall be verified against the bifurcation submitted by the winning bidder. Later, same justification shall be considered as part of the bid for reference in AMC school board's record book. Please note that, if any discrepancy is observed then the bid would be rejected by concerned authority. Further, decision on the bid shall be at the discretion of AMC School Board only.
- iii. The Financial bids for the technically qualified bidders shall be opened on the notified date and time. They will be reviewed to determine whether the financial bids are substantially responsive or not. Bids that are not substantially responsive are liable to be disqualified at Authority's discretion.
- iv. Financial Bids that are not as per the format provided in the RFP shall be liable for rejection.
- v. The commercial evaluation will be done on Least Cost/Lowest Cost (L1) basis. L1 price will be the lowest sum total of **C1 (from Table C of Commercial bid)**.
- vi. If L1 bidder fails to submit the Performance Bank Guarantee (PBG), withdraw it's proposal and other obligation under RFP to initiate the project, L2 bidder will be invited for negotiations. In this case, L2 bidder will be asked to match the prices of L1 bidder. Final decision of awarding the project to L2 bidder will depend upon the mutually agreed price between both the parties (bidder and Authority).

3.2.4 Rights to Accept/Reject any or all Proposals

AMC School Board reserves the right to accept or reject any proposal, and to annul the bidding process and reject all Bids 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 AMC School Board's action.

3.2.5 Notifications of Award and Signing of Contract

- i. Prior to the expiration of the period of proposal validity, the bidders will be notified in writing through FAX or email that its proposal has been accepted.
- ii. AMC School Board shall facilitate signing of the contract within the period of 30 days of the notification of award. However, it is to be noted that the date of commencement of the project and all contractual obligations shall commence from the date of issuance of Purchase Order/Letter of Acceptance (LOA)/Letter of Intent (LOI), whichever is earlier. All reference timelines as regards the execution of the project and the payments to the Implementation Bidder shall be considered as beginning from the date of issuance of the Purchase Order/Letter of Acceptance, whichever is earlier.
- iii. The notification of award (LOI/LOA/Purchase Order) will constitute the formation of the Contract. Upon the Bidder's executing the contract with AMC School Board, it will promptly notify each unsuccessful bidder and return their EMDs.
- iv. At the time AMC School Board notifies the successful Bidder that its bid has been accepted, AMC School Board will send the Bidders the Pro forma for Contract, incorporating all clauses/agreements between the parties. Within 15 days of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to AMC School Board.

Note

- i. Any conditional bid would be rejected.
- ii. Errors & Rectification: Arithmetical errors will be rectified on the following basis:
 - a. "If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected.
 - b. If there is a discrepancy between words and figures, the amount in words will prevail."
- iii. If the Bidder does not accept the error correction, its Bid will be rejected and EMD may be forfeited.
- iv. Bidder must attach valid documents in support to their Pre-Qualification and Financial, Technical capabilities/strength, as mentioned above. Without proper supporting documents, the Bid proposals are liable to be rejected.
- v. The bidder should submit authorization certificate of Original Equipment Manufacturer (OEM) (or multiple OEMs) specific to the bid. The bidder should have a support agreement/arrangement for services including supply of spare parts etc. which includes the post-sales support activities for the entire project period.
- vi. All the proposed equipment should not be declared End-of-Support by the OEMs for next 6 years from the date of bid submission.
- vii. The Manufacturer's Authorization Form (MAF) is required for any hardware or software component being supplied as part of this project.
- viii. Kindly note that the indicative/estimated quantity provided in the RFP would be used for evaluation purposes; however, the payment would be done on actual usage basis.

SECTION: 4 SCOPE OF WORK

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Ahmedabad Municipal Corporation (AMC) School Board has successfully implemented the Smart Model Primary School in Ahmedabad City and based on the achievement of extraordinary output in model primary school, AMC School Board would like to implement similar project in Seventy-Five (75) Smart school. The initiative of AMC school board is to provide world class infrastructure in AMC schools and provide best-in-segment experience to the students at AMC schools.

In the event of future additional approvals for smart school implementation, compliance with pertinent government clauses shall authorize the issuance of 30% of the corresponding work project cost.

Bidder is required to execute multiple activities under this project and major activities are briefly introduced in this section of the RFP. Exhaustive list of items to be procured are mentioned in Annexure D of this RFP, wherein technical and / or functional specification is mentioned against each of the line item to be procured under this RFP. Bidder is requested to assess the scope in totality to provide the best possible solution to AMC school board.

4.1. Future Classrooms

The requirement for future classroom is of a compact projector integrated with computer. Bidder may offer similar solution to meet the functional & technical requirement of future classroom mentioned in RFP.

The future classroom shall augment the teaching-learning process through digital devices like laptop, integrated projector with computer (or projector with computer/laptop), classroom management software, digital content, console management software with support infrastructure like storage cabinet, benches etc. as mentioned in RFP.

Through Learning initiatives, the aspiration is provision of digital learning experience and develop a comprehensive solution for modernizing the learning experience for students at AMC schools. The use of technology in learning processes at schools shall greatly transform learning outcomes. The deliverable infrastructure to establish future classrooms are mentioned in Annexure 4 with their specifications.

4.2. Mathematics and Science Labs with working models and Teachers' training

The 3D models of the important concepts and topics of the Mathematics and Science subjects create the enthusiasm among the students to learn these subjects with better understanding and increased interest. The 3D models for Modern Periodic Table, Human Eye, Skull & Brain, Ear, Barometer, Digital Clock, Solar Vapor Tower, Human Battery, Magnetic Spring, Magnetic effect of electric current with compass, Solar Water Heater, Conservation of Momentum – Marbles Slide, Smoke Based Optical Bench for Concave & Convex Lens etc. 500+ such 3D models facilitate the better learning of the concepts among the students. The specifications of these models are as mentioned in Annexure 1.

4.3. Dashboard and Other Software regarding O&M

The vendor shall develop an advanced, user-centric dashboard that provides the AMC School Board with detailed insights and control over the following aspects:

Chromebook Usage Monitoring

- Develop functionalities to track daily usage metrics of Chromebooks by students.
- Implement monitoring tools to log the types of applications and educational resources accessed.
- Generate analytical reports detailing usage patterns, time spent on various applications, and overall engagement metrics.

Science and Mathematics Lab Utilization

- Create modules to record and track student attendance and participation in Science and Mathematics labs.
- Monitor and log the utilization of lab equipment and resources.

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- Provide comprehensive reports on lab usage, including student performance metrics and resource allocation.

Procurement and Maintenance Tracking

- Develop an inventory management system to track the procurement of items for smart schools.
- Implement functionalities to monitor the repair and replacement status of items.
- Maintain a detailed inventory database, including item conditions, maintenance history, and lifecycle management.

Student Literacy and Skills Assessment

- Implement tracking mechanisms to monitor the number of students proficient in reading and writing in English, Gujarati, and Hindi.
- Develop tools to assess and monitor student capabilities in creating PowerPoint presentations (PPTs), typing, and other relevant skills.
- Generate detailed reports on student literacy and skill development, identifying areas of improvement and proficiency levels.

Software Development

- The vendor shall develop the associated software, ensuring seamless integration with the dashboard. The software should encompass the following features:

User Authentication and Access Control

- Implement robust role-based access control to ensure data security and privacy.
- Provide secure login mechanisms for administrators, teachers, and other stakeholders, incorporating multi-factor authentication where applicable.

Data Collection and Integration

- Develop modules for efficient data collection from various sources, including Chromebooks, lab systems, and administrative records.
- Ensure seamless data integration with existing systems and databases, supporting real-time data synchronization.

Reporting and Analytics Tools

- Provide sophisticated reporting tools to generate customizable and comprehensive reports on various metrics.
- Implement advanced analytics features to provide actionable insights and trend analysis based on collected data.

User Interface and Experience Design

- Design an intuitive, responsive, and aesthetically pleasing user interface for the dashboard and software.
- Ensure accessibility across multiple devices, including desktops, tablets, and smartphones, adhering to best practices in user experience (UX) design.

Implementation and Training

The vendor shall be responsible for the end-to-end implementation and training, including:

Installation and Configuration

- Install and configure the dashboard and associated software on AMC School Board's servers or cloud infrastructure.
- Ensure seamless integration with existing IT systems and infrastructure.

Training and Technical Support

- Provide comprehensive training sessions for administrators, teachers, and other stakeholders on using the dashboard and software.
- Offer ongoing technical support and maintenance services to ensure optimal performance and address any issues promptly.

4.4. Civil Work

The demolition and civil rework in the school buildings is intended wherever it is necessary. Dismantling of tiled or stone flooring, dismantling of brick work and stone masonry, new brick work, concreting, termite control treatment, repairing of doors, windows & ventilators, painting, electrical wiring work etc. work is required to be undertaken for the school infrastructure wherever necessary. The details of the work to be completed is mentioned in the Annexure 6

The bidder needs to fill the unit cost of activities under civil work (please fill the unit cost of civil items in commercial bid format in nProcure. Bidders need to fill unit cost for all line items under civil cost.

The payment for civil work Like this (3D Paint, 3D Wallpaper, etc..) shall be done on actual basis (door & window deduction, gaps, vent etc.) after completion and approval of work in selected schools.

4.5. Scope for Project Inception & Installation

4.5.1 Manpower Deployment for Implementation Phase

The Bidder needs to plan all the important tasks to ensure that all pre-requisite is met, and the Bidder team can deliver the project as per the timelines, requirements and service levels. The first step to initiate the project is to prepare the project plan and mobilize the implementation team. The Bidder needs to submit the CVs of implementation team for Ahmedabad School Board's approval before mobilization. During project, the Bidder would be required to prepare project plan, project initiation document, progress reports, risk register, issue register and other project management related documents. The indicative list of project management documents would include the following:

- i. Define an organized set of activities for the project and identify the interdependence between them.
- ii. Resource planning and loading for each phase/activity. It must also indicate where each resource would be based during that phase, i.e., onsite at the AMC School/AMC School Board/AMC or off site at implementation agency premises.
- iii. Establish and measure resource assignments and responsibilities.
- iv. Highlight the milestones and associated risks.
 - v. Communicate the project plan to stakeholders with meaningful reports.
 - vi. Measure project deadlines and performance objectives.
- vii. Project Progress Reporting. During the implementation of the project, the implementation agency should present weekly reports. Report shall be presented in the steering committee meeting to AMC School Board. The report should contain at the minimum the under mentioned:
 - a. Results accomplished during the period (weekly)
 - b. Cumulative deviations from the schedule date as specified in the finalized Project Plan
 - c. Corrective actions to be taken to return to planned schedule of progress.
 - d. Plan for the next week
 - e. Proposed revision to planned schedule provided such revision is necessitated by reasons beyond the control of implementation agency.
 - f. Support needed.
 - g. Highlights/lowlights
 - h. Issues/Concerns
 - i. Risks/Show stoppers along with mitigation
- viii. Identify the activities that require the participation of client personnel and communicate their time requirements and schedule early enough to ensure their full participation at the required time.
- ix. All the proposed products should be delivered only after receiving an approval against sample product from AMC school board. If in case the products are procured without an approval against sample of the same product, no claim shall be entertained on reimbursement towards the expenditure incurred by the implementation agency.

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- x. **Project Schedule:** A detailed week-wise timeline indicating various activities to be performed along with completion dates for the same shall be provided by the Lead Bidder.
- xi. **Project Initiation Report:** The project initiation report shall be prepared by the Bidder after the initiation of the project. The report shall contain manpower deployment plan, project plan, risk mitigation plan, escalation matrix, etc.
- xii. **Progress Reports:** Detailed weekly, fortnightly, monthly Progress Report along with issues/escalations/risks. The format shall be finalized by the AMC School Board prior to start of the project.
- xiii. **Risk Register:** Bidder shall be required to maintain a risk register which shall enlist all possible risks which shall impact the solution along with their occurrence and likelihood. The Bidder shall also propose the mechanism to mitigate the identified risks.
- xiv. **Issue Register:** Apart from the risk register the Bidder shall also maintain the issue register which shall list down the issue that have occurred in the project and the decision/remedial measures taken in reference to the issue.
- xv. **Stakeholder Register:** To keep the information about the stakeholders, the Bidder will be required to prepare a stakeholder register containing details about each stakeholder or group of stakeholders. This will be an input into the requirement gathering and communications plan.
- xvi. **Deployment of implementation team:** The Bidder will be required to provide CVs of the implementation team and various resources which it intends to deploy on the project and ensure their mobilization to the project site.
- xvii. Other reports which shall be required to be delivered as part of implementation of the solution
- xviii. The bidder needs to deploy a competent team to execute scope of work defined in RFP. The bidder needs to depute adequate number of team members to execute the project in a timely manner, failure to execute the project within the defined time period shall attract a liquidated damage as defined in this RFP.
- xix. The implementation team shall consist of a Project Manager, Civil Project Manager and at least Twenty-Eight (28) in that Eight (8) Senior Civil Engineer and Twenty (20) Installation & Field Team. Bidder needs to share CV of these resources along with their technical bid. It should be in the format mentioned in TQ9.
- xx. Project Manager: a permanent professional personal to supervise the entire project on regular basis during implementation phase & O&M Phase and co-ordinate with the authority nominated by AMC School Board. Project Manager will ensure that everything is getting implemented as per the agreed plan and SLAs.
- xxi. Project Manager should be available for meetings in the AMC School Board / School premises based on the agreed plan or as per the requirement.
- xxii. The implementation project team shall be available for discussion, meeting, and working jointly with AMC school board team.
- xxiii. The bidder needs to provide their team details along with the tentative timeline to complete various activities allied with each of the school within first 1 week only. Bidder is also requested to update the aforementioned timeline as and when there is any deviation is observed by the bidder.
- xxiv. Bidder is also requested to raise flag against any of the concerns that they may have to complete the execution within the stipulated period of time.
- xxv. The bidder will ensure that in the event of change of project resources during the course of the project, prior intimation to the AMC School Board and suitable knowledge transfer takes place. Also, the replacement of the resource should be of higher or similar skill set, experience level and shall need to be approved by AMC School Board
- xxvi. If required, AMC School Board may request to deploy all team member at AMC School Board /AMC School Board location for speedy implementation of project.
- xxvii. AMC School Board may arrange interview with proposed project team to understand their suitability for the role; in case of non-fitment the bidder will have to replace the resource with higher or similar skill set, experience level and shall need to be approved by AMC School Board.

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- xxviii. All members of project team need to be available with bidder from start of assignment (i.e., issue of LOI/LOA/Work Order).
- xxix. The vendor is required to deploy a team of four personnel at the school during the implementation phase, with each team member responsible for one of the four components specified in the Request for Proposal (RFP). Payment prior to go-live will be disbursed upon the submission of system-generated attendance records for the deployed team. Likewise, during the O&M phase, quarterly payments will be released based on the attendance records for the respective quarter. Additionally, before the project commences, the vendor must submit a manpower deployment list, including names and contact details, for each assigned school. One team is permitted to manage a maximum of ten schools within the project.

Minimum qualification of resources to be deployed during the implementation phase has been mentioned in below table:

Sr No	Name of Position	No. of Resources	Qualification	Years of Exp.	Area of Experience
1	Project Manager	1	B.E. / B.Tech. / M.C.A. in IT or Computer Science/ Computer engineering with MBA	10	Relevant experience in planning, design, execution, monitoring, controlling and closure of Smart School / large scale IT / ICT projects.
2	Senior Civil Engineer	8	Diploma/B.tech/B.E. in civil engineering	8	Relevant experience in planning, design, execution, monitoring, controlling and closure.
3	Installation & Field Team	20	Bachelor's or master's Degree	2	Relevant experience in deployment of smart components in ICT projects.

Note: During implementation phase, The bidder shall require deploying above manpower. Please note that no separate payment shall be made to the SI for the deployment of manpower during implementation phase. The bidder is required to deploy at least the resources within 7 days of receipt of the Work Order issued by AMC School Board. If the bidder fails to deploy the specified resources within the stipulated time frame of seven (7) days from the receipt of the Work Order, a penalty of INR 5000/- per day for Project Manager and INR 3000/- per day for all other non-deployed resource will be imposed for each day of delay in the deployment of the required resources. If the manpower is found absent during the implementation phase of the project, then per day value will be deducted from the final milestone report of the project.

Compliance and Reporting Procedures

The Bidder shall submit the MIS and Monitoring reports on a regular basis in a mutually decided format agreeable to AMC SCHOOL BOARD and the Bidder. Vendor must supply reports to AMC SCHOOL BOARD on a monthly, quarterly, and annual basis documenting all activity and noted trends for the period, including but not limited to:

- Volume of Calls, and tickets
- Types of Incidents and requests
- Time to resolve
- Systems involved
- Areas involved, etc

4.5.2 Requirement Gathering

The bidder shall carry out a detailed systems study of AMC schools and project stakeholders to review and make additions on the Functional Requirements Specifications and formulate site survey report to the concerned AMC school board.

- a. The bidder shall study and revalidate the requirements with AMC School Board/AMC and submit as an exhaustive document.
- b. Implementation agency must get the sign off from user groups formed by AMC School Board/AMC.
- c. For all the discussion with AMC School Board team, implementation agency shall be required to be present at AMC / AMC School Board office with the requisite team members.
- d. Prior to starting, the bidder shall carry out survey of all schools and submit exhaustive document containing the requirements against each of the AMC school.

Bidder will conduct workshops with relevant users of the systems wherever necessary, to obtain more details on the requirements of the project and have to get a sign-off on the requirements from the appropriate authorities.

4.5.3 Supply & Delivery

The bidder shall provide delivery challan and all supporting document for delivery of all the hardware & software items. It is responsibility of bidder for supplying unlimited licenses for the proposed solution. All licenses supplied by the Bidder for the purpose of this project shall be perpetual in nature and shall be in the name of AMC School Board and will include maintenance and insurance for the entire duration of the contract. Bidder will maintain an inventory of all software components procured, license renewals etc. This list will be made available to the AMC School Board on request. All licenses will be invoked only after the successful completion of UAT and after the signing of End user license agreement (EULA).

- The manufacturer for hardware shall have manufacturing and testing facility be accredited by national/state government recognized agency. The bidder will have to submit the accreditation, safety and quality certificate with delivery of hardware.
- The manufacturer calibration lab accreditation certificate should be submitted with technical proposal for review and approval prior to inspection along with QAP.
- The Purchaser (AMC School Board) or its representative shall have the right to inspect and / or to test the Goods to confirm their conformity to the Contract. The special conditions of contract and / or the Technical Specification shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing of the identifying of any representatives retained for these purposes.
- The inspections and tests may be conducted on the premises of the Supplier or its sub bidder(s), at point of delivery and / or at the Good's final destination. Should any inspected or tested Goods fail to conform to the Specifications, the Purchaser may reject them and the Supplier shall either replace the rejected Goods or make all alterations necessary to meet specification requirements free of cost to the Purchaser. The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Good's arrival in India shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods' shipment from the country of origin.
- 10% of Total delivered quantity from each line item of price bid shall be reviewed and inspected at warehouse of bidder at project location by Third Party Inspectors (TPI)/ PMC / AMC School Board team.
- For every unit supplied by the supplier, the conformance to the Specifications mentioned in the Tender shall be established by the supplier.
- All the expenses related to inspection at manufacturing and testing facility of supplier viz. lodging & boarding, transportation, all facilities including third party inspection (TPI) fees, testing charges and other related commercial expanses as and where required shall be borne by the bidder.
- The supplier shall facilitate in-process and / or Pre-delivery inspection by the Representatives of the Purchaser, as and when, the same is required by the Purchaser.

4.5.4 Installation & Commissioning

- i. The bidder shall carefully consider the scope of work and provide a solution that best meets the project's requirements.

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- ii. The bidder shall carefully consider the solutions it proposes and explicitly mention the same in the technical proposal. The implementation of the application software shall follow the procedure mentioned below:
- iii. Software Products (Configuration and Customization): In case implementation agency proposes software products the following need to be adhered:
 - a. Bidder shall be responsible for supplying the application and licenses of related software products and installing the same so as to meet project requirements.
 - b. Implementation agency shall have provision for procurement of User licenses in a staggered manner as per the actual requirement of the project.
 - c. Bidder shall perform periodic audits to measure license compliance against the number of valid End User software licenses consistent with the terms and conditions of license agreements, volume purchase agreements, and other mutually agreed upon licensed software terms and conditions.
 - d. Bidder shall report any exceptions to license terms and conditions at the right time to AMC School Board. However, the responsibility of license compliance solely lies with the implementation agency. Any financial penalty imposed on AMC School Board during the contract period due to license non-compliance shall be borne by implementation agency.
- iv. Bidder will be responsible for installation & commissioning of all software & hardware devices as per the project timeline defined in this RFP. Also, if there is requirement to add specific items (Hardware, software or networking components) which are necessary to implement their solution shall be approved by the client.
- v. Bidder is required to note that all the hardware, tools, software installations and its maintenance will be responsibility of the bidder to make their solution live at all the mentioned sites.
- vi. Bidder will be responsible for all the supply, installation, commissioning, cabling, setup and configuration of the units in terms of hardware and software utilities to make the system end-to-end go live for central learning lab, smart classrooms and labs.
- vii. It is responsibility of bidder to get requisite approval from officials of AMC School Board and from govt. and private entities for installation and commissioning work.
- viii. The purchaser may give permission to bidder for installation & commission in parts of total awarded work. It will be decided by AMC School Board based on learning observed during implementation phase.
- ix. If there is any delay in meeting the timeline for installation & commissioning due to non-availability of approval or reasons not attributed to bidder performance; the bidder needs to inform AMC School Board and AMC school board officials in writing in advance on minimum 15 days.
- x. Bidder will be responsible for the maintenance and support for all the equipment and software provided at the mentioned sites for the duration of contract period.
- xi. For any change/ movement requirement, the bidder will be responsible for re-installation of equipment, connectivity, cabling, and configuration of the solution considering additional installation cost as mentioned in BOM.
- xii. For any additional request the purchaser will place the request to the bidder. The per unit rates specified by the bidder as a part of this proposal submission will remain valid for the complete contract period and no variation (except for the taxes / duties) will be considered by the purchaser.
- xiii. The contractual terms of service shall be monitored on a monthly basis as per the individual service requirements. However, if the performance of the system/ services is degraded significantly at any given point of time during the contract and if the immediate measures are not implemented and issues are not rectified to the complete satisfaction of the AUTHORITY or an agency designated by it, then the AUTHORITY shall have the right to take appropriate punitive actions including termination of the contract.

4.5.5 Reporting, Database Administration and Trouble Shooting

- i. The bidder will need to provide daily, weekly, monthly and periodic reports to AMC School Board and AMC School Board as defined by authority.
- ii. Successful Bidder shall maintain data regarding entitlement for software & hardware upgrades,

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- enhancements, refreshes, replacements and maintenance.
- iii. Undertake end-to-end management of database on an on-going basis to facilitate smooth functioning and optimum utilization including regular database backup and periodical testing of backup data, conducting configuration review to tune database, maintaining the necessary documentation and managing schemes to database schema, disk space, user roles, and storage.
- iv. The bidder shall allow the AMC School Board or its nominated agency access to information reasonably required to define the then current mode of operation associated with the provision of the services to enable the AMC School Board to assess the existing services being delivered.
- v. Promptly on reasonable request by the AMC School Board, the implementation agency shall provide access to, and copies of all information held or controlled by them which they have prepared or maintained in accordance with the agreement relating to any material aspect of the services (whether provided by the implementation agency or sub-contractors appointed by the implementation agency).
- vi. The AMC School Board shall be entitled to copy of all such information. Such information shall include details pertaining to the services rendered and other performance data. The implementation agency shall permit the AMC School Board or its nominated agencies to have reasonable access to its employees and facilities, to understand the methods of delivery of the services employed by the implementation agency and to assist appropriate knowledge transfer

4.5.6 Testing & Go-Live of the solution

The AMC School Board shall appoint an agency/officials/team who shall be responsible for conducting the user acceptance test & performance and security audit of the solution. The agency/officials/team appointed by the AMC School Board shall conduct audit and make recommendations on system before Go-Live. The bidder shall incorporate and make changes in solution.

The testing and audit shall be performed on the below mentioned aspects.

- a. Functional Testing: Ensuring that the application functionality as described by the AMC School Board works adequately. The functional testing of application will necessarily be core responsibility of the bidder.
- b. User Acceptance Test on all software modules & digital content.
- c. Acceptances Test of all hardware & support infrastructure
- d. Performance Testing - Ensuring that the application meets expressed performance requirements by using performance test tools and performance monitoring tools.
- e. Security Testing - Testing for exploitable application security weaknesses that undermine the application security or the security of the infrastructure.
- f. Penetration Testing
- g. Vulnerability Testing
- h. Testing and Measurement of all the items installed under the project.

The illustrative deliverables for this activity are mentioned below.

- i. First Round Testing & Audit Report
- ii. Rectified solution and submission of next round of testing & audit
- iii. Next Round Testing & Audit Report
- iv. If required, rectified solution and submission of next round of testing & audit
- v. Compliance Confirmation by purchaser

All the mentioned activities under scope of work shall get completed before the commencement of go-live.

- a. Bidder shall prepare and agree with AMC School Board, the detailed plan for Go-Live (in-line with AMC School Board's implementation plan).
- b. Bidder shall define and agree with AMC School Board, the criteria for Go-Live.
- c. Bidder shall ensure that all the data migration is done from existing systems if required.
- d. Bidder shall submit signed-off UAT report (issue closure report) ensuring all issues raised during UAT are being resolved prior to Go-Live.

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- e. Bidder shall ensure that Go –Live criteria as mentioned in User acceptance testing of Project is met and implementation agency needs to take approval from AMC School Board team on the same.
- f. Go-live of the application shall be done as per the finalized and agreed upon Go-Live plan.

The key activities that need to be performed before go-live of the solution are as follows:

- i. Business readiness check before handing over to user.
- ii. Training of all modules to respective school officials (As and when requested during the tenure of the project)
- iii. Exit Management and Knowledge Transfer Plan
- iv. Mobilization of manpower for hand holding support
- v. Data Migration both old and new to solution
- vi. Approval from AMC School Board

The users will operate the system for 4 weeks and will report any issues faced, the Bidder shall be responsible to fix the issues within stipulated time. The AMC School Board will authorize the go-live of the solution.

The Go-live shall be issued, only after completion of all the allied activities at each of the schools. Further, AMC school board may provide an interim Go-live at their own discretion. However, please note that if in case, either the school is not finalized or the readiness is not there at the school, AMC school board may provide Go-live for the remaining school, where all the activities are completed.

4.5.7 Preparation of Standard Operating Procedures

Bidder shall prepare Standard Operating Procedures and Practices for operating and maintaining the solution, risk mitigation strategies, periodic status reports, training guidelines and modules, knowledge management protocol. Bidder has to submit the SOPs and risk mitigation strategies to the AMC School Board for approval. Bidder shall also have to submit Do's and Don'ts for the entire solution being installed.

4.5.8 Training & Capacity Building

- i. The bidder is required to train a set of Master Trainers as part of 'Training of Master Trainers (ToMT) program to effectively use the hardware and software of the smart school during implementation phase.
- ii. The participants will include principals, administrative staff and nominated officials by AMC school board for implementation phase training.
- iii. The Bidder shall prepare detailed training plan for all the users of the system.
- iv. The bidder needs to conduct training either at schools or venue decided by AMC school board.
- v. The training should ensure proper hands-on training is imparted to the designated end-so as to make them well conversant with the functionalities, features and processes built in the Software.
- vi. Along with training manual/user guide needs to be provided by the bidder.
- vii. Bidder shall have to provide such training as and when requested by the AMC school board even during the entire contractual duration.
- viii. The training needs to be completed before Go-Live.

4.6. Role of Project Stakeholders

4.6.1 Successful Bidder

- i. Delivery of project scope described in this RFP for both implementation phase and O&M phase.
- ii. Ensuring the achievement of project objective & envisaged outcome
- iii. Deployment of competent project team as per the requirement.
- iv. Delivery of quality product and services.
- v. Methodical and Result Oriented Project Management Approach & Technique.
- vi. Adherence to project timeline.
- vii. Accurate and timely reporting and information management.
- viii. Co-ordination and teamwork with project stakeholders to deliver the objective of project.
- ix. Adherence to code of conduct, culture and discipline of AMC School Board, AMC School Board, AMC and other organization/individual working on this project.

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- x. Project office and warehouse in Ahmedabad for daily functioning and storage of equipments, parts and material under project.
- xi. Signing of contract with AMC School Board & submission of PBG.
- xii. Support in carrying out inspection, audit as well as measurement at all the schools envisaged under this school.

4.6.2 AMC School Board

- i. Support to successful bidder in delivery of project scope and meeting the objective & envisaged outcome.
- ii. Review, approval, and suggestions on deliverables.
- iii. Locations, list of schools for delivery of project scope.
- iv. School building, Power and utility connection at project site.
- v. On demand of bidder, access to relevant data and approval for visit, meetings and work in schools.
- vi. List of teachers for training.
- vii. Permission to work in AMC Schools and office premises.
- viii. Approval on work completed & billing request raised by bidder.
- ix. Approval on attendance of project team deployed by bidder.
- x. Participation and approval on testing, UAT and Go-Live of project.
- xi. Review of project progress and report to AMC School Board in case of non-performance or deviation from RFP.

4.7. Scope for Operation & Maintenance (O&M) Period

As part of its scope of work the successful bidder shall provide 3 years of Post Implementation Operational & Maintenance (O&M) Support. Bidder shall also have to have 3 years of comprehensive on-site warranty from respective OEM to enable AMC school board to have seamless services during the O&M phase of the project.

There is no separate cost to be quoted for Operation and Maintenance phase by the bidder as part of the commercial bid against this bidding document. Bidders are requested to factor such cost in their Capital Expenditure (CAPEX) price bid only. Further, while making the final payment pertaining to the implementation phase of this project, 10% of CAPEX per smart school shall be withheld by AMC school board. Remaining 10% (i.e., 3 years from the date of Go-Live) amount of Capex to be paid in equal amount at the end of each quarter for the duration of contract from the Go-live date. Amount pertaining to the violation of SLA terms, as stated in this document shall be levied from quarterly bill payment of vendor. If such amount is not paid by the implementation agency, same shall be invoked from their Performance Bank Guarantee. Amount pertaining to the violation of SLA terms, as stated in this document shall have to be paid by the bidder within 45 days of such intimation. If such amount is not paid by the implementation agency, same should be invoked from their Performance Bank Guarantee.

If the performance of the bidder is not satisfactory during the O&M phase of the project, Performance Bank Guarantee (PBG) shall be invoked by the AMC school board and the amount kept on hold shall not be released to the implementation agency.

During the O&M Phase of the project, successful bidder shall be required to carry out various activities such as: Routine Maintenance of various Science and Mathematics working model, 3D educational chart, Smart Panel, Chromebook, STEM and Robotics lab infrastructure and all other modules procured under this RFP. All the procured software's support should also be provided during this O&M period including any requirement pertaining to licenses as well. No additional payment shall be made by AMC school board during the O&M phase of the project. License should be perpetual in nature as well.

Bidder should meet the SLA criteria defined in this RFP and ensure that routine preventive maintenance is also taken care of over and above the restoration of various models turns into non-working mode.

Bidder should provide all the products with 3 years of On-site warranty support to AMC school board. Bidder may be asked to produce relevant documents in this regard by the AMC school board during the declaration of Go-Live / before the commencement of O&M phase / at relevant stage of the project.

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During the culmination of the Operations and Maintenance (O&M) phase, the vendor is required to furnish calibration certificates for all operational models within the Science and Mathematics Lab, Robotics Lab, and Future Class. Given that the O&M period spans three years, the vendor is obligated to submit the certificates no later than six months prior to the conclusion of the O&M period. The consumable items needed for all the labs should be provided by the vendor during O&M phase.

The vendor is required to deploy a team of four personnel at the school during the Operations & Maintenance (O&M) phases, with each team member responsible for one of the four components specified in the Request for Proposal (RFP). Payment prior to go-live will be disbursed upon the submission of system-generated attendance records for the deployed team. Likewise, during the O&M phase, quarterly payments will be released based on the attendance records for the respective quarter. Additionally, before the project commences, the vendor must submit a manpower deployment list, including names and contact details, for each assigned school. One team is permitted to manage a maximum of ten schools within the project.

4.7.1 Manpower Deployment for O&M Phase

- i. The bidder should deploy **at least four resources per 10 school at onsite** during the O&M phase of the project. Project Manager shall coordinate with AMC School Board for any concerns related to this project and for updates on day-to-day activities to the department.
- ii. The bidder needs to provide **onsite** Project Manager during the O&M phase of the project. Bidder needs to provide their CV to AMC school board in requisite format at the time / before of award of Go-live to the winning bidder.
- iii. The bidder needs to deploy adequate number of team members to cater to the SLAs specified in this RFP for O&M phase.
- iv. The bidder needs to deploy a competent team for O&M phase to execute scope of work defined in RFP. All project team member should be stationed at project location and a proper weekly attendance report should be submitted to AMC School Board with approval from AMC school board.
- v. Resources should remain available from 10 AM to 8 PM on all days except public holidays. Bidder may opt to propose rotation based on the availability / amount of work required from the resource.
- vi. The resource persons should be bonafide member/employee of the concerned company for 3 months. The bidder will be responsible for all the employment terms of these trainers including the service laws i.e. income tax, provident fund, gratuity, pension, LTC, Medical Expenses etc., and will also comply applicable Minimum Wages Act. AMC School Board shall not be responsible of any act of the trainers and also not be liable for any damages/penalty /payment in any form either legal or otherwise.
- vii. It is **mandatory to deploy minimum 28 resources** during the O&M phase at AMC school board location.
- viii. The bidder will ensure that in the event of change of project resources during the course of the project, prior intimation to the AMC School Board and suitable knowledge transfer takes place. Also, the replacement of the resource should be of higher or similar skill set, experience level and shall need to be approved by AMC School Board.
- ix. AMC School Board may arrange interview with proposed project team to understand their suitability for the role; in case of non-fitment the bidder will have to replace the resource with higher or similar skill set, experience level and shall need to be approved by AMC School Board.
- x. In case of non-availability of any team member for more than two (2) working days without informing AMC School Board, the bidder will need to replace the resource with same or higher qualification and experience.
- xi. All members of project team need to be available from the start of Go-Live date. In case of partial Go-Live the requirement of project team shall be change accordingly.
- xii. The selected bidder is required to deploy a dedicated team and provide comprehensive details of each team member, including their contact information, to the school board. Additionally, the vendor must ensure the submission of mandatory attendance records for these team members within the schools, which is a prerequisite for the processing of the Operations and Maintenance (O&M) bill.

Minimum qualification of resources to be deployed during the implementation phase has been mentioned in

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below table:

Sr No	Name of Position	No. of Resources	Qualification	Years of Exp.	Area of Experience
1	Project Manager	1	B.E. / B.Tech. / M.C.A. in IT or Computer Science/ Computer engineering with MBA	10	Relevant experience in planning, design, execution, monitoring, controlling and closure of Smart School / large scale IT / ICT projects.
2	Senior Civil Engineer	8	Diploma/B.tech/B.E. in civil engineering	8	Relevant experience in planning, design, execution, monitoring, controlling and closure of large-scale Civil projects.
3	Installation & Field Team	20	Bachelor/master's degree in Math/Statistics/Computer science/ IT /Computer Engineering/ Education/Development Studies	2	Relevant experience in deployment of smart components in ICT projects. Bidders need to submit system generated attendance for the team deployed for Installation.

Note: During O&M Phase, the bidder shall require deploying above manpower. Please note that no separate payment shall be made to the SI for the deployment of manpower during O&M phase. In the event that non availability of above resources, a penalty of INR 5000/- per day for Project Manager and INR 3000/- per day for all other non-deployed resource will be imposed for each day of absence of the required resources. This penalty will be deducted from the bidder's quarterly bill amount.

4.7.2 Training & Capacity Building during O&M Phase

Training of all stakeholders for smart school project is essential for ensuring that the solution developed is actually put to use. The bidder needs to ensure proper hands-on training is imparted to the designated end-so as to make them well conversant with the functionalities, features and processes built in the Software. Along with training manual/user guide needs to be provided by the bidder.

The Bidder is responsible for providing training to all the teacher, principals & administrative staff and provides required support as part of Capacity building as and when requested from the authority

4.7.3 Deliverables

The operational aspects of project need to be handled by the implementation agency including maintaining weekly statuses, minutes of the meetings, weekly/monthly/project plans, etc. Relevant stake holders will meet formally on a weekly basis covering, at a minimum, the following agenda items:

- Project Progress
- Delays, if any – Reasons thereof and ways to make-up lost time, Issues and concerns
- Performance and SLA compliance reports.
- Quarterly SLA report
- Current scenario of each site with actual image of site at an interval of 3 months for each of the smart school
- Unresolved and escalated issues.
- Project risks and their proposed mitigation plan
- Discussion on submitted deliverable.
- Timelines and anticipated delay in deliverable if any

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- Bidder needs carry out colour work (on need basis) as per the instruction of AMC authority and payment shall be made as per tender rate. However, the colour work should last for minimum 3 Years, no payment will be made if the colour is required due to poor quality work within 3 Years.
- Bidder shall have to ensure necessary / requisite touch-ups are carried out where the color work has affected due to one or the other reason at each of the smart school.
- Any other issues that either party wishes to add to the agenda

During the customization and implementation phase, there may be a need for more frequent meetings and the agenda would also include:

- Module development status
- Testing results
- IT infrastructure procurement and deployment status
- Status of setting up/procuring of the DC hosting
- Any other issues that either party wishes to add to the agenda.

4.7.4 Project Monitoring and Reporting

- a. The implementation agency shall circulate written progress reports at agreed intervals to AMC School Board and other stakeholders. Project status report shall include Progress against the Project Management Plan, status of all risks and issues, exceptions and issues along with recommended resolution etc.
- b. Other than the planned meetings, in exceptional cases, project status meeting may be called with prior notice to the implementation agency. AMC School Board reserves the right to ask the implementation agency for the project review reports other than the standard weekly review reports.
- c. The bidder is required to establish and provide a 24/7 toll-free number to the school board and the principals of the respective schools, facilitating direct contact for assistance or issue resolution concerning the procured items as outlined in the tender. This dedicated contact must also generate a ticket number for each complaint, enabling effective ticket management and tracking of resolved and pending issues related to the smart school infrastructure.

4.7.5 Risk and Issue Management

- a. The implementation agency shall develop a Risk Management Plan and shall identify, analyze and evaluate the project risks, and shall develop cost effective strategies and action plans to mitigate those risks.
- b. The implementation agency shall carry out a Risk Assessment and document the Risk profile of AMC School Board based on the risk appetite and shall prepare and share the AMC School Board Enterprise Risk Register. The implementation agency shall develop an issues management procedure to identify, track, and resolve all issues confronting the project. The risk management plan and issue management procedure shall be done in consultation with AMC School Board.
- c. The implementation agency shall monitor, report, and update the project risk profile. The risks should be discussed with AMC School Board and a mitigation plan be identified during the project review/status meetings. The Risk and Issue management should form an agenda for the Project Steering Committee meetings as and when required.

4.7.6 Planning and Scheduling

The implementation agency shall prepare a detailed schedule and plan for the entire project covering all tasks and sub tasks required for successful execution of the project. The implementation agency has to get the plan approved from AMC School Board at the start of the project and it should be updated every week to ensure tracking of the progress of the project.

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The project plan should include the following:

- a. The project breaks up into logical phases and sub-phases
- b. Activities making up the sub-phases and phases
- c. Components in each phase with milestones
- d. The milestone dates are decided by AMC School Board. Implementation agency cannot change any of the milestone completion dates. Implementation agency can only propose the internal task deadlines while keeping the overall end dates the same. Implementation agency may suggest improvement in project dates without changing the end dates of each activity.
- e. Key milestones and deliverables along with their dates including those related to delivery and installation of hardware and software
- f. Start date and end date for each activity
- g. The dependencies among activities.
- h. Resources to be assigned to each activity

4.7.7 Warranty Support Service

As part of the warranty services, it is proposed that the bidder shall provide:

- i. Successful bidder shall provide performance warranty in respect of performance of the installed application to meet the performance requirements and service levels in the RFP.
- ii. Comprehensive & On-site Warranty and Annual Maintenance of the all the product procured under this RFP for entire project duration i.e., three (3) years from the date of Go-Live.
- iii. Bidder needs to procure all the licenses required to run the project components installed under this project. No additional charges shall be paid to the bidder during the O&M phase.
- iv. It is the responsibility of bidder to perform all activities, documentation and procedure for insurance of product.
- v. Overall, it is the responsibility of bidder to ensure the proper functioning of product for entire project duration.
- vi. SI shall have to replace the product with equal or higher specification, if in case any product is failing on a repetitive basis and / or disrupts the routine business requirements of AMC School Board at no additional cost to AMC School Board
- vii. The SI should either repair the equipment or replace the equipment with existing or new make (brand) matching with same functional & technical specification /higher specifications (that must be approved by AMC School Board before installation), to ensure that the proposed system/solution is operational. Any equipment is either breakdown, damaged due to the negligence of SI, or any technical reasons, it should be replaced with new equipment without any additional cost to AMC School Board for the entire contract duration.
- viii. In case the quoted item is not available in the market, the SI shall have to supply higher Version or New Make (brand) matching with same functional and technical specifications with prior approval of AMC School Board at no extra cost. No “End of Life”/ refurbished / repaired items shall be supplied & installed either temporary or permanent basis.
- ix. Onsite comprehensive (including all Hardware, Software, network cabling for all types of defects and problems) maintenance services shall be provided by the Supplier / OEM during the period of warranty and Comprehensive Annual Maintenance Contract (CAMC). In case the supplier fails to rectify the problem within required timelines including holidays then OEM shall be required to provide second level support, service to rectify the problem or replace the faulty system or part thereof. The performance of the system shall be measured, and applicable penalties shall be calculated and imposed on the bidder, in case the performance is below the required thresholds.
- x. The contractual terms of service shall be monitored on a monthly basis as per the individual service requirements. However, if the performance of the system/ services is degraded significantly at any given point of time during the contract and if the immediate measures are not implemented and issues are not rectified to the complete satisfaction of the AUTHORITY or an agency designated by it, then the AUTHORITY shall have the right to take appropriate punitive actions including termination of the contract.

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- xi. Monitor the available Updates of versions, patches etc.
- xii. Measure that the warranty complies with the agreed Technical Standards, Security Requirements, Operating Procedures, and Recovery Procedures.
- xiii. Requirements, Operating Procedures, and Recovery Procedures.
- xiv. A comprehensive warranty support and on-site free service warranty for the entire contract period from the date of Go Live. Bidder shall obtain the minimum of five-year product warranty and five year onsite free service warranty on all licensed software, computer hardware and peripherals, networking and other equipment. Bidder shall also be responsible for infrastructure maintenance of all the locations.
- xv. Bidder shall make partnership with OEMs for in build warranty support with products.
- xvi. Bidder shall provide the comprehensive manufacturer's warranty in respect of proper design, quality and workmanship of all hardware, equipment, accessories etc. covered in the scope. IA must warrant all hardware, equipment, accessories, spare parts, and software etc. procured and implemented against any manufacturing defects during the warranty period.
- xvii. Bidder shall provide the performance warranty in respect of performance of the installed hardware and software to meet the performance requirements and service levels.
- xviii. Bidder should upgrade Application Software/ any licensed software / Database to latest versions of system software for application and database servers as required.
- xix. Mean Time between Failures (MTBF) - If during contract period, any equipment has a hardware failure on four or more occasions in a period of less than three months or six times in a period of less than twelve months, it shall be replaced by equivalent or higher-level new equipment by the Bidder at no cost to the AMC School Board. For any delay in making available the replacement and repaired equipment for inspection, delivery of equipment or for commissioning of the systems or for acceptance tests / checks on per site basis, AMC School Board reserve the right to charge a penalty.
- xx. During the warranty period IA shall maintain the systems and repair / replace, at no additional charge to the AMC School Board, all defective components that are brought to the IA's notice at the installed sites.
- xxi. The Bidder shall as far as possibly ensure that the equipment is repaired at site.
- xxii. Warranty should not become void, if AMC School Board buys, any other supplemental hardware from a third party and installs it within these machines under intimation to the Bidder. The entire responsibility for providing onsite support and getting services from OEM for all such procurements by the AMC School Board will remain with Bidder.
- xxiii. The Bidder shall carry out Preventive Maintenance (PM), including cleaning of interior and exterior, of all hardware and testing for virus etc., if any, and should maintain proper records at each site for such PM. Failure to carry out such PM will be a breach of warranty, and the warranty period will be extended by the period of delay in PM.
- xxiv. Bidder shall monitor warranties to check adherence to preventive and repair maintenance terms and conditions of all equipment's and components.
- xxv. The IA shall ensure that the warranty complies with the agreed Technical Standards, Security Requirements, Operating Procedures, and Recovery Procedures, as defined by Government.
- xxvi. Bidder shall have to stock and provide adequate onsite and offsite spare parts and spare component to ensure that the uptime commitment as per SLA is met.
- xxvii. Any component that is reported to be down on a given date should be either fully repaired or replaced by temporary substitute (of equivalent configuration) within the time frame indicated in the Service Level Agreement (SLA).
- xxviii. The Bidder shall develop and maintain an inventory database to include the registered hardware warranties.

4.7.8 Exit Management Plan

- i. The implementation agency shall provide the AMC School Board or its nominated agency with a recommended exit management plan ("Exit Management Plan") which shall deal with at least the following aspects of exit management in relation to the MSA as a whole and in relation to the Project Implementation, and the Operation and Management SLA.
 - a. A detailed program of the transfer process that could be used in conjunction with a replacement implementation agency including details of the means to be used to ensure continuing provision of the

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services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer.

- b. Plans for the communication with such of the implementation agency 's sub-contractors, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on the AMC School Board 's operations as a result of undertaking the transfer.
 - c. (If applicable) proposed arrangements for the segregation of the implementation agency 's networks from the networks employed by AMC School Board and identification of specific security tasks necessary at termination.
 - d. Plans for provision of contingent support to AMC School Board, and replacement implementation agency for a reasonable period after transfer.
- ii. The implementation agency shall re-draft the Exit Management Plan annually thereafter to ensure that it is kept relevant and up to date.
 - iii. Each Exit Management Plan shall be presented by the implementation agency to and approved by the AMC School Board or its nominated agencies.
 - iv. The terms of payment as stated in the Terms of Payment Schedule include the costs of the implementation agency complying with its obligations under this Schedule.
 - v. In the event of termination or expiry of MSA, and Project Implementation, each Party shall comply with the Exit Management Plan.
 - vi. During the exit management period, the implementation agency shall use its best efforts to deliver the services.
 - vii. Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule.
 - viii. Exit Management plan shall be furnished in writing to the AMC School Board or its nominated agencies within 90 days from the Effective Date of this Agreement.

SECTION: 5 DELIVERABLE, TIMELINE & PAYMENT PROCESS

5.1 Project Deliverables, Timeline and Payment Process

The total duration of the Project shall be of 4 (four) months. The AMC School Board may provide multiple extensions to the Implementation Bidder on the same terms and conditions under original agreement after completion of project duration.

Primary School upgradation to Smart School in Ahmedabad City.

To – Date of issuance of Work Order to the winning bidder

Sr No	Milestone	Timeline	Deliverable	Payment
1.	Requirement Gathering & Submission of Documents <ul style="list-style-type: none"> ▪ As-Is Study ▪ School-wise Detailed implementation plan 	To + 1 weeks	Submission of all deliverables & report to AMC School Board	0
2.	Material Delivery as per the updated quantity derived in the requirement gathering	To + 6 weeks	Delivery Challan Report & Post-Dispatch Inspection & Acceptance Report	70% of CAPEX
3.	Installation & Commissioning of all hardware & software items with Testing & Customization of hardware, software product as per RFP and client requirement.	To + 14 weeks	Installation and Commissioning Sign-off report	10% of CAPEX
4.	User Acceptance & Go-Live with Dashboard (T1)	To+ 16 weeks	User Acceptance Test / Final Acceptance Test report	10% of CAPEX

To ensure the performance of vendor during operation and maintenance phase AMC School board will release remaining 10% of payment during O&M phase (i.e., 3 years from the date of Go-Live) through equal quarterly payment.

Amount pertaining to the violation of SLA terms, as stated in this document shall be levied from quarterly bill payment of vendor. If such amount is not paid by the implementation agency, same shall be invoked from their Performance Bank Guarantee. While making the final Bidder is required to provide Comprehensive and on-site Warranty Support for 3 years from the date of Go-live. *(Please refer Section 4.8 Scope of Operation & Maintenance period)*

Note:

- To is date of award of LOI/LOA/Work Order i.e., start of the project.
- T1 is the date of start of operations after Go – Live based on the agreed and approved Implementation Plan with AMC School Board.
- The payment will be made as per the quantities defined in the financial bid of this RFP.
- AMC School Board at its discretion may or may not give work order for any or all items quoted by the selected bidder. The contract value, PBG, Scope of Work and other associated terms will be revised accordingly.
- AMC School Board may issue commissioning and Go-Live approval in parts for allotted work.
- Part commissioning and Go-Live will be based on recommendations of AMC School Board for purpose of better use of deployed software and hardware solutions. In such cases the bidder will have to initiate the services for O&M phase and may raise the request of payment on quarterly basis.
- However, it has been assumed that the work (for all 75 schools) will be allotted under one work order. In case of change in allotted work the timeline and payment terms shall also be revised accordingly.
- The payment will be done as per the quantities defined in the financial bid of this RFP.
- The disbursement of the final invoice amount will be affected in favor of the bidder contingent upon their successful completion of the development and implementation of the dashboard, inclusive of all specified activities enumerated therein.

Payment for additional items

AMC School Board may release the work order for the additional work of 10 smart schools in totality or part there of any selected items from BOQ to the successful bidder the additional work will be given based on requirement and approval of AMC School Board Authority on rate discovered under the price bid of this tender.

Based on the final project plan or during the project duration if there is need for additional items and there is variation in the quantities (limited to thirty percent of quantity discovered in financial bid) as defined in the financial bid, implementation bidder will be required to arrange additional items.

Payment for such additional items will be made separately by AMC School Board.

In such case of any additional requirement, payment will be made based on the rate provided in the financial bid of the Implementation Bidder.

Payment mechanism to be followed for additional items is given below:

5.2 Service Level Agreement & Penalty

The purpose of this Service Level Agreement (hereinafter called SLA) is to clearly define the levels of service which shall be provided by the successful bidder to End Customer and AMC School Board for the duration of the contract. The SLA is intended to establish a clear set of measurable parameters against which the performance of the Implementation Bidder can be measured.

- The bidder needs to maintain a reliable database to monitor the project progress and their performance against the SLAs.
- Bidder needs to report the compliance / non-compliance to SLAs on weekly and monthly basis.
- Bidder needs to deploy a system (web based or portal or mobile application or project management software) for real time project progress monitoring and should share access with designated officials from AMC School Board.
- Penalties shall be levied only for the reasons attributable to the implementing agency. Any risks / issues foreseen by the implementing agency should be brought to the notice of the AMC School Board immediately. If no such issues / risks are highlighted by the implementing agency, then it is expected that no delays will be there in the implementation schedule.

5.2.1 SLA & Penalty for Implementation phase

Definition	
Service Level Requirement	All the deliverables defined in RFP must be submitted On-time on the date as mentioned in the contract with no delay.
Measurement of Service Level Parameter	To be measured in Number of weeks of delay from the timelines mentioned in the section “Project Timelines”
Penalty for non-achievement of SLA Requirement	Any delay in the delivery of the project deliverables (solely attributable to vendor) would attract a liquidated damage per week of 0.5% of the project cost of the unexecuted / undelivered portion
Penalty for delay in O&M Reporting	The bidder is required to submit the Operations and Maintenance (O&M) report commencing from the project Go-live date as communicated by the vendor, marking the initiation of the O&M period. A delay in submission of the report beyond one week will incur a penalty of 0.5% of the quarterly amount per week . Additionally, if the bidder submits reports for two or more quarters simultaneously, a penalty of 10% on the total bill , excluding the current quarter, will be imposed.

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Note:

- To is date of award of LOI/LOA/Work Order i.e., start of the project.
- Maximum penalty is restricted to 10% of the CAPEX for project implementation phase and 10% of the OPEX for O&M phase. Non-compliance to SLA beyond the penalty limit defined for CAPEX & OPEX phase may lead to termination of contract on discretion of AMC School Board.
- T1 is the date of start of operations after Go – Live based on the agreed and approval from AMC School Board.
- Penalties shall be levied only for the reasons attributable to the implementation agency. Any risks/ issues foreseen by the implementation agency shall be brought to the notice of the AMC School Board immediately. If no such issues/risks are highlighted by the implementation agency, then it is expected that no delays will be there in the implementation schedule
- All works under or in course of execution or executed in pursuance of the contract shall at all times, be open to the inspection and supervision of AMC School Board or appointed representatives.
- If any hardware has hardware failure on four or more occasions in a quarter, it shall be replaced by equivalent new equipment by the vendor at no cost to AMC School Board within 10 days from the date of last failure. Till the replacement is provided, the original equipment has to be kept in running condition or else a standby provided, and all services restored. However, penalties for breakdown as per SLAs defined in the tender will be applicable.
- The penalties as above will be recovered from any payment due to the Successful bidder.

Partial/Full damage to hardware

- a. The bidder should be responsible for operation and maintenance of items, which have been installed/constructed/supplied by them for entire contract duration.
- b. A comprehensive warranty support and on-site free service warranty for the entire contract period from the date of Go Live for all products.
- c. In case of Partial/ Full damage or loss of the equipment due to reasons beyond the control of bidder performance like Theft, intentional damage by mishandling, Fire etc., they should procure an insurance for major items. The Bidder should be in a position to supply working standby equipment with same configuration or higher with all services restored, as if it is a normal breakdown.
- d. In the event of intentional damage, mishandling, or theft the bidder should promptly notify (within 24 hrs.) the school principal and AMC school board. The replacement of such damages shall be done either through insurance or as per price discovered in the tender.
- e. Hardware installed through this Project would become an important public asset. During the contract period of the Project the bidder shall be required to repair / replace any equipment if stolen / damaged/faulty. Appropriate insurance cover must be provided to all the equipment supplied under this project
- f. In case of Partial/ Full damage or loss of the equipment due to reasons beyond the control like Theft, intentional damage by mishandling, Fire etc., the Bidder should be in a position to supply working standby equipment with same configuration or higher with all services restored, as if it is a normal breakdown.
- g. In such a case the Bidder will have to make provision for the supply of the new hardware against the lost/ damaged equipment/ component without any additional cost to AMC school board. If the Bidder does not provide standby equipment, the penalties for breakdown as per SLAs will be imposed.
- h. Service Engineers/ Representatives of Bidder shall invariably carry their identity cards with them, without which they will not be allowed to access department Systems. Service Engineers of the Bidder shall have access to the Computer Systems/ Backup Solution only after obtaining clearance from department authorized officials. No component of the System/ data/ log information will be taken out of department premises without clearance from authorized Officials of the department.

5.2.2 SLA & Penalty for Operation & Maintenance Phase

During the Operation & Management period the implementation agency is expected to keep the Technology and Performance levels above the specified level. It will be the responsibility of the implementation agency to design and code the software to ensure application is measurable in terms of uptime and performance.

The application and hardware infrastructure is expected to be in running condition on all days (24*7). If there is a system or software breakdown, all breakdown calls are to be resolved within specified time from the time of complaint made to bidder O&M team. The resolution time is defined based on the criticality of the issue. It would be the responsibility of the successful bidder to log issues / breakdowns related to all application, IT equipment supplied & network connections as part of this project at the AMC schools under the scope of work with the respective OEMs. The complaint shall be extended to O&M team through Call / Message / Email etc. Bidder is expected to provide quick resolution against the same as well.

Sr No	Service level parameter	Baseline Metric	Penalty	Basis for measurement
1	Availability of smart components schools	>90% per quarter	No penalty	The measurement of the component's availability (Future Classroom, Science Lab, STEM and Robotics Lab) will be based on the reports generated through open-source monitoring tools or by tools deployed by bidder/client during the project. (The bidder needs to maintain the O&M activities on weekly basis to determine the O&M performance in case of non-reporting or unavailability of the data, maximum quarterly payment will be livid i.e., Rs. 30,000 per school)
		80-90% per quarter	INR 15,000 on a quarterly evaluation	
		70 – 80%	INR 30,000 on a quarterly evaluation	
		< 70%	May lead to contract termination	
2	Resolution of complaints and queries recorded by school principal/teachers and AMC School Board officials	Within 1 working day	No penalty	The measurement of the component's availability (Future Classroom, Science Lab, STEM and Robotics Lab) will be based on the reports generated through open-source monitoring tools or by tools deployed by bidder/client during the project. (The bidder needs to maintain the O&M activities on weekly basis to determine the O&M performance in case of non-reporting or unavailability of the data, maximum quarterly payment will be livid i.e., Rs. 30,000 per school)
		Within 3 working days	INR 5,000 per instances	
		Within 7 working days	INR 10,000 per instances	
		Within 7+ working days	INR 25,000 per instances	

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Sr No	Service level parameter	Baseline Metric	Penalty	Basis for measurement
				Rs. 25,000 per instances)

Note:

- Maximum penalty is restricted to 10% of the project cost. Non-compliance to SLA beyond the penalty limit defined may lead to termination of contract on discretion of AMC School Board.
- If the breakdown issue cannot be resolved within the above specified time limits, a compatible System of equivalent or higher specifications has to be installed within that period.
- The service requests are to be made between business hours (10.00 Hrs to 20:00 Hrs). Any service request made after 20:00 Hrs will be considered as next working day. AMC Colander to be followed for resource deployment. Additionally, bidder may have to arrange resources on a special case, upon request from AMC school board.
- SLA hours will be counted during the business hours, wherever SLA is hourly based only.
- The successful bidder will have to provide an open-source Enterprise Management System (EMS) or any SLA monitoring at no cost to Ahmedabad School Board to measuring and monitor the operational SLAs.
- Penalties shall be levied only for the reasons attributable to the implementation agency. Any risks/ issues foreseen by the implementation agency shall be brought to the notice of the AMC School Board immediately. If no such issues/risks are highlighted by the implementation agency, then it is expected that no delays will be there in the implementation schedule.
- The penalties as above will be recovered from any payment due to the Successful bidder.

Partial/Full damage to hardware

- a. Hardware installed through this Project would become an important public asset. During the contract period of the Project the bidder shall be required to repair / replace any equipment if stolen / damaged/faulty. Appropriate insurance cover must be provided to all the equipment supplied under this project
- b. In case of Partial/ Full damage or loss of the equipment due to reasons beyond the control like Theft, intentional damage by mishandling, Fire etc., the Bidder should be in a position to supply working standby equipment with same configuration or higher with all services restored, as if it is a normal breakdown.
- c. Service Engineers/ Representatives of Bidder shall invariably carry their identity cards with them, without which they will not be allowed to access department Systems. Service Engineers of the Bidder shall have access to the Computer Systems/ Backup Solution only after obtaining clearance from department authorized officials. No component of the System/ data/ log information will be taken out of department premises without clearance from authorized Officials of the department.

Review of SLA Parameters

The SLA design is based on the scope of services and operational aspects of Implementation Bidder. Due to evolving nature of the proposed project, a review of SLAs will be conducted at the end of three months from the date of go-live of the Implementation Bidder. The purpose of this review is to reassess the SLAs based on the first three months' call volumes. AMC School Board, after thorough analysis of the monthly statistics monitored as per the above mentioned SLA parameters, may consider revision of the SLA parameters and update this agreement. And if the revision occurs, then the revised SLAs would be final and binding for the rest of the term of the contract.

5.2.3 Termination of Contract

Termination of Contract AMC School Board may, without prejudice to any other remedy under this Contract and applicable law, reserves the right to terminate for breach of contract by providing a written notice of 30 days stating the reason for default to the SI and as it deems fit, terminate the contract either in whole or in part in the following ways.

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- i. Termination by Default: for failing to perform obligations under the Contract of if the quality is not up to the specification or in the event of non-adherence to time schedule.
- ii. Termination for Convenience: AMC School Board by written notice sent to the SI, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that the termination is for AMC School Board's convenience, the extent to which performance of the SI under the Contract is terminated, and the date upon which such termination becomes effective.
- iii. Termination for Non-Performance: If the SI fails to deliver any or all of the project requirements / operationalization / go-live / performance parameters (PERFORMANCE STANDARDS) of the project within the time frame specified in the contract; or
 - a. If the SI fails to perform any other obligation(s) under the contract.
- iv. Termination for NCLT proceedings or Insolvency proceedings: The Department may at any time terminate the contract by giving written notice to the bidder(s), if the bidder has NCLT proceedings going them or if the lead bidder(s) becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the bidder(s), provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Department. Bidder agrees to handover all requisite data in terms of code, documents, etc. along with requisite to the office of the AMC School Board identified team in this case.

Prior to providing a notice of termination to the SI, AMC School Board shall provide the SI with a written notice of 30 days instructing the SI to cure any breach/ default of the Contract, if AMC School Board is of the view that the breach may be rectified.

On failure of the SI to rectify such breach within 30 days, AMC School Board may terminate the contract by providing a written notice of 30 days to the SI, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to AMC School Board. In such event the SI shall be liable for penalty/liquidated damages imposed by the AMC School Board. The performance Guarantee shall be forfeited by the AMC School Board.

Consequences of Termination

- In the event of termination of this contract, AMC School Board is entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective continuity of the services which the SI shall be obliged to comply with and take all available steps to minimize the loss resulting from that termination/ breach, and further allow and provide all such assistance to AMC School Board and/ or succeeding vendor, as may be required, to take over the obligations of the SI in relation to the execution / continued execution of the requirements of this contract.
- In the event of termination of this contract, AMC School Board shall have ownership over entire volume of delivered & installed software and hardware irrespective payment made to successful bidder.
- In the event of the SI being unable to service the contract for whatever reason, AMC School Board would evoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of department under the Contract in the matter, the proceeds of the PBG shall be payable to department as compensation for any loss resulting from the Bidder's failure to complete its obligations under the Contract. Department shall notify the Bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the Bidder is in default.
- AMC School Board shall also be entitled to make recoveries from the Bidder's bills, performance bank guarantee, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction, or misstatement.
- All plans, drawings, specifications, designs, reports, other documents prepared by the Vendor and materials for which part delivery payment is made in the execution of the contract shall become and remain the property of AMC School Board/ AMC and before termination or expiration of this contract the SI shall deliver all such documents, prepared under this contract along with a detailed inventory thereof, to AMC School Board/ AMC.

***SECTION: 6 INSTRUCTIONS TO THE
BIDDERS***

6.1 Instructions to the bidder

- Bidders are advised to study all instructions, forms, terms, requirements, and other information in the Bid Documents carefully.
- Every page of the proposal should necessarily be numbered and signed with seal.
- The bidder should not tamper the templates, and file types. If any additional information should be provided in a separate sheet where required.
- Submission of bid shall be deemed to have been done after careful study and examination of the Bid Document with full understanding of its implications.
- The response to this Bid Document should be full and complete in all respects. Failure to furnish all information required by the Bid Documents or submission of a proposal not substantially responsive to the Bid Documents in every respect will be at the bidder’s risk and may result in rejection of its Proposal.
- Additionally, proposals of only those Bidders who satisfy the Conditions of Eligibility, stated herein, will be considered for evaluation by AMC School Board.
- Any past projects where the bidder executed other works in addition to what is asked in Pre-Qualification Criteria in a single order, the bidder should consider only the value of asked project part and highlight only those components.

6.1.1 Purpose of Bid Document

The purpose of this tender is to select bidder to enhance teaching-learning process in municipal schools through use of ICT technology and support infrastructure in Ahmedabad City. This document provides information to enable the bidders to understand the broad requirements to submit their ‘Bids’.

In case a bidding firm possesses the requisite experience, and capabilities required for undertaking the work, it may participate in the selection process individually (the “Sole Firm”) in response to this invitation. The term “Bidder” means the bidding entity for this project.

The way the Proposal is required to be submitted, evaluated and accepted is explained in this RFP.

6.1.2 Proposal Preparation Cost

The bidder is responsible for all costs incurred in connection with participation in this process, including, but not limited to, costs incurred in conduct of informative and other diligence activities, participation in meetings/discussions/presentations, preparation of proposal, in providing any additional information required by AMC School Board to facilitate the evaluation process, and in negotiating a definitive Contract or all such activities related to the bid process. The department will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

This Bid Document does not commit the AMC School Board to award a contract or to engage in negotiations. Further, no reimbursable cost may be incurred in anticipation of award. All materials submitted by the Bidder shall become the property of AMC School Board and may be returned at its sole discretion.

6.1.3 Queries (Online)

A prospective Bidder requiring any clarification on the RFP Document may submit his queries, via email, till 6 pm of pre bid meeting date.

The queries should necessarily be submitted in the following format:

Bidders Request for Clarification		
Name and Address of the Organization submitting request	Name and Position of Person submitting request	Contact Details of the Organization / Authorized Representative

Bidders Request for Clarification

		Tel: Mobile: Fax: Email:
RFP Document Reference (Section No., Page No.)	Content of the RFP requiring clarification	Clarification Sought

Queries submitted post the above-mentioned deadline, or which do not adhere to the above-mentioned format may not be considered.

6.1.4 Amendment of RFP Document

At any time before the deadline for submission of bids, the AMC School Board, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RFP Document by an amendment.

The bidders are advised to visit the, <https://tender.nprocure.com>, www.ahmedabadcity.gov.in on regular basis for checking necessary updates. AMC School Board also reserves the rights to amend the dates mentioned in this RFP for bid process.

In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the AMC School Board may, at its discretion, extend the last date for the receipt of Bids.

6.1.5 AMC School Board’s rights to terminate the selection process

AMC School Board may terminate the RFP process at any time and without assigning any reason. AMC School Board makes no commitments, express or implied, that this process will result in a business transaction with anyone.

This RFP does not constitute an offer by AMC School Board.

The bidder’s participation in this process may result in AMC School Board selecting the bidder to engage in further discussions and negotiations toward execution of a contract. The commencement of such negotiations does not, however, signify a commitment by the AMC School Board to execute a contract or to continue negotiations. AMC School Board may terminate negotiations at any time without assigning any reason.

6.1.6 Right to reject any proposal

Notwithstanding anything contained in this RFP, AMC School Board reserves the right to accept or reject any Proposal and to annul the Selection Process and reject all Proposals, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons, therefore.

Besides other conditions and terms highlighted in the Tender Document, bids may be rejected under following circumstances:

General Rejection criteria:

- i. Conditional Bids - If the information provided by the Bidder is found to be partial/ incorrect / misleading / fraudulent at any stage / time during the Tendering Process.
- ii. Any effort on the part of a Bidder to influence the bid evaluation, bid comparison or contract award decisions.
- iii. Bids received after the prescribed time & date for receipt of bids.
- iv. Bids without signature of person (s) duly authorized on required pages of the bid.
- v. Bids without power of attorney/ board resolution or its certified true copy.
- vi. Technical Rejection criteria
- vii. Bid not sealed and packaged in envelope as asked in RFP.
- viii. Bidders not complying with the Eligibility Criteria given in this Tender
- ix. Technical Bid containing commercial details.

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- x. Revelation of Prices in any form or by any reason before opening the Commercial Bid.
- xi. Failure to furnish all information required by the Tender Document or submission of a Bid not substantially responsive to the Tender Document in every respect.
- xii. Bidders not quoting for the complete scope of work as indicated in the Tender Documents, addendum /corrigendum (if any) and any subsequent information given to the Bidder.
- xiii. Bidders not complying with the Technical and General Terms and conditions as stated in the Tender Documents.
- xiv. The Bidder not confirming unconditional acceptance of full responsibility of providing services in accordance with the scope of work and Service Level Agreements of this Tender.

Commercial Rejection Criteria

- i. Incomplete price Bid.
- ii. Price Bids that do not conform to the Tender's price bid format.
- iii. Total price quoted by the Bidder does not include all statutory taxes and levies applicable.
- iv. If there is an arithmetic discrepancy in the commercial Bid calculations the Technical Committee shall rectify the same. If the Bidder does not accept the correction of the errors, its Bid may be rejected.
- v. Misrepresentation/ improper response by the Bidder may lead to the disqualification. If such disqualification / rejection occurs after the Proposals have been opened and the highest-ranking Bidder gets disqualified / rejected, then AMC School Board reserves the right to consider the next best Bidder or take any other measure as may be deemed fit in the sole discretion of AMC School Board, including annulment of the Selection Process.

6.1.7 Bid Fee and Earnest Money Deposit (EMD) and amount

- The bidder should pay non-refundable Bid Fee of Rs. 30,000/- in favor of "The Chairman, Nagar Prathmik Shikshan Samiti Ahmedabad" payable at Ahmedabad, from Nationalized or Scheduled Banks except Co-operative Banks, payable at Ahmedabad. The Bid fees shall be in the form of a Demand Draft only.
- The bidder should also pay bid security Earnest Money Deposit (EMD) of Rs. 3,00,00,000/- in favor of "The Chairman, Nagar Prathmik Shikshan Samiti Ahmedabad" from Nationalized or Scheduled Banks except Co-operative Banks, payable at Ahmedabad. The EMD shall be in the form of DD or BG with validity of 180 days beyond the original validity period for the bid.
- No interest will be payable by the AMC School Board on the Earnest Money Deposit (EMD).
- In case bid is submitted without EMD or Bid fees as mentioned above then AMC School Board reserves the right to reject the bid without providing opportunity for any further correspondence to the bidder concerned.
- The EMD of unsuccessful Bidders will be returned by the Authority, without any Interest, as promptly as possible on acceptance of the Proposal of the Selected Bidder or when the Authority cancels the Bidding Process.
- The Selected Bidder's EMD will be returned, without any interest, upon the Selected Bidder signing the Agreement and furnishing the Security Deposit / Performance Guarantee in accordance with the provision thereof.
- The decision of AMC School Board regarding forfeiture of the EMD and rejection of bid shall be final & shall not be called upon question under any circumstances.
- The EMD may be forfeited:
- If a Bidder withdraws their bid or increases their quoted prices during the period of bid validity or its extended period, if any; or
- In the case of a successful bidder, if the Bidder fails to sign the Contract or to furnish Performance Bank Guarantee within specified time
- During the bid process, if a Bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.
- During the bid process, if any information found wrong / manipulated / hidden in the bid.

6.1.8 Sealing, Marking and Submission of Technical Bid

The price bid must be submitted online on <https://tender.nprocure.com>. It should not be sent physically, if submitted physically the bid shall be rejected.

Bidders are required to submit their technical bid on both at <https://tender.nprocure.com> and in separate sealed envelopes as per instructions given below:

Part 1: Technical Bid consisting Pre-Qualification documents, Bid Fees and EMD with complete details as mentioned in RFP. The proposal shall also consist with all supporting documents, MAF, Data sheet if any.

Each Bidder shall submit only one proposal containing documents as below.

- i. Original DD/BG of the Bid fee & EMD
- ii. Pre-qualification criteria related documents.
- iii. Each page of the above should bear the initials of the Applicant along with the seal of the Applicant in token of confirmation of having understood the contents.
- iv. Details of EMD & Tender fee shall be submitted in electronic format (by scanning) while uploading the bid. This submission shall mean that EMD & tender fees are received for purpose of opening the bid. Accordingly, offer/ tenders of those bidders whose EMD & tender fee is received electronically, shall be opened. However, for the purpose of realization of EMD and Tender fee, bidder shall send the EMD as well as Tender fee in required format in original through RPAD/ Speed Post/in person so as to reach to registered office of AMC School Board. Punitive action shall be initiated for non-submission of EMD & Tender fees in original to registered office by bidder including abeyance of registration and cancellation of E-tendering code for one year.
- v. Proposal should be signed by an authorized person of the bidder. It should be submitted along with a certified true copy of a board resolution/power of attorney empowering authorized signatory to sign/act/execute documents binding the bidder to the terms and conditions detailed in this proposal.
- vi. Tenders by partnership firm must be signed by all partners. The full name and addresses of all the partners shall be furnished. The tenders by Corporation/ Companies must be signed with the legal name of the Corporation/ Company by the president/ or by the secretary or other person or persons legally authorized to bind the Corporation/ Company in the matter
- vii. Proposals must be direct, concise, and complete. AMC School Board will evaluate bidder's proposal based on its clarity and completeness of its response to the requirements of the project as outlined in this RFP. AMC School Board reserves the right to accept or reject any or all the proposals without assigning any reason.
- viii. Following documents shall only be submitted in HARD COPY to AMC School Board, Ahmedabad by all bidders.
 - a. Earnest Money Deposit as mentioned in the tender
 - b. Tender Fees as mentioned in the tender
 - c. Affidavit on Non-Judicial Stamp Paper of Rs. 100/-

Note: The EMD and the tender fee details should match the Details of the Original EMD and the Tender Fee DD/BG, failing which the bid shall be out rightly rejected

The large envelope must be sealed and super scribed containing above documents and shall be sent as under:

Details to be mentioned exactly on sealed envelop

Tender Details

Notice No.:

Tender Name

Last date of Submission:

To,
The Administrative Officer
Ahmedabad Municipal Corporation School Board
Scout Bhavan, Near Prabhudas Thakkar
College, Paldi,
Ahmedabad, Gujarat- 380007

The Bid must be sent strictly by Postal Speed Post or Registered Post AD or in person by the representative of

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the bidder to AMC School Board. Documents received in any other manner or mode (like courier, email etc.) will not be considered. AMC School Board won't be responsible for any postal delays.

AMC School Board will not accept submission of a proposal in any manner other than that specified in the document. Proposals submitted in any other manner shall be treated as defective, invalid and rejected.

In case bidder needs any clarification or if training required for participating in online tender, they can contact the following office: -

(n) Code solutions – A division GNFC Ltd.
403, GNFC Infotower, Bodakdev, Ahmedabad – 380 054, Gujarat (India)
Tel: +91 26857316/17/18 Fax: + 91 79 26857321
E-mail: nprocure@gnvc.net Website: www.tender.nprocure.com
Toll Free: 1800-233-1010 (Ext. 501 & 512)
For further particulars contact above office/ or visit on following websites:
www.tender.nprocure.com ,

6.1.9 Late Bids

The Bids received after the due date and the specified time (including the extended period if any) shall not be entertained. The Bids submitted by telex/telegram/fax/e-mail etc. shall not be considered. No correspondence will be entertained on this matter. PURCHASER shall not be responsible for any delay or non-receipt/ non-delivery of the documents. No further correspondence on the subject will be entertained. PURCHASER reserves the right to modify and amend any of the above-stipulated condition/Criteria depending upon project priorities vis-à-vis urgent commitments.

For the online bid submission, it is advised that the SI takes all necessary precaution for the same, including submitting the Bid well in advance to avoid any last-minute hassles, ensuring that the names/ formats of the files to be uploaded are as per the e-tendering portal requirements, using the prescribed browser for upload etc. PURCHASER shall not entertain any bids which could not be uploaded or uploaded properly in the portal for whatsoever reasons.

6.1.10 General Instructions

a) Language of Bids

The Bids prepared by the Bidder and all correspondence and documents relating to the bids exchanged by the Bidder and AMC School Board, shall be written in English language, provided that any printed literature furnished by the Bidder in another language shall be accompanied by an English translation in which case, for purposes of interpretation of the bid, the English translation shall govern.

If any supporting documents submitted are in any language other than English, Notarized copy of the translation of the same in English language shall be submitted by the bidder.

b) Concessions permissible under statutes

Bidder, while quoting against this tender, must take cognizance of all concessions permissible, if any, under the statutes and ensure the same is passed on to AMC School Board, failing which it will have to bear extra cost. In case Bidder does not avail concessional rates of levies like customs duty, excise duty, sales tax, etc. AMC School Board will not take responsibility towards this. However, AMC School Board may provide necessary assistance, wherever possible, in this regard.

c) Bid Validity

The proposal should be valid for acceptance for a minimum period of 180 days from the Bid Opening Date (the "Proposal Validity Period"). If required, Authority may request the bidder to have it extended for a further period. The request and the responses thereto shall be made in writing. A Bidder agreeing to the request will not be required or permitted to modify his Proposal but will be required to extend the validity of EMD for the period of the extension, and in compliance with Clause 4.7 in all respects.

d) Taxes

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The Prices mentioned in the Price Bid should include all applicable taxes & duties as applicable.

GST

GST (Goods & Service Tax) has come in existence from 1st July 2017. Contractor/Successful Bidder is bound to pay any amount GST prescribed by the Govt. of India as per the terms of Contract agreed upon during the course of execution of this Contract.

During the course of execution of Contract, if there is any change in Rate of GST (Goods & Service Tax) by the Government, the same shall be reimbursed/recovered separately by AMC School Board, subject to the submission of Original Receipt/Proof for the amounts actually remitted by the Successful Tendered/Contractor to the Competent Authority along with a Certificate from Chartered Accountant of Contractor/Successful bidder certifying that the amount of GST paid to the Government and the same shall be intimated/submitted/claimed within 30 (Thirty) Days from the date of payment. Remittance of GST within stipulated period shall be the sole responsibility of the Successful bidder/contractor, failing which, AMC School Board may recover the amount due, from any other payable dues with AMC School Board and decision of AMC School Board shall be final and binding on the Contractor/Successful Bidder in this regard. Further the non- payment of GST to the Government may lead to the termination of contract and forfeiture of Security Deposit/Performance Guarantee Amount.

If imposition of any other new Taxes/Duties/Levies/Cess or any other incidentals etc. or any increase in the existing Taxes/Duties/Levies/Cess or any other incidentals etc. (excluding GST) are imposed during the course of the contract, the same shall be borne by the Contractor/Successful Bidder Only, in no case AMC School Board shall be liable for the same.

e) Firm Prices and Bid Currency

Prices quoted must be firm and final and shall not be subject to any upward modifications, on any account whatsoever. Prices shall be expressed in Indian Rupees (INR) only.

f) Right to vary the scope of the work at the time of award

AMC School Board reserves its right to make changes to the scope of the work at the time of execution of the resultant Agreement. If any such change causes an increase or decrease in the cost of, or the time required for the SI's performance of any part of the work under the Agreement, whether changed or not changed by the order, an equitable adjustment (if required) shall be made in the Contract Value or time schedule, or both, and the Agreement shall accordingly be amended. Any claims by the SI for adjustment under this Clause must be asserted within thirty (30) days from the date of the SI's receipt of the AMC School Board changed order.

g) Modification or Withdrawal of Bids

A Bidder wishing to withdraw its bid shall notify AMC School Board by e-mail prior to the deadline prescribed for bid submission. A withdrawal notice may also be sent by electronic means such as e-mail, but it must be followed by a signed confirmation copy, postmarked at least one day prior the deadline for submission of bids.

The notice of withdrawal shall be addressed to AMC School Board at the address named in the bid Data Sheet, bear the Contract name, the <Title> and < bid No.>, and the words "bid Withdrawal Notice."

Bid withdrawal notices received after the bid submission deadline shall be ignored, and the submitted bid shall be deemed to be a validly submitted bid.

No bid may be withdrawn in the interval between the bid submission deadline and the expiration of the specified bid validity period. Withdrawal of a bid during this interval may result in the forfeiture of the Bidder's EMD.

h) Performance Bank Guarantee

The successful bidder shall at his own expense, deposit with department, within 30 days of the notification of award (done through issuance of the Purchase Order/Letter of Acceptance/Letter of Intent), an unconditional and irrevocable Performance Bank Guarantee (PBG) from Nationalized or Scheduled Banks except Co-operative Banks in favor of "The Administrative Officer, Ahmedabad Municipal Corporation School Board" for the due performance and fulfilment of the contract by the

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bidder.

The SI shall submit performance guarantee for implementation phase for an amount equivalent to 5% of the Project Value which is unconditional & irrevocable bank guarantee.

This will be released to SI on successful Go-Live of project and submission of new performance guarantee for O&M phase on yearly basis as stated below which is unconditional & irrevocable bank guarantee.

- Year 1: 4% of Project Value
- Year 2: 3% of Project Value
- Year 3: 2% of Project Value

The SI should renew the yearly bank guarantee 30 days prior to the date of expiry till the end of entire contract period".

All charges whatsoever such as premium, commission, etc. with respect to the Performance Bank Guarantee shall be borne by the bidder.

The successful bidder shall maintain a valid and binding Performance Guarantee for a period of three months after the expiry of the Contract Period ("Validity Period") i.e., 3 years from the go-live date.

The Performance Bank Guarantee letter format can be found in the Annexure- III of this document.

The Performance Bank Guarantee may be discharged/ returned by department upon being satisfied that there has been due performance of the obligations of the Bidder under the contract. However, no interest shall be payable on the Performance Bank Guarantee.

If the Bidder, fails to furnish the Performance Guarantee, it shall be lawful for the Authority to forfeit the EMD and cancel the contract or any part thereof

In the event of the Bidder being unable to service the contract for whatever reason or receive frequent complaints from citizens, AMC School Board would evoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of AMC School Board under the Contract in the matter, the proceeds of the PBG shall be payable to AMC School Board as compensation for any loss resulting from the Bidder's failure to complete its obligations under the Contract. AMC School Board shall notify the Bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the Bidder is in default.

AMC School Board shall also be entitled to make recoveries from the Bidder's bills, performance bank guarantee, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction, or misstatement.

i) Work Order/ Purchase Order

For all installations to be carried out in the AMC school board under this contract, the contract will be signed with AMC School Board and the work order will be issued by the AMC School Board.

j) Validity Period of the Contract

Upon selection of the bidder and the contract is made, the validity of the Bidder contract period would be valid till 3 Years after go-live, unless revoked for whatever reasons. If at any stage during the tenure of the period, it comes to the notice of AMC School Board, directly or through some other complaint, that the Bidder had misinterpreted the facts or submitted any false information or hidden any information, which could have affected the signing of this agreement with the Bidder, this agreement shall stand terminated immediately under intimation to the Bidder.

The contract would be subjected to review at the end of its validity period for renewal. If any need, necessities for such review during the validity period would be considered by AMC School Board on its merit.

k) Quantity variation

The quantity mentioned in the Commercial Bid format (Section 9) is only for indicative in nature. The

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actual quantity depends on the actual site survey conducted by the bidder and after same is approved by AMC School Board for installations at various locations. AMC School Board reserves the right to vary quantity at the time of award of the contract or after the contract is awarded. Such variation on either side shall be capped at 30% of the BoQ quantity / of the total project cost.

l) Price Variation

During the validity of the contract including the extended period if any, if the Bidder supplied any item included in BoM of this RFP to any other department / organization / individual at a price lower than the price fixed in the contract, the bidder must voluntarily pass on the price difference with immediate effect.

m) Governing Law

The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts at Ahmedabad shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the Bidding Process.

n) Restriction on Transfer of Agreement

The Bidder shall not assign or transfer its right in any manner whatsoever under this agreement to a third party or enter into any agreement for sub-contracting and/or partnership relating to any subject matter to the agreement to any third party or any sister-concerned firm within a group either in whole or in any part i.e., partnership/third party interest shall be created.

Failure to agree with the Terms & Conditions of the Bid Document/ Contract

Failure of the bidder to agree with the Terms & Conditions of the Bid Document/Contract shall constitute sufficient grounds for the annulment of the award of contract, in which event the contract may be awarded to the next most responsive bidder.

Terms and Conditions of the Tender

Bidder is required to refer to the draft Contract Agreement, attached as Annexure-II in this Bid Document, for all the terms and conditions to be adhered by the successful bidder during Project Implementation and Post implementation period.

Please note that one needs to read the Contract Agreement as a whole document; and the Annexure mentioned there-in may not correspond to the Bid Document Annexure. Please refer to the Interpretation Section of the Draft/Master Service Agreement.

o) Liability

Except as provided in this Agreement, hereinabove, neither party shall be liable to other party or any other party by virtue of termination of this Agreement for any reason whatsoever for any claim for loss or profit or on account for any expenditure, investment, leases, capital improvements or any other commitments made by the other party in connection with their business made in reliance upon or by virtue of this Agreement.

p) Force Majeure

If any damages to items due to Force Majeure events (such as earthquake, fire, natural calamities, war, act of God) of any kind during Warranty Period and Maintenance Period shall be the liability of AMC School Board. In such case, AMC School Board shall request the successful Bidder to repair/replace the damaged unit and reinstall the same. All costs towards the same shall be reimbursed by AMC School Board to the successful Bidder on mutual understanding.

The Bidder shall not be liable for forfeiture of its Performance Guarantee, imposition of liquidated damages or termination for default, if and to the extent that it's delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure. For purposes of this Clause, "Force Majeure" means an event beyond the "reasonable" control of the Bidder, not involving the Bidder's fault or negligence and not foreseeable. Such events may include Acts of God & acts of Government of India in their sovereign capacity.

In the event of delay in performance attributable to the presence of a force majeure event, the time for performance shall be extended by a period(s) equivalent to the duration of such delay. If the duration of delay continues beyond a period of 30 days, AMC School Board and the SI shall hold consultations with each other in an endeavor to find a solution to the problem.

Notwithstanding anything to the contrary mentioned above, the decision of the AMC School Board shall be final and binding on the SI.

q) Conflict of Interest

A “Conflict of Interest” is any situation that might cause an impartial observer to reasonably question whether Bidder actions are influenced by considerations of your firm’s interest at the cost of Government. The Bidder agrees that it shall hold the AMC School Board’s interest paramount, without any consideration for future work, and strictly avoid any Conflict of Interest with other assignments of a similar nature. In the event the Bidder foresees a Conflict of Interest, the Bidder shall notify AMC School Board forthwith and seek its approval prior to entering into any arrangement with a third party which is likely to create a Conflict of Interest.

Bidders shall not have a conflict of interest that may affect the Selection Process or the scope (the “Conflict of Interest”). Any Bidder found to have a Conflict of Interest shall be disqualified.

AMC School Board requires that the Bidder provides professional, objective, and impartial advice and at all times hold the AMC School Board’s interest’s paramount, avoid conflicts with other assignments or its own interests, and act without any consideration for future work.

The Bidder shall disclose to AMC School Board in writing, all actual and potential Conflicts of Interest that exist, arise or may arise (either for the Bidder or its team) during the term of the Agreement as soon as it becomes aware of such a conflict.

r) Resolution of Dispute

The AMC School Board and the Bidder shall make every effort to resolve amicably, by direct informal negotiation, any disagreement or dispute arising between them under or in connection with the contract. If after thirty days from the commencement of such informal negotiations, the AMC School Board/AMC and the Bidder have been unable to resolve amicably a contract dispute; either party may require that the dispute be referred for resolution by formal arbitration.

All questions, disputes or differences arising under and out of, or in connection with the contract, shall be referred to two Arbitrators: one Arbitrator to be nominated by the AMC School Board and the other to be nominated by the Bidder. In the case of the said Arbitrators not agreeing, then the matter will be referred to an umpire to be appointed by the Arbitrators in writing before proceeding with the reference. The award of the Arbitrators, and in the event of their not agreeing, the award of the Umpire appointed by them shall be final and binding on the parties. The Arbitration and Reconciliation Act 1996 shall apply to the arbitration proceedings and the venue of the arbitration shall be Ahmedabad. Cost of arbitration shall be borne by each party proportionately. However, expenses incurred by each party in connection with the preparation, presentation shall be borne by the party itself. The provisions of this clause shall survive termination of this Agreement.

s) Discount

The SIs are advised not to indicate any separate discount in the Financial Bid. Discount, if any, should be merged with the quoted prices. Discount of any type, indicated separately, shall not be considered for evaluation purpose. However, in the event of such an offer is found to be the lowest without considering the discount, the Purchaser shall avail such discount at the time of award of contract.

t) Site visit and verification of information

SIs are encouraged to submit their respective Bids after doing a thorough survey of project site and ascertaining for themselves the site conditions, traffic, location, surroundings, climate, availability of power, water and other utilities for construction, access to site, handling and storage of materials, weather data, applicable laws and regulations, and any other matter considered relevant by them.

It shall be deemed that by submitting a Bid, the SI has made a complete and careful examination of the Bidding Documents.

- Received all relevant information requested from the Authority

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- Accepted the risk of inadequacy, error or mistake in the information provided in the Bidding Documents or furnished by or on behalf of the Authority relating to any of the matters.
- Satisfied itself about all matters, things and information including matters herein above necessary and required for submitting an informed Bid, execution of the Project in accordance with the Bidding Documents and performance of all of its obligations thereunder.
- Acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in the Bidding Documents or ignorance of any shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations, loss of profits etc. from the Authority, or a ground for termination of the Concession Agreement by the Concessionaire
- Acknowledged that it does not have a Conflict of Interest; and agreed to be bound by the undertakings provided by it under and in terms hereof.

u) Safety Regulation, Accident and Damage

The SI shall be responsible at his own cost in and relative to performance of the work and SI to observe and to ensure observance by his Sub-selected vendors, agents and servants of the provisions of Safety Code as hereinafter appearing and all fire, Safety and security regulations as may be prescribed by the Owner from time to time and such other Precautions, measures as shall be necessary and shall employ / deploy all equipment necessary to protect all works, materials, properties, structures, equipments, installations, communications and facilities whatsoever from damage, loss or other hazard whatsoever (including but not limited to fire and explosion) and shall during construction and other operations minimize the disturbance and inconvenience to the Owner, other SIs, the public and adjoining land and property owners and occupiers, and crops, trees and vegetation and shall indemnify and keep indemnified the One from and against all losses and damages and costs, charges and expenses and penalties, actions, claims, demands and proceedings whatsoever suffered or incurred by or against the Owner, as the case may be, virtue of any loss, alteration, displacement, disturbance or destruction or accident to any works materials, properties, structures, equipments, installations communications and facilities and land and property owners and occupiers and crops, trees and vegetation as aforesaid, with the intent that the SI shall be exclusively responsible for any accident, loss, damage, alteration, displacement, disturbance or destruction as aforesaid resultant directly or indirectly from any breach by the SI of his obligation aforesaid or upon any operation, act or omission of the SI his Sub-selected vendor(s) or agent(s) or servant(s).

The SI's liabilities under Clause (a) and otherwise under the Contract shall remain unimpaired notwithstanding the existence of any storage cum erection or other insurance covering any risk, damage, loss or liability for which the SI is liable to the Owner in terms of the foregoing Sub-Clause or otherwise and / or in respect of which the SI has indemnified the Owner with the intent that notwithstanding the existence of such insurance, the SI shall be and remain fully liable for all liabilities and obligations under the contract and indemnified to the Owner, and the Owner shall not be obliged to seek recourse under such policy(ies) in preference to recourse against the SI or otherwise to exhaust any other remedy in preference to the remedies available to in under the Contract prior written approval of SSCDL. However, even if the work is sub-contracted / outsourced, the sole responsibility of the work shall lie with the SI. The SI shall be held responsible for any delay/error/non-compliance etc. of its sub-contracted vendor. The details of the sub-contracting agreements (if any) between both the parties would be required to be submitted to SSCDL.

v) Ownership and Licenses

The ownership of all hardware/software developed/customized/ configured/ procured as part of the project and related documentation for the project would always lie with the SMC/SSCDL. All licenses for software procured related to project have to be in the name of Ahmedabad Municipal Corporation. The SI will be required to produce the Licenses/ATS/Warranty and other documents from the respective OEMs clearly mentioning the product name, quantity, duration, type of support, etc. The payment for the respective item will be subject to submission of the aforesaid documents to SMC/SSCDL.

w) General Clause related to Any SIs/Sub-Selected vendor from a Country which shares a Land Border with India

- I. Any SI from a country which shares a land border with India will be eligible to bid in this tender only if the SI is registered with the Competent Authority (Registration committee constituted by the

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Department for Promotion of Industry and Internal Trade (DPIIT)).

II. "SI" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, every artificial juridical person not falling in any of the descriptions of SIs stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

III. "SI from a country which shares a land border with India" means:

- a. An entity incorporated, established or registered in such a country; or
- b. A subsidiary of an entity incorporated, established or registered in such a country; or
- c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
- d. An entity whose beneficial owner is situated in such a country; or
- e. An Indian (or other) agent of such an entity; or
- f. A natural person who is a citizen of such a country; or

IV. The beneficial owner for the purpose of (iii) above will be as under:

1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.
 - a. Explanation—
 - b. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company.
 - c. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.
2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership.
3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals.
4. Where no natural person is identified under i or ii or iii above, the beneficial owner is the relevant natural person who holds the position of senior managing official.
5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

VI. The successful SI shall not be allowed to sub-contract works to any selected vendor from a country which shares a land border with India unless such selected vendor is registered with the Competent Authority (Registration committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)).

x) Resolution of Dispute

The AMC School Board and the SI shall make every effort to resolve amicably, by direct informal negotiation, any disagreement or dispute arising between them under or in connection with the contract. If after thirty days from the commencement of such informal negotiations, the AMC School Board/AMC and the SI have been unable to resolve amicably a contract dispute; either party may require that the dispute be referred for resolution by formal arbitration.

All questions, disputes or differences arising under and out of, or in connection with the contract, shall be referred to two Arbitrators: one Arbitrator to be nominated by the AMC School Board and the other to be nominated by the SI. In the case of the said Arbitrators not agreeing, then the matter will be referred to an umpire to be appointed by the Arbitrators in writing before proceeding with the reference. The award of the Arbitrators, and in the event of their not agreeing, the award of the Umpire appointed by them shall be final and binding on the parties. The Arbitration and Reconciliation Act 1996 shall apply to the arbitration proceedings and the venue of the arbitration shall be Ahmedabad. Cost of arbitration shall be borne by each party proportionately. However, expenses incurred by each party in connection with the

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preparation, presentation shall be borne by the party itself. The provisions of this clause shall survive termination of this Agreement.

y) Consortium/Joint Venture

Consortium is allowed for maximum of two (2) parties. Collectively they should meet the aggregate requirement for financial and technical capability for eligibility. Original or Notarized Copy of consortium partnership with clearly defined stake and scope of each partner. Lead bidder of consortium will be sole responsible for execution of work defined in RFP and meeting the performance criterion.

These points shall also be captured in agreement.

- i. Identity of prime member and Power of Attorney in favour of prime member.
- ii. Roles and responsibilities of each consortium member, the identification of the lead partner, and providing for joint and several liability for each partner.
- iii. Both consortium members would be available throughout the Contract Period.
- iv. Both consortium members shall be jointly and severally liable for due implementation, operation and maintenance of the project.
- v. The role and responsibility of any member must be commensurate with the technical/ financial capabilities that such member is contributing towards meeting the qualification criteria. Each consortium member is liable to contribute resources in terms of knowledge, skills and trained manpower commensurate with its role and responsibilities during the Contract Period.
- vi. The Consortium Agreement must also state that the period of the Agreement would coincide with the Contract period. Consortium must continue to be in existence during the period of the Contract and that any change will be subject to approval of the AMC School Board only.
- vii. The final Contract between the consortium members (The Consortium Contract) would be available for legal vetting and open to suggestions by the AMC. AMC School Board will suggest binding corrections if it finds that such contract does not meet its requirements and interests as per the Tender in letter and spirit.
- viii. The Agreement should be on stamp paper and notarized. The signatories must be duly authorized.
- ix. Any modification in roles and responsibilities between consortium members during Contract period shall be allowed only after approval from SCADL. Any changes and deviation of roles and responsibilities of consortium members during the execution, operation and maintenance of this project without prior approval of Authority shall be viewed seriously by the AMC School Board as it can affect an important public service. Such unilateral action by the implementing agency shall entitle AMC School Board to take appropriate action including considering it an Event of Default under this Contract leading to consequences including termination with appropriate notice.
- x. Any dispute arising during Contract period between the consortium members shall be resolved amicably without adversely impacting project implementation and operation. If in AMC's opinion, dispute between consortium members adversely impacting implementation and operation of the project then Authority may in its sole discretion in the interest of the project (a) Terminate the Contract after due process and/or (2) Provide a binding solution.
- xi. In case AMC School Board intends to proceed for Termination on account of IA/bidder, Event of Defect and/ or unresolved disputes between the consortium members, all the consortium members shall be jointly and severally liable for implementation, operation and maintenance of project at agreed prices and payment terms specified in this Tender till Authority or any new agency appointed by it takes over the project.
- xii. AMC School Board reserves the right to reject the bid in case of change in the constitution of the consortium after the submission of bid and before the execution of the Agreement.

6.1.11 Additional Quantity/Change Request

- a. AMC School Board reserves its right to award additional quantity of work order up to 30% of the original quantity (as per state and central govt. guideline) at the same price and terms and conditions quoted in original contract.
- b. AMC School Board also reserves right to award change request work order up to 30% of the original project cost for the work needed to execute the work defined in scope of work defined in original contract
- c. Payment for additional items

Based on the final project plan or during the project duration if there is need for additional items and Based on the final project plan or during the project duration if there is need for additional items and there is variation in the quantities as defined in the financial bid, implementation SI will be required to arrange additional items. Payment for such additional items will be done separately by AMC School Board.

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- d. In such case of any additional requirement, payment will be done based on the rate provided in the financial bid of the Implementation SI. Payment mechanism to be followed for additional items is given below:
- e. CAPEX COMPONENT - 30% CAPEX payment on the successful delivery of additional item, post approval from AMC School Board and 70% CAPEX payment on the successful installation of the additional item, post approval on the installation report or shall be in accordance with the actual timeline proposed under this RFP.
- f. OPEX COMPONENT - OPEX part will be equally divided in remaining part of the quarterly payment during O&M. OPEX payment will be prorated based on the duration left in O&M. That is, if additional item is procured in 4th Quarter, then OPEX will be paid for 17 quarters only (starting from 4th Quarter till 20th Quarter).

6.1.12 Policy for procurement

With reference to make in India, following policies will be applicable:

- I. Policy released by Ministry of Electronics and Information Technology (MeitY), Government of India dated 14th September 2017 having no. F.No.33(1)/2017-IPHW and any further amendments.
- II. Policy released by Ministry of Communications, Department of Telecommunications (DoT), Government of India dated 29th August 2018 having no. 18-10/2017-IP and any further amendments.
- III. Policy released by Department of Promotion of Industry and Internal Trade, Ministry of commerce and industry, Government of India dated 4th June 2020 having no. P-45021/2/2017-PP (BE-II) and any further amendments.
- IV. Policy released by Department of Promotion of Industry and Internal Trade, Ministry of commerce and industry, Government of India dated 20th June 2019 having no. P-45021/121/2018- (BE-II) and any further amendments.

- For deciding L1 local supplier under make in India policy, the policy mentioned in sr. no. III will be applicable. For considering the products under make in India, the policy mentioned in sr.no. I and II will be applicable.
- For the products proposed under make in India, the bidder/s shall be required to verify, do due diligence, and submit all justifications / documents/ information along with the compliance of the products to meet the technical specifications, functional specifications, envisaged outcomes and SLA requirements specified in the RFP. After conforming the above, the bidders and the OEMs shall have to provide an undertaking on INR 300 rupees non-judicial stamp paper confirming the compliance of the technical specifications, functional specifications, envisaged outcomes, local content in terms of composition of the products and SLA requirements specified in the RFP.
- The bidder/s is also required to submit OEM's statutory auditor certificate certifying percentage of local content in terms of composition of the products confirming the compliance of the technical specifications, functional specifications, envisaged outcomes and SLA requirements specified in the RFP.

In case of procurement for a value in excess of Rs. 10 crores, the 'Class 1 local supplier'/'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or Cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content" as per the policy no. P45021/2/2017-PP (BE-II) clause 9b.

Bidders and OEM's have to provide the compliance in accordance on the above.

- In case at any point of time, the details provided is found to misrepresent any facts or documents or any piece of information provided, then OEM/s shall be disqualified and blacklisted. The bidder/s have to provide the new solution as per the requirement of the RFP at no extra price within one month.
- With regards to above table, OEMs will certify the installation base and the project experience. This certificate shall be issued through the global Headquarters and attested by the Indian office. in case of any doubt, Tendering authority shall verify the claim of OEMs. Decision of AMC School Board shall be final and binding upon the Bidder and OEM.

Selection Process for Bidders

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1. The AMC School Board will adhere the Make in India Policy released by department of Promotion of Industry and internal trade, Ministry of commerce and industry, Government of India dated 4th June 2020 having no. P-45021/2/2017-PP (BE-II). The mentioned policy along with office memorandum mentioned in the point 4 (immediately below) shall supersede any claims, petitions, representations etc made by the bidder/s while making any purchasing decision by the purchaser.
2. The AMC School Board will adhere office memorandum published by Ministry of Finance, Department of Expenditure, Public Procurement Division as insertion of rule 144 (xi) in the general financial rules (GFRs), 2017 dated 23rd July 2020 having no. F. No. 6/18/2019-PPD. Details of policy mentioned below:
 - I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
 - II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
 - III. "Bidder from a country which shares a land border with India" for the purpose of this order means:
 - a. An entity incorporated, established or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d. An entity whose beneficial owner is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
 - IV. The beneficial owner for the purpose of (iii) above will be as under:
 - i. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

Explanation—

 - a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
 - b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
 - ii. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 - iii. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
 - iv. Where no natural person is identified under i or ii or iii above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 - v. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
 - V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
 - VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

Model Certificate for Tenders (for transitional cases as stated in para 3)

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country and is eligible to

be considered."

For more information, Bidder should refer to reference no. F. No. 6/18/2019-PPD dated 23rd July 2020 of public procurement division, Department of Expenditure, Ministry of Finance, Government of India on Restrictions on companies sharing land border with India.

6.1.13 Termination of Contract

Termination of Contract AMC School Board may, without prejudice to any other remedy under this Contract and applicable law, reserves the right to terminate for breach of contract by providing a written notice of 30 days stating the reason for default to the SI and as it deems fit, terminate the contract either in whole or in part in the following ways.

- Termination by Default: for failing to perform obligations under the Contract of if the quality is not up to the specification or in the event of non-adherence to time schedule.
- Termination for Convenience: AMC School Board by written notice sent to the SI, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that the termination is for AMC School Board's convenience, the extent to which performance of the SI under the Contract is terminated, and the date upon which such termination becomes effective.
- Termination for Non-Performance: If the SI fails to deliver any or all of the project requirements / operationalization / go-live / performance parameters (PERFORMANCE STANDARDS) of the project within the time frame specified in the contract; or

If the SI fails to perform any other obligation(s) under the contract.

- Termination for Insolvency/NCLT proceedings: The Department may at any time terminate the contract by giving written notice to the SI(s), if the SI(s) becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the SI(s), provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Department. SI agrees to handover all requisite data in terms of code, documents, etc. along with requisite to the office of the AMC School Board identified team in this case.

Prior to providing a notice of termination to the SI, AMC School Board shall provide the SI with a written notice of 30 days instructing the SI to cure any breach/ default of the Contract, if AMC School Board is of the view that the breach may be rectified.

On failure of the SI to rectify such breach within 30 days, AMC School Board may terminate the contract by providing a written notice of 30 days to the SI, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to AMC School Board. In such event the SI shall be liable for penalty/liquidated damages imposed by the AMC School Board. The performance Guarantee shall be forfeited by the AMC School Board.

Consequences of Termination

- In the event of termination of this contract, AMC School Board is entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective continuity of the services which the SI shall be obliged to comply with and take all available steps to minimize the loss resulting from that termination/ breach, and further allow and provide all such assistance to AMC School Board and/ or succeeding vendor, as may be required, to take over the obligations of the SI in relation to the execution / continued execution of the requirements of this contract.
- In the event of termination of this contract, AMC School Board shall have ownership over entire volume of delivered & installed software and hardware irrespective payment made to successful SI.
- In the event of the SI being unable to service the contract for whatever reason, AMC School Board would evoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of department under the Contract in the matter, the proceeds of the PBG shall be payable to department as compensation for any loss resulting from the SI's failure to complete its obligations under the Contract. Department shall notify the SI in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the SI is in default.
- AMC School Board shall also be entitled to make recoveries from the SI's bills, performance bank guarantee, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

- All plans, drawings, specifications, designs, reports, other documents prepared by the Vendor and materials for which part delivery payment is made in the execution of the contract shall become and remain the property of AMC School Board/ AMC and before termination or expiration of this contract the SI shall deliver all such documents, prepared under this contract along with a detailed inventory thereof, to AMC School Board/ AMC.

Annexure A: Technical Bid Format

Checklist for Technical Qualification Document

<<To be printed on bidder company's letterhead and signed by Authorized signatory>>

S. No.	Documents to be submitted	Submitted (Y / N)	Documentary Proof (Page No.) of Proposal
i.	Bid Processing Fee (DD) as per RFP		
ii.	Bid Security EMD (DD/BG) as per RFP		
iii.	Technical Proposal Packaged in Envelope with Pen Drive as per RFP		
iv.	Power of attorney / board resolution to the authorized Signatory of the RFP		
v.	Copy of Certificate of Incorporation/Registration certificate/ Shop & Establishment Certificate		
vi.	Bidder Profile on their letterhead		
vii.	Copy of Audited Balance Sheet and Profit and loss statement for last three financial years 2021-22, 2022-23 and 2023-24		
viii.	Supporting Documents like Rent Agreement/ Electricity Bill / Self-Declaration on Company's Letter head to be submitted for Local Office in Ahmedabad. OR undertaking from authorized signatory to open the local office within 45 days from issuance of LOI to be submitted		
ix.	Copy of GST registration		
x.	Copy of PAN registration		
xi.	Make & Model of all Hardware & Software components		
xii.	Compliance to Technical Specifications as mentioned in the RFP on OEM's Letterhead.		
xiii.	Bill of Material without prices		
xiii.	Datasheets highlighting the Functional and Technical Specification parameters in each datasheet for compliances		
xiv.	OEM declaration letter		
xv.	Self-declaration by the Bidder duly signed and stamped by the authorized signatory - Not be insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons		
xvi.	Self-declaration by the Bidder duly signed and stamped by the authorized signatory - Not have their directors and officers convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified.		

Note:

All technical bid document(s)/ details should be duly sealed & signed as required.

In case of the deviation in the authorization letter by the manufacturer & forwarding letter; the price bid of such bidder will not be opened.

Any conditional mention regarding any technical details or prices in any document(s)/ forwarding letter; price bid of such bidder will not be opened.

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TQ 1: Technical Bid Cover Letter

<<To be printed on bidder company's letterhead and signed by Authorized signatory>>

Date: dd/mm/yyyy

To
The Administrative Officer,
Ahmedabad Municipal Corporation School Board (AMC School Board)
Scout Bhavan, Near Prabhudas Thakkar College,
Paldi, Ahmedabad, Gujarat- 380007

Subject: Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.

Reference: Tender No :<No> Dated<DD/MM/YYYY>

Dear Sir/ Madam,

Having examined the Bid Document (and the clarification / corrigendum issued thereafter, if any), the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide the professional services as required and outlined in the Bid Document for the "Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.

We attach hereto our responses to Technical-Qualification & Commercial proposals as required by the Bid Document. We confirm that the information contained in these responses or any part thereof, including the exhibits, and other documents and instruments delivered or to be delivered to AMC School Board is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead AMC School Board in its shortlisting process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the selection process, we are liable to be dismissed from the selection process or termination of the contract during the project, if selected to do so.

We agree for unconditional acceptance of all the terms and conditions set out in the Bid Document (& subsequent clarification / corrigendum, if any) document and also agree to abide by this tender response for a period of 180 days from the Bid Opening date. We hereby declare that in case the contract is awarded to us, we shall submit the contract performance guarantee bond in the form prescribed the Bid Document.

We agree that you are not bound to accept any tender response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products/ services specified in the tender response.

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

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone& Fax:

E-mail address :

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

TQ 2: Bidder Information Format

<<To be printed on bidder company's letterhead and signed by Authorized signatory>>

To whomsoever it may concern,

Please find below the details of bidder for participation in Selection of Bidder for RFP for Smart School Project to enhance teaching-learning process in municipal schools through use of ICT technology and support infrastructure in Ahmedabad City.

#	Particulars	Bidder
1	Name of the organization	
2	Type of Organization (Pvt. Ltd/ Public Limited)	
3	Address of Registered office	
4	Company Registration Details	
5	Date of Registration	
6	PAN	
7	GST	
8	Number of years of operations in India	
9	Authorized Signatory Name	
10	Authorized Signatory Designation	
11	Authorized Signatory Contact Details	
12	Authorized Signatory email ID	

Yours Sincerely,

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone& Fax:

E-mail address :

Note: To be submitted with any other supporting details specified as Document Proof in Section 3

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

TQ 3: Bidders Annual turnover over in last 3 financial years

<<To be printed on CA letterhead and signed by Authorized signatory>>

Date: dd/mm/yyyy

To
The Administrative Officer,
Ahmedabad Municipal Corporation School Board (AMC School Board)
Scout Bhavan, Near Prabhudas Thakkar College,
Paldi, Ahmedabad, Gujarat- 380007

Subject: Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.

Sir/ Madam,
I have carefully gone through the Terms & Conditions contained in the RFP Document Selection of Bidder for Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.

I hereby declare that below are the details regarding Overall turnover over last 3 financial years for our organization.

#	Details	FY 2021-22 (i)	FY 2022-23 (ii)	FY 2023-24 (iii)	Average Turnover [(i)+(ii)+(iii)/3]
1	Overall Annual Turnover- Bidder				

Contact Details of officials for future correspondence regarding the bid process:

Details	Authorized Signatory	Secondary Contact
Name		
Title		
Company Address		
Mobile		
Fax		
Email Id		

I further certify that I am competent officer in my company to make this declaration.

Yours Sincerely,

Signature of Authorized Signatory (with official seal)

Name :
Designation :
Address :
Telephone& Fax :
E-mail address :

Note: To be submitted with any other supporting details specified as Document Proof in Section 3 of RFP.

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

TQ 4: Auditor's/CA Certificate for turnover for bidder

Date: dd/mm/yyyy

This is to certify that the Annual Turnover as per books and records of _____ for the following financial years are as under.

#	Financial Year Ending	Annual Turnover (INR)
1.	31st March, 2022	
2.	31st March, 2023	
3.	31st March, 2024	
	Average Turnover	

I further certify that I am competent officer in my company to make this declaration.

Yours Sincerely,

Signature of Auditor (with official seal)

Name :
Designation :
Address :
Telephone& Fax :
E-mail address :

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

TQ 5: Self-Declaration – No Blacklisting

<<To be printed on company's letterhead and signed by Authorized signatory>>

Date: dd/mm/yyyy

To
The Administrative Officer,
Ahmedabad Municipal Corporation School Board (AMC School Board)
Scout Bhavan, Near Prabhudas Thakkar College,
Paldi, Ahmedabad, Gujarat- 380007

Sir/Madam,
In response to the Tender Ref. No. _____ dated _____ for Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city, as an owner/ partner/ Director of _____, I/ We hereby declare that presently our Company/ firm _____ is having unblemished record and is not declared ineligible for corrupt and fraudulent practices either indefinitely or for a particular period of time by any State/ Central Government/ PSU.

We further declare that presently our Company/ firm _____ is not blacklisted and not declared ineligible for reasons other than corrupt and fraudulent practices by any State/ Central Government/ PSU during last five years, from date of this bid submission.

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.

Name of the Bidder :
Authorized Signatory :
Seal of the Organization :
Business Address :
Date :
Place :

TQ 6: Self-Declaration – Not convicted in any criminal offense

<<To be printed on company's letterhead and signed by Authorized signatory>>

Date: dd/mm/yyyy

To,
The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi,
Ahmedabad: 380007.

Sir/Madam,

In response to the Tender Ref. No. _____ dated _____ RFP for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City, as an owner/ partner/ Director of _____, I/ We hereby declare that presently our Company/ firm _____ is having unblemished record and does not have our directors and officers convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified. either indefinitely or for a particular period of time 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.

Name of the SI :
Authorized Signatory :
Seal of the Organization :
Business Address :
Date :
Place :

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

TQ 7: Affidavit

(The affidavit format as indicated below to be furnished on non-judicial stamp paper of Rs: 100 and duly notarized)

Name of work: Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.

1. I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither our firm M/s nor any of its constituent partners have abandoned any work in India nor any contract awarded to us for such works has been rescinded during last five years, from the date of this bid submission.
3. The undersigned hereby authorize(s) and request(s) any bank, person, authorities, government or public limited institutions, firm or corporation to furnish pertinent information deemed necessary and requested by the AMC School Board to verify our statements or our competence and general reputation.
4. The undersigned understands and agreed that further qualifying information may be requested and agrees to furnish any such information at the request of the AMC School Board.
5. The AMC School Board and its authorized representative are hereby authorized to conduct any inquiries or investigations to verify the statements, documents, and information submitted in connection with this application and to seek clarification from our bankers and clients regarding any financial and technical aspects. This Affidavit will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by you to verify statements and information provided in the tender or with regard to the resources, experience and competence of the Applicant.
6. My/ our offer shall not be considered in case of fake/ forged document(s) found during verification at any stage or at any stage of contract. I/ We are agreed to whatever action (s) taken by competent authority of corporation in the aforesaid circumstances such as forfeiture of security deposit and debarring from participation in future tenders for the period/ years as deemed fit by the corporation and informing the same to all other state/ central level Government/ semi government organizations.

Signed by the Authorized Signatory of the firm

Title of the office: _____

Name of the firm: _____

Date: _____

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

TQ 8: Details of experience

Date: dd/mm/yyyy

To
The Administrative Officer,
Ahmedabad Municipal Corporation School Board (AMC School Board)
Scout Bhavan, Near Prabhudas Thakkar College,
Paldi, Ahmedabad, Gujarat- 380007

Sir/Madam,

I have carefully gone through the Terms & Conditions contained in the Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city”.

I hereby declare that below are the details regarding relevant work that has been taken up by our company.

Assignment Name:	
Location:	Approx. Value of Services:
Name of Client:	Duration of assignment (months):
Client Contact Person, Title/Designation, Tel. No./Address:	Total No. of Beneficiary from the system:
Start date (month/year):	Total No of client end users:
Completion date (month/year):	No. of professional staff-months provided by your firm/organization for the proposed Solution:
Description of Project:	
Description of Actual Services provided:	
Mandatory Supporting Documents:	
Work order / Contract for the project/ Purchase Order	
Client Certificate giving present status of the project and view of the quality of services by the Bidder	

I further certify that I am competent officer in my company to make this declaration.

Yours Sincerely,

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone& Fax :

E-mail address :

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

TQ 9: Solution Design

S. No.	Chapters of Technical Proposal	Description
Chapter 1: About Bidder		
1.1	Introduction & Background	
1.2	Services & Products	
1.3	Credentials & Prior Projects	
1.4	Team	
1.5	Address & Offices	
1.6	Similar Prior Experience	
Chapter 2: Understanding of Scope of Work and Approach of Bidder for Implementation		
2.1	Approach to meet the requirement asked in RFP Scope of Work	
2.2		
2.3		
2.4		
2.5		
2.6		
2.7		
2.8		
2.9		
2.10		
2.11		
2.12		
Chapter 3: Approach & Methodology for Deliverables		
3.1	Inception Phase	
3.2	Manpower Deployment for Implementation Phase	
3.3	Requirement Gathering	
3.4	Solution Design & Customization	
3.5	Supply & Delivery	
3.6	Installation & Commissioning	
3.7	Testing & Go-Live of the solution	
3.8	Activities, Timeline	
3.9	Completeness of the proposed project plan with proper Timelines, Responsibility Matrix, and change management	
3.10	Change Management	
3.11	Identification of Project Risks	
3.12	Mitigation Plan for the identified risks	
	Chapter 4: Expectation of Bidder from Authority	
	Chapter 5: Annexures	

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

TQ 10: Curriculum Vitae (CV) of Project Team

S. No.	Details	Response
1	Proposed Position & Skill Set	
2	Name of Firm	
3	Name of Staff [Insert full name]	
4	Date of Birth	
5	Education [Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment]	
6	Membership of Professional Associations / Societies	
7	Summary of key Training and Certifications	
8	Countries of Work Experience: [List countries where staff has worked in the last ten years]	
9	Language Proficiency	(Read/Write/Speak) - (Excellent/Good/Fair)
10	Number of years of experience	
11	Employment Record [Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment as per format provided]	From [Year]: _____ To [Year]: _____ Employer: Positions held:
12	Detailed Tasks Assigned [List all tasks to be performed under this assignment]	
13	Highlights of assignments handled and significant accomplishments. [Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 12.]	Name of assignment or project: Year: Location: Client: Main project features: Positions held: Activities performed:

SIGNATURE:

DATE OF SIGNING: Day Month Year

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TQ 11: Format for Manufacturer’s Authorization Format (MAF) from OEM

Ref:

Date:

To

The Chief Executive Officer
 Smart City Ahmedabad Development Limited
 Command and Control Centre,
 Opp. Divan Ballubhai School,
 Nr. Sanskar Kendra, Paldi,
 Ahmedabad: 380007.

Subject: Manufacturer Authorization Letter for RFP No.

Sir,

We, <OEM Name> having our registered office at <OEM address>, hereinafter referred to as OEM are an established manufacturer of the following items quoted by <Bidder Name> having their registered office at <Bidder address>, hereinafter referred to as Bidder.

Item – 1: _____

We <OEM Name> authorize <Bidder’s name> to quote our above-mentioned product for above mentioned tender.

We confirm that we have understood the delivery & installation timelines defined in the tender. We confirm that we have worked out all necessary logistics and pricing agreement with <Bidder name>, and there won't be any delay in delivery, installation and support due to any delay from our side. Our full support is extended in all respects for supply, warranty and maintenance of our products. We also ensure to provide the required spares and service support for the supplied equipment as per tender terms. In case of any difficulties in logging complaint at bidder end, user shall have option to log complaint at our call support Centre.

We hereby declare that the proposed product complies with all the specifications defined and desired in this RFP and subsequent corrigenda.

We herewith certify that the Products/ Equipment/ Solutions quoted by us are not end of the life and we hereby undertake to support this Products/ Equipment/ Solutions for the duration of minimum 7 years from the date of Submission of the Bid.

Sr. No.	Name of Products/ Equipment/ Solution as per RFP	Proposed Products/ Equipment/ Solution with brand, model & part number	OEM warranty	Remarks

Yours faithfully,

Authorized Signatory
 Designation
 OEM’s company name
 CC: Bidder’s corporate name

NOTE:

The letter should be submitted on the letter head of the manufacturer / OEM and should be signed by the authorized signatory.

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TQ 12: Format for Authorization Letters from Bidder, Consortium and OEMs

Undertaking as per guidelines published by Ministry of Finance, Dept. of Expenditure, Public Procurement division dated 23.07.2020

(To be submitted by Bidder & Consortium member on 300 Rs Stamp paper)

To,
The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi,
Ahmedabad: 380007.

Sub: RFP for Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.

Dear Sir,

Mr. _____ undersigned authorized representative of M/s <<Name of Company>> has read clause regarding restriction on procurement from a bidder of a country which shares a land border with India.

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that quoted product from following OEMs are not from such a country or, of if from such a country, these quoted products OEM have been registered with competent authority. I hereby certify that these quoted products & its OEM fulfils all requirements in this regard and is eligible to be considered for procurement for RFP for “Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.”.

If given information is found to be false, this would be ground for immediate termination and further legal action in accordance with law.

No.	Item Category	Quoted Make & Model
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
.		
.		

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No.	Item Category	Quoted Make & Model
N		

Authorized Signatory:

Name:

Designation:

Name of the Bidder/OEM:

Address:

Company Seal:

(On Letter Head of OEM)

To,
The Chief Executive Officer
Smart City Ahmedabad Development Limited
Command and Control Centre,
Opp. Divan Ballubhai School,
Nr. Sanskar Kendra, Paldi,
Ahmedabad: 380007.

Sub: RFP for Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.

Mr. _____ undersigned authorized representative of M/s. <<Name of Company>> has read clause regarding restriction on procurement from a bidder of a country which shares a land border with India.

I certify that following quoted product is not from such a country or, of if from such a country, these quoted product(s) & we as OEM has been registered with competent authority. I hereby certify that this quoted product(s) fulfill all requirements in this regard and is eligible to be considered for procurement for RFP “Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.”.

No.	Item Category	Quoted Make & Model
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

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No.	Item Category	Quoted Make & Model
9.		
.		
.		
N		

In case I'm supplying material from a country which shares a land border with India, I will provide evidence for valid registration by the competent authority; otherwise, Purchaser/End user Dept. reserves the right to take legal action on us.

Thanking you,
Yours faithfully

(Signature of the Authorized signatory of the OEM Organization)

Name :
Designation :
Date :
Company Seal :
Business Address :

TQ 13: Bank Guarantee format for EMD

FORMAT OF THE UNCONDITIONAL AND IRREVOCABLE BANK GUARANTEE FOR EARNEST MONEY DEPOSIT

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

In consideration of the (*Insert name of the Bidder*) submitting the Bid *inter alia* For Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city, for meeting the terms and conditions in response to the RFP DOCUMENT----- dated ----- issued by **Ahmedabad Municipal Corporation School Board** (“AMC School Board”), and AMC School Board agreeing to consider the Bid of [*Insert the name of the Bidder*] in accordance with the terms of the E-BID DOCUMENT, the (Insert name and address of the bank issuing the Bid Bond, and address of the head office) (Here in after referred to as “Guarantor Bank”) hereby agrees unequivocally, irrevocably and unconditionally to pay to AMC School Board or its authorized representative at [*Insert Name of the Place from the address of AMC School Board*] forthwith on demand in writing from AMC School Board or any representative authorized by it in this behalf an amount not exceeding Rupeeson behalf of M/s.[*Insert name of the Bidder*].

This guarantee shall be valid and binding on the Guarantor Bank up to and including (*Insert date of validity of Earnest Money Deposit in accordance with the terms of reference of the E-BID DOCUMENT*) and shall not be terminable by notice or any change in the constitution of the Guarantor Bank or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between concerned parties.

Our liability under this Guarantee is restricted to Rupees (Rs...). AMC School Board or its authorized representative shall be entitled to invoke this Guarantee until [*Insert Date, which is six months after the date in the preceding sentence*]. The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from AMC School Board or its authorized representative, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to AMC School Board or its authorized representative.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection, disputes, or disparities raised by the Bidder or any other person. The Guarantor Bank shall not require AMC School Board or its authorized representative to justify the invocation of this

BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against AMC School Board or its authorized representative in respect of any payment made hereunder.

This BANK GUARANTEE shall be payable at Ahmedabad.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

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This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly, AMC School Board or its authorized representative shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder to enforce any security held by AMC School Board or its authorized representative or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

The Guarantor Bank hereby agrees and acknowledges that AMC School Board shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rupees --- -----and it shall remain in force until [Date to be inserted on the basis of Terms of Reference of the E-BID DOCUMENT], with an additional claim period of 6 (six) months thereafter. We are liable to pay the guaranteed amount or any part thereof under this BANK GUARANTEE only ifAMC School Board or its authorized representative serves upon us a written claim or demand.

In witness whereof the Bank, through its authorized officer, has set its hand and stamp on thisday of at

Witness:

Signature
Name
Address
Designation with Bank Stamp Signature

Signature
Name
Address
Designation with Bank Stamp Signature

Name and address

Attorney as per power of attorney No.

For:..... [Insert Name of the Bank]

Banker's Stamp and Full Address:

Dated this day of 2022.

Note: The Stamp Paper should be in the name of the Executing Bank

FORMAT FOR POWER OF ATTORNEY FOR PRIME MEMBER OF CONSORTIUM

Whereas the Smart City Ahmedabad Development Ltd. has invited applications from interested parties for the Selection of **“Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.”**.

Whereas,, and (Collectively “Consortium”) being Members of the Consortium are interested in bidding for the Project in accordance with the terms and conditions of the Request for Proposal (RFP document) and other connected documents in respect of the Project, and

Whereas it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium’s bid for the Project and its execution.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS

We, Having our Registered office at,

M/s,..... Having our Registered office at,

(Hereinafter collectively referred to as the “Principals”) do hereby irrevocably designate, nominate, constitute, appoint and authorize M/s. having its registered office at, being one of the Members of the Consortium, as the Lead Member and true and lawful attorney of the Consortium (hereinafter referred to as the “Attorney”). We hereby irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Consortium and any one of us during the bidding process and, in the event the Consortium is awarded the concession/contract, during the execution of the Project and in this regard, to do on our behalf and on behalf of the Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the pre-qualification of the Consortium and submission of its bid for the Project, including but not limited to signing and submission of all applications, bids and other documents and writings, participate in SIs and other conferences, respond to queries, submit information/ documents, sign and execute contracts and undertakings consequent to acceptance of the bid of the Consortium and generally to represent the Consortium in all its dealings with the SCADL, and/ or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Consortium’s bid for the Project and/ or upon award thereof till the Concession Agreement is entered into with the SCADL.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us/ Consortium.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF, 20....

For

(Signature)

.....

(Name & Title)

Request for Proposal (RFP) for Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad City – Phase IV

For

(Signature)

.....

(Name & Title)

Witnesses:

1.

2.

(Executants)

(To be executed by all the Members of the Consortium)

Notes:

- *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*
- *Also, wherever required, the SI should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the SI.*
- *For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by SIs from countries that have signed the Hague Legislation Convention, 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate.*

Annexure B: Commercial Bid Format & Instructions

Section I: Commercial Bid Cover Letter

<<To be printed on letter head of Bidder and signed by Authorized signatory>>

Date: dd/mm/yyyy

To
The Administrative Officer,
Ahmedabad Municipal Corporation School Board (AMC School Board)
Scout Bhavan, Near Prabhudas Thakkar College,
Paldi, Ahmedabad, Gujarat- 380007

Subject: Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.

Reference: Tender No :< No> Dated<DD/MM/YYYY>

Dear Sir/ Madam,

We, the undersigned Bidders, having read and examined in detail all the bidding documents in respect of “Selection of Bidder for Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city” do hereby propose to provide services as specified in the Bid Document referred above.

PRICE AND VALIDITY

All the prices mentioned in our Tender are in accordance with the terms as specified in the Tender documents. All the prices and other terms and conditions of this Tender are valid for entire contract duration. We hereby confirm that our Tender prices include all taxes. Taxes are quoted separately under relevant sections, as specified in the Bid Document formats.

We have studied the clause relating to Indian Income Tax and hereby declare that if any income tax, surcharge on Income Tax, Professional and any other corporate Tax in altered under the law, we shall pay the same.

DEVIATIONS

We declare that all the services shall be performed strictly in accordance with the Bid Documents and there are no deviations

Further we agree that additional conditions, if any, found in our bid documents, shall not be given effect to.

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 this regard before evaluation of our Tender, we agree to furnish the same in time to your satisfaction.

BID PRICE

We declare that our Bid Price is for the entire scope of the work as specified in the Bid Document. The bid price at which the contract is awarded shall hold good for entire tenure of the contract. These prices are indicated in the subsequent sub-sections of this Section.

CONTRACT PERFORMANCE GUARANTEE BOND

We hereby declare that in case the contract is awarded to us, we shall submit the contract Performance Bank Guarantee in the form prescribed in the Bid Document.

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

We understand that our Tender is binding on us and that you are not bound to accept a Tender you receive. We confirm that no technical deviations are attached here with this commercial offer.

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Thanking you,
Yours faithfully,

(Signature of the Authorized Signatory)

Name

Designation

Seal.

Date:

Place:

Business Address:

Section II: General instructions for Commercial Bid

- i. Bidder should provide all prices as per the prescribed format under this Annexure.
- ii. All the prices are to be entered in Indian Rupees (INR) only
- iii. Bidder needs to quote the cost against Capital Expenditure (CAPEX) part only. Bidder should factor any cost, which may be incurred during the O&M phase in their price bid. No additional cost shall be sanctioned for O&M phase of this project.
- iv. Prices indicated in the schedules shall be inclusive of all taxes, Levies, duties including GST and with excluding GST both.
- v. All prices should be inclusive of all required accessories/parts, installation charges and onsite repair warranty and comprehensive annual maintenance for the entire project duration.
- vi. It is mandatory to provide breakup of all Taxes, Duties and Levies wherever asked for.
- vii. The bidder will have to arrange for storage of the goods at their own cost for storage of any items supplied as part of this scope of work. Security of the same should also be catered by bidder only.
- viii. AMC School Board reserves the right to ask the SI to submit proof of payment against any of the taxes, duties, levies indicated.
- ix. The Unit Rate as mentioned in the following formats may be used for the purpose of 'Change Order' (limited to thirty percent of quantity described in commercial bid) for respective items including license fee, if any. The unit-rates discovered shall be valid for duration for 3 Years from the date of opening of the financial bid.
- x. AMC School Board also intends to utilize various rates obtained through this tender for requirements across various departments. Bidders are requested to factor this potential demand and give the best possible rate to AMC School Board.
- xi. Line items mentioned in the Commercial Formats are for representation purpose. Bidders are required to suitably add line items / merge the cost components depending upon their proposed solution.
- xii. Quantity mentioned against each of the item is tentative in nature. Actual quantity verification shall be carried out at respective school location. Successful bidder shall be paid based on the actual quantity, which is installed and commissioned at site only. However, final decisive authority shall be AMC school board only in this regard.
- xiii. No escalations of prices will be considered under any circumstances.
- xiv. Warranty Period is defined as 3 years from the date of Go-Live of the complete system in working condition to the end user. The bidder shall be responsible to maintain the system for 3 Years from the date of Go-Live which includes year of onsite repair warranty and comprehensive Annual maintenance.
- xv. Bidder is requested to provide consumables as well for respective items for the entire contractual agreement period.
- xvi. Bidder is requested to provide adequate documentary evidence against all the work, specifically civil work carried out by their team.
- xvii. The bidders may visit the site and obtain additional information at their own cost and responsibility.
- xviii. AMC School Board to scale up and scale down resources based on requirements. Any line items may be removed from the scope based on AMC School Board's discretion.
- xix. During the payment stage, AMC School Board reserves the right to ask the Bidder to submit proof of payment against any of the taxes, duties, levies indicated. Bidder is also requested to submit all the documentary evidence while raising any invoice against respective milestone mentioned in this document.
- xx. The Bidder needs to account for all Out-of-Pocket expenses due to Boarding, Lodging and other related items. No additional/separate payment shall be made regarding the same.
- xxi. For the purpose of evaluation of Commercial Bids, AMC School Board shall make appropriate assumptions to arrive at a common bid price for all the Bidders. This however shall have no correlation with the Contract value or actual payment to be made to the Bidder.
- xxii. In case of repeat of same item in commercial bid, the least price quoted by bidder shall be considered while placing additional order.
- xxiii. The Contract Price shall be firm and not subject to any alteration.
- xxiv. The Implementation agency should be deemed to have satisfied itself as to the correctness and sufficiency of the contract price, which shall, except as otherwise provided for in the contract, cover all its obligations under the contract.
- xxv. Please note invitation of price discovery rate for future requirements does not imply guarantee of any

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additional work or any increase in scope of work under this project. The price discovery rates are being invited to meet any exigency requirements if a need emerges during the period of contract with respect to deployment of additional manpower resources.

- xxvi. The rate/cost quoted for AMC and price discovery elements would be considered for additional procurement/payment in future.
- xxvii. The bidder shall have to provide break-up of cost quoted under various line items (*Example: Break-up of cost quoted under each line item of Mathematics and Science Lab, which is more than 500 items under a particular one-line item in commercial bid*) in their commercial bid. The detailed break-up and its calculation shall be verified for the winning bidder only and overall rates quoted on online platform shall prevail. This discovered rate may be used by AMC School Board (Of winning bidder only).
- xxviii. Wherever present, the items mentioned as Lump Sum in above table will have quantity as 1 in the BoQ, the bidder should consider the same as Lump Sum and submit the commercials. Bidder is also requested to exercise the scope to be completed against the same line item.

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Section III: Commercial Bid Format

Detailed specification of the line items mentioned in Project cost (this includes both CAPEX and OPEX cost) table are available in Annexure D of this document.

A. Project cost

Sr. No.	Component	Quantity (A)	Unit of Measurement	Unit Rate (Excluding GST) (INR) (B)	Unit Rate (Including GST) (INR) (C)	Total (Excluding GST) (INR) (D=A*B)	Total (Including GST) (INR) (E=A*C)
1.	Math and Science Lab with working Models with Teachers Training and Charts (with LED T.V)	1	No.				
2.	3D Educational Chart with Wall Waterproofing	11000	Sq. ft				
3.	3D Paint	1000	Sq. ft				
4.	Future Class	1	Lump sum				
5.	Fancy Benches for Future Class	20	No.				
6.	Civil Work	1	Lump sum				
Total cost for one (1) smart school							
Total cost for Seventy-Five (75) smart schools							

Quantities mentioned in the commercial bid is for ONE (1) Smart school implementation only. Whereas bidder is required to implement 75 Smart schools under this project. Further, Quantities mentioned in the tender are approximate and no claim shall be entertained for quantities of work executed being either more or less than those entered in the tender of estimate. Total Cost for this project shall be Commercial bid summary, as the cost of one Smart School in the same table to arrive to the total project cost.

Further, as stated in Section 3.2.3, bidders shall have to provide quote against each of the line item mentioned in Section IV BoQ below this section. Bidder needs to provide bifurcation against the same.

The bidder must fill applicable taxes for each item as per the govt. rules and regulations as on bid submission date. In case of incorrect value of GST/taxes, the authority’s decision on bid evaluation shall be final and it may lead to disqualification of bidder.

AMC School Board may release the work order for the additional work of 30% of project cost for smart schools in totality or part there of any selected items from BOQ to the successful bidder the additional work will be given based on requirement and approval of AMC School Board Authority on rate discovered under the price bid of this tender.

The bidder whose total cost for the 75 schools, inclusive of all components specified in the provided table, is the lowest will be designated as L1.

Note: The bidder shall submit separate invoices for each school. For example, if there are four line items to supply to Asarwa School, the invoice should list only those components. For civil work, the bidder is allowed to issue a separate invoice, but it should be for each school only. Invoices that do not follow the school wise components list format will not be approved for the payment. The School Board will not be responsible for any incorrect invoices raised by the bidder. The bidder is solely responsible for any additional GST/TDS resulting from incorrect invoices.

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B. Detailed BoQ

Annexure: - 1 (Math's and Science Lab with working Models with Teachers Training and Charts)

Sr No	Name	Unit (A)	Unit Cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D = (B+C) *A)
1	JANTAR MANTAR	1			
2	LOOP the Loop	1			
3	LAZY TUBES	1			
4	Lever	1			
5	Circuit Board (Electrical)	1			
6	Tesla Coil	1			
7	Phases of moon	1			
8	Eclipse	1			
9	Seasons	1			
10	Waterproof Megnoscope	1			
11	Probability with Manipulative	1			
12	3-dimension modern periodic table	1			
13	Barometer, digital clock and calendar weather Forecast Receiver	1			
14	Wind Speed and direction meter	1			
15	Human battery	1			
16	Solar vapor tower	1			
17	Magnetic spring	1			
18	Magnetic field visualization with compasses	1			
19	Magnetic effect of electric current with compass	1			
20	Shape of earth due to rotation	1			
21	Solar water heater	1			
22	Conservation of momentum – marbles slide	1			
23	Smoke Based Optical Bench for Convex Lens	1			
24	Smoke Based Optical Bench for Concave Lens	1			
25	Smoke Based Optical Bench for Convex Mirror	1			
26	Smoke Based Optical Bench for Concave Mirror	1			
27	Self balancing doll	1			

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28	Tower of Pisa	1			
29	D of nails	1			
30	The floating ball	1			
31	Heat spiral	1			
32	Bernoulli balls	1			
33	Magic water tap	1			
34	Archimedes screw	1			
35	Simple Machines – To understand the functions of Lever – Pulley	1			
36	Wheel and axle load lifting	1			
37	Anamorphous	1			
38	Freely suspended magnet	1			
39	Zoetrope	1			
40	Colored shadows	1			
41	Viscosity	1			
42	Thaumatrope	1			
43	Internal reflection total	1			
44	Newton's disc	1			
45	Multiple reflection of light	1			
46	Human kaleidoscope	1			
47	The odd dining table	1			
48	Lateral shift	1			
49	Volcano eruption	1			
50	Day & night	1			
51	The universe – solar system	1			
52	Satellites	1			
53	Heat absorption	1			
54	Hand powered generator	1			
55	Radiometer	1			
56	Solar energy kit	1			
57	Newtons 3rd Law Model	1			
58	Magnetic fluid	1			
59	Windmill	1			
60	K.E. and P.E. wheel	1			
61	Marble race	1			
62	Force and types – FRICTION	1			
63	Electric Bell	1			
64	Magnetic effect of electric current with galvanometer	1			
65	Wave motion with pendulum	1			
66	Nham's disc	1			
67	Volume vs density	1			
68	DNA model	1			

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69	Rain measurement meter, heat index, dew point	1			
70	Angle of vision	1			
71	Depth perception – near and far	1			
72	Simple pendulum	1			
73	Pendulums of varying length	1			
74	Sympathetic pendulums	1			
75	Weight on different planets	1			
76	All roads lead to Delhi	1			
77	Angular momentum wheel	1			
78	Clap switch	1			
79	Funny mirrors	1			
80	Depth perception doll	1			
81	Drip irrigation	1			
82	Weight balancing scale	1			
83	Measurement of physical quantities : Weighing Machine	1			
84	Electric Maze	1			
85	Sand patterns of a compound pendulum	1			
86	The iconic border / colour boundary	1			
87	Change in electrical resistance due to dimension	1			
88	Pin screen	1			
89	Periscope (Submarine)	1			
90	Newton's cradle	1			
91	Resonance	1			
92	Moment of inertia	1			
93	Lateral and longitudinal waves	1			
94	Change in electrical resistance due to dimension	1			
95	Sound - Transmission of various types of sound waves. – Xylophone	1			
96	Natural resources	1			
97	SERIES AND PARALLEL CIRCUITS	1			
98	ELECTRICAL RESISTANCE OF MATERIALS	1			
	Biology LAB	1			
1	Student Microscope	1			
2	Human torso	1			
3	Human heart model	1			
4	Human brain & skull	1			

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5	Human Digestive Model (21*8")	1			
6	Human Nervous Model (21*8")	1			
7	Foot Joint	1			
8	Flip Joint	1			
9	Hand Joint	1			
10	Amoeba (9*13")	1			
11	Hydra	1			
12	Plant cell	1			
13	Animal cell	1			
14	Prepared Slide for Microscope	1			
15	Specimen in Plastic Jar,	1			
16	HUMAN BODDY 11 layers KNOWLEDGE KIT	1			
17	Coverslips	1			
18	Glass slides	1			
19	Motor and Pestle	1			
20	Human eye model	1			
21	Human ear	1			
22	DNA model	1			
23	Human skeleton	1			
24	The Muscular system and digestive system in Human ings - Teeth	1			
	Science kits	1			
1	Properties of Air	1			
2	Air can lift weight	1			
3	Relationships quiz cards	1			
4	Balloon car	1			
5	Clay animals	1			
6	Do it YOURSELF kit of MANGALYAN and Model of PSLV ROCKET.	1			
7	Colossal S & L – space theme	1			
8	Animals' zoo – card game	1			
9	Aryabhata model	1			
10	KEBO	1			
11	3d ball for solar system with acrylic paint and paintbrush	1			
12	Pinwheel	1			
13	Animals jigsaw	1			
14	Insects jigsaw	1			
15	Birds jigsaw	1			
16	Popsicle stick whistle	1			
17	Balloon bugle	1			

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18	Paper cup telephone	1			
19	Pan pipes	1			
20	The impossible fold	1			
21	Waterproof tissue paper	1			
22	Blowing out candle through bottle	1			
23	Magnetic spring	1			
24	Solar eclipse Viewer	1			
25	COSMOS : FROM BIG BANG TO EARTH	1			
26	SUN AND THE ZODIAC BAND	1			
27	Sundial	1			
28	Moon flip book	1			
29	Friction books	1			
30	Floating rice bottles	1			
31	Light is needed for photosynthesis	1			
32	Air is needed for photosynthesis	1			
33	Starch test for green leaves	1			
34	STATES OF MY COUNTRY JIGSAW	1			
35	Tornado in a bottle	1			
36	Magnetic field viewer	1			
37	Planets card game	1			
38	Catapult	1			
39	Strength of paper pillar	1			
40	Inverted glass of water with card	1			
41	Inverted glass of water with cloth	1			
42	Water rising in cup	1			
43	Inverted bottle of water	1			
44	Structures – paper cups	1			
45	Germination of seeds	1			
46	Starch test of food items	1			
47	LEVITATING PENCIL	1			
48	Which one has more volume	1			
49	Lungs model	1			
50	Inertia challenge	1			
51	Small lifts heavy	1			
52	Electromagnet	1			
53	Measurement of physical quantities: Measuring Units	1			

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54	Heat: Modes of heat transfer: Conduction	1			
55	Modes of heat transfer: Expansion and Contraction of a solid substance	1			
56	TELESCOPE 3.0	1			
57	Folding flyers	1			
58	Thaumatrope	1			
59	Piercing a balloon	1			
60	Cloth siphon	1			
61	Reflection of light	1			
62	Magic straw – static electricity	1			
63	Static electricity	1			
64	Jenga	1			
65	Balancing nails	1			
66	Ping pong ball cup challenge	1			
67	Reflection in a plane mirror	1			
68	Laws of reflection Common optics box	1			
69	Multiple reflection in mirrors at an angle common optics box	1			
70	No inversion – principle of periscope common optics box	1			
71	Dispersion of light common optics box	1			
72	Recombining light using two prisms common optics box	1			
73	Angle of prism common optics box	1			
74	Rainbow formation common optics box	1			
75	Eye defects and correction common optics box	1			
76	Lateral inversion common optics box	1			
77	Reflection through rectangular block common optics box	1			
78	Refraction and reflection at plane surface common optics box	1			
79	Refraction through semicircular block common optics box	1			
80	Critical angle common optics box	1			

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81	Total internal reflecting prism common optics box	1			
82	Focal length of convex lens common optics box	1			
83	Focal length of concave lens common optics box	1			
84	Focal length of convex mirror common optics box	1			
85	Focal length of concave mirror common optics box	1			
86	Focal length of convex lens using plane mirror common optics box	1			
87	Focal length of convex lens - image and object method common optics box	1			
88	Convex lens as a combination of prisms common optics box	1			
89	Concave lens as a combination of prisms common optics box	1			
90	Simple kaleidoscope	1			
91	Refraction tricks - broken pencil & disappearing coin	1			
92	ISRO GSLV mk2 making kit	1			
93	Respiratory system jigsaw	1			
94	Heat resistant thread	1			
95	Heat resistant balloon	1			
96	Finding of light using water bottle and laser	1			
97	Paper chromatography	1			
98	Balloon wars	1			
99	Jal tarang	1			
100	Screaming balloons	1			
101	Soap and turmeric test	1			
102	Floating and sinking lemons	1			
103	Simple circuits – conductors and insulators	1			
104	Doppler effect	1			
105	Floating ball challenge	1			
106	Hydraulic jack	1			
107	Hydraulic excavator	1			
108	Potato battery	1			
109	Lemon battery	1			
110	Kabhie solid kabhie liquid	1			
111	Crystal model	1			
112	The Structure of an atom	1			
113	Food chain jigsaw	1			

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114	Guess the state flash cards	1			
115	Guess the professions	1			
116	Who am i	1			
117	Paper circuit	1			
118	Colour blending top	1			
119	Electric bug	1			
120	Art bot	1			
121	Four legged walking toy	1			
122	Water filtration	1			
123	Telescope MAKING KIT	1			
124	The odd mous strips	1			
125	Effects of Light : LIGHT TRAVELS IN A STRAIGHT	1			
126	Light & Shadow: i. Sources of Light, ii. How shadows form	1			
127	Make your own home	1			
128	Different types of Currencies	1			
129	Different Types of Masala	1			
130	Working of Clock	1			
131	Gujarati Globe	1			
132	Pin Hole camera	1			
133	Stethoscope	1			
134	Sand Clock	1			
135	Gujarat Map with (Famous Places, udhyog , khanij, paak, river & Hills)	1			
	(A) Chemistry LAB	1			
1	Test Tubes	1			
2	Conical Flask (250ml)	1			
3	Measuring Cylinder (100ml)	1			
4	Syring	1			
5	Funnels (75 mm)	1			
6	Glass Rods	1			
7	Glass Trough (8*4")	1			
8	Round Bottom Flask	1			
9	Tripod Stand	1			
10	Wire Gauze	1			
11	Spirit Lamp	1			
12	Spatula	1			
13	Tongs	1			
14	Forceps	1			
15	Filter Paper	1			
16	Rubber Cork – one Hole,Two holes & Without holes	1			
17	Test tube stand	1			
18	Plastic Tray	1			

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19	Delivery Tube for test tubes	1			
20	Test tube holders	1			
21	Gloves	1			
22	Test tube Cleaning brush	1			
23	Wash Battles (250ml)	1			
24	Bunsen Burner	1			
25	LITMUS PAPER BLUE	1			
26	Litmus paper red	1			
	Chemicals Lab	1			
1	Iodine Solution	1			
2	Sodium Hydroxide	1			
3	Vinegar	1			
4	Sodium Bicarbonate	1			
5	Sodium carbonate	1			
6	Methylene Blue	1			
7	Lime Water	1			
8	Copper Sulphate	1			
9	Sodium Nitrate	1			
10	Hydrochloric acid N10	1			
11	Sulphur Powder	1			
12	Magnesium Ribbons	1			
13	Acetic Acid	1			
14	Calcium Chloride Fused	1			
15	Copper Oxide Red	1			
16	Lead Nitrate	1			
17	Potassium Chloride	1			
18	Sodium sulphate	1			
19	Ammonium Chloride	1			
20	Lime water	1			
21	Acetone Extra pure	1			
22	Phenolphtheline indicator	1			
23	Methelyne blue	1			
24	Sulphuric Acid	1			
	Mathematics kits	1			
1	$A(b + c) = ab + ac$	1			
2	$(A + b)(c + d) = ac + ad + bc + bd$	1			
3	$(A + b)^2 = a^2 + 2ab + b^2$	1			
4	$(A^2 - b^2) = (a+b)(a-b)$	1			
5	$(A + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$	1			
6	$(A + b)^3$	1			
7	$(A+b)^2 - (a-b)^2 = 4ab$	1			
8	Area of rhombus	1			
9	Area of triangle 1	1			

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10	Area of triangle 2	1			
11	Area of parallelogram	1			
12	Area of trapezium	1			
13	2 d geometrical shapes	1			
14	3 d geometrical shapes	1			
15	$(A+b)^2 + (a-b)^2 = 2a^2+2b^2$	1			
16	Multiplication strips	1			
17	Fraction strips	1			
18	Numr puzzle game - arrange 1 to 8	1			
19	Equilateral triangle to square puzzle	1			
20	Sum of angles of a triangle	1			
21	Sum of angles of a quadrilateral	1			
22	Pentominoes	1			
23	Mid-point theorem	1			
24	Set of triangles	1			
25	Angle bisector theorem	1			
26	Two congruent right triangles	1			
27	Plug in 3 holes	1			
28	Parking puzzle	1			
29	Pegboard puzzle	1			
30	1 TO 9 = 15 MATHS puzzle	1			
31	Tower of brahma puzzle	1			
32	LCM	1			
33	1 TO 9 = 20 MATHS PUZZLE	1			
34	1TO 12 =26 MATHS PUZZLE	1			
35	Tangram puzzles	1			
36	Integers	1			
37	FACTORS Reuse material of Integers kit	1			
38	EVEN & ODD NUMRS Reuse material of Integers kit	1			
39	TURN-TURN GAME Reuse material of Integers kit	1			
40	Make a Square puzzle	1			
41	Circle into Rectangular	1			
42	Rectangular geoboard	1			
43	Circular geoboard	1			
44		1			
45	Pythagoras theorem 2	1			
46	Understanding pi	1			
47	Sum of angles of traingle with respect to shape of edge	1			

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48	Constructions of parabola	1			
49	Soma Cube	1			
50	$Ad^2 = bdxdc$	1			
51	Construction of ellipse	1			
52	1 to 16 =36 math's Puzzle	1			
53	Find the bigger curve	1			
	Charts – contributors of science	1			
1	Johannes kepler	1			
2	Sushrut	1			
3	Aryabhata	1			
4	Varahmihira	1			
5	Brahmagupta	1			
6	Nagarjuna	1			
7	Bhaskaracharya	1			
8	Raja sawai jai singh	1			
9	Srinivasa Ramanujan	1			
10	Jagdish chandra bose	1			
11	Prafulla chandra roy	1			
12	Homi jahangir bhabha	1			
13	Vikram sarabhai	1			
14	Alrt einstein	1			
15	Sir c v raman	1			
16	Satyendranath Bose	1			
17	Subrahmanyanchandrashek har	1			
18	Edwin hubble	1			
19	Baudhayana	1			
20	Charak	1			
21	Rishi kanad	1			
22	Galileo galilei	1			
23	Isaac newton	1			
24	Nicolaus copernicus	1			
25	Charles darwin	1			
	Charts – contributors of mathematics	1			
26	Rene descartes	1			
27	D r kaprekar	1			
28	R c bose	1			
29	John napier	1			
30	Galileo galilei	1			
31	Fibonacci	1			
32	Varahmihira	1			
33	Bhaskaracharya 1	1			
34	Bhaskaracharya 2	1			

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35	Brahmagupta	1			
36	Mahaviracharya	1			
37	Archimedes	1			
38	Aryabhata	1			
39	Pythagoras	1			
40	Euclid	1			
41	P c vaidya	1			
42	A r rao	1			
43	Isaac newton	1			
44	G w leibniz	1			
45	Leonhard euler	1			
46	C f gauss	1			
47	George boole	1			
48	Alrt einstein	1			
49	Srinivasaramanujan	1			
50	Harish chandra	1			
51	Stand for charts	1			
52	Pen drive	1			
53	Platform	16			
54	Storage cupboards	1			
55	LED tv	1			
56	Common tools box	1			
57	Trouble shooting and repairs box	1			

Annexure: - 2 (3D Educational Chart)

Sr No.	Name of Item	Unit/ Sq. ft (A)	Unit Cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D = (B+C) *A)
1	3D Educational Chart with Wall Waterproofing	11000 Sq. ft			

Annexure: -3 (3D Paint)

Sr. No.	Name	Unit/ Sq. ft (A)	Unit Cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D=(B+C) *A)
1	3D paint	1000 Sq. ft			

Annexure: -4 (Future Classroom)

Sr. No	Future Classroom	Unit / Size (A)	Unit Cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)

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Sr. No	Future Classroom	Unit / Size (A)	Unit Cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
	Estimated deliverables.				
	HARDWARE				
1	Chromebook / Laptop	40			
2	Integrated computer projector	1			
3	Wireless Router	1			
4	Chrome cart & Storage Facility	1			
5	USP (Minimum 20 minutes back up)	1			
6	Networking and Cabling	1			
	SOFTWARE/APPLICATION				
1	Multimedia Learning Modules in Hindi/English	1			
2	Management Console	40			
3	G Suite for Education	-			
	PROJECT MANAGEMENT				
1	Minimum 1 days of Professional Development Program for Teachers at the inception of Project	-			
2	Refresher Training (one per year for Five years)	-			
3	School Coordinator for minimum 12 months for all schools	-			
4	Project Management for minimum 36 months (Including VAS)	-			
5	Basic Electrification of all IT Equipment	-			

Annexure: - 5 (Benches for Future Class)

Sr No	Name	Unit/ Sq. ft (A)	Unit Cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
1	Benches for Future Class	20			

Annexure: - 6 (CIVIL WORK)

The successful bidder shall undertake school survey work and submit a report with details such as no. of door/window, nature and quantity of repair work requirement including plaster, floor repairing, colour, door/window work, 3D charts and more as specified in RFP. AMC school board will finalize and approve the civil work in each school.

It is the vendor responsibility to complete the cleaning work of school building and premise as per the satisfaction of school principal and AMC school board authority.

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
1	Dismantling tiled or stone floors laid in mortar including stacking of serviceable materials and disposal of under serviceable materials with all lead and lift	SMT	1			
2	Demolition of Brick work and stone masonry including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (ii) in cement mortar	CMT	1			
3	Demolition including stacking of serviceable materials and disposal of unserviceable materials with lead and lift. (i) RCC work	CMT	1			
4	Demolition of brick work and stone masonry including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (i) In Lime mortar (ii) in Cement mortar.	CMT	1			
5	Dismantling sanitary fittings like wash basin, Indian WC pan, European WC pan, flushing tank etc. including stacking the materials with all lead and lift	No.	1			
6	Excavation for foundation up to 1.5m depth including sorting out, stacking of useful materials and disposing of the excavated stuff up to 50mt. lead.		1			
6 A	(A) Loose soil or soft soil	CMT	1			
6 B	(C) Hard murrum	CMT	1			
7	Providing & Laying Brick bat cement Concrete 1:5:10 (1 Cement: 5Coarse sand: 10 graded brick aggregates 40mm nominal size) and curing complete excluding cost of form work. Foundation and plinth.	CMT	1			
8	Providing & laying Cement Concrete 1:4:8 (1 Cement :4 Coarse sand :8 hand Brocken stone aggregates of 40mm nominal size) in plinth and curing complete including cost of formwork. (A) Foundation and Plinth - At plinth level	CMT	1			
9	Providing & laying Cement Concrete 1:2:4 (1 Cement: 2 Coarse Sand: 4 graded stone aggregate 20 mm nominal size) & curing complete including cost of form work (A) Foundation and Plinth -Below Tie beam, Plinth protection & surface leveling work.	CMT	1			
10	Providing and laying cement concrete flooring 1:2:4 (1-cement: 2-coarse sand: 4-graded stone aggregate 20mm nominal size) laid in one layer and finished with a floating coat of neat cement.	SMT	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
	(A) 40mm thick.					
11	Providing and laying controlled cement concrete M.200 and curing complete including the cost of formwork and excluding the cost of reinforcement for reinforced concrete work in (C) Coping Vertical and horizontal for all floor (Cement Level 360 Kg)	CMT	1			
12	Providing and laying controlled cement concrete M.250 and curing complete including the cost of formwork and excluding the cost of reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete. (Cement Level 380 Kg) (B) Columns, Pillars posts and struts all floor (Cement Level 380 Kg) (C) Slab all floor (Cement Level 360 Kg)	CMT	1			
13	Providing I.S.I. T.M.T Bars Fe.500D steel reinforcement (ISI mark) Confirmed to IS-1786 for R.C.C. work including Cutting, bending, binding and placing in position etc. complete. For all floors	KG	1			
14	Brick work using common burnt clay building bricks having crushing strength not less than 35Kg./sq.cm. In foundation and plinth in cement mortar 1:4 (1 cement :6 Coarse sand) (B) Conventional.	CMT	1			
15	Brick work using common burnt clay building bricks having crushing strength not less than 35Kg./sq.cm. In foundation and plinth in cement mortar 1:6 (1 cement :6 Coarse sand) (B) Conventional.	CMT	1			
16	Half brick in common brunt clay building bricks having crushing strength not less than 35 Kg/sq.cm in cement mortar 1:4 (1 cement: 4 coarse sand) (C) Fly Ash Bricks in super structure including curing etc. complete. For all floors	SMT	1			
17	Providing 10mm thick cement plaster in single coat on brick/concrete walls & Ceiling & Soffit of stair interior plastering in cement mortar 1:4(1 cement 4 sand) watering, curing etc. complete. For all floors	SMT	1			
18	Providing 15mm thick cement plaster in single coat on rough or fair side of single or half brick wall for interior plastering in cement mortar 1:4(1 cement 4 sand) watering, curing etc. complete. For all floors	SMT	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
19	20mm thick sand faced cement plaster on walls above ground level consisting of 12mm thick backing coat of cement mortar 1:3(1 cement 3 sand) and 8mm thick finishing coat of cement mortar 1:1(1 cement 1 sand) watering, curing etc. complete for any Height.	SMT	1			
20	Providing and laying White glazed tiles minimum 6mm thick in flooring, treads of steps, skirting or dado and landings laid on a bed of minimum 12mm thick cement mortar 1:3(1 cement: 3 coarse sand) finishing with flush pointing in white cement.	SMT	1			
21	Providing and laying white glazed tiles 6mm thick in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1-cement : 3-coarse sand) finishing with flush pointing in white cement.	SMT	1			
22	Finishing walls with 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot Tinted) with silicon additives. New work (Two or more coats applied @ 1.43 liter/ 10sqm. Over and including priming coat of exterior primer applied @ 0.90 liter/10 sqm, Item Includes two coat of primer and putty with scaffolding at all level of work. As per Approval of Engineer In charge.	SMT	1			
23	Distempering (Two coats) with oil bound washable distemper having VOC content less than 50 gm/liter of approved brand and manufacture and of required shade on wall surfaces to give an even shade, over and including a priming coat with alkali resistance primer of approved brand after thoroughly brushing the surface and other foreign matter and also including preparing the surface even and sand papered smooth As per Approval of Engineer In charge. Rate are inclusive of Applying Two Coats of Lappy (Putty) and One Coat of Primer on New Wall Surfaces to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth. Material shall be used As per Approved make list of SSA	SMT	1			
24	Painting two coats (Including priming coat) having Low VOC content on new wood and wood based surface with enamel paint, Primer coat, interior to give an even shade including cleaning the surface of all dirt, dust, oil, grease and other foreign matter sand papering, knotting and stopping. (As directed by Engineer in charge)	SMT	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
25	Painting two coats (Including Priming coat)having Low VOC content over new steel and other metal surfaces with enamel paint, primer coat, brushing, interior to give an even shade including cleaning the surface of all dirt, oil, grease, dirt, dust and other foreign matter with fine steel wood, scrapers and sand paper with ready mixed priming paint brushing red lead etc. complete.(As directed by Engineer in charge)	SMT	1			
26	Providing and laying Minimum 25 mm Kota stone Polish work, with Polish Kota stone slab flooring over 20mm. (average) base of cement mortar 1:6 (1 cement :6 coarse sand) of L.M. 1:1.5 and laid and jointed with grey cement slurry including rubbing and polishing complete. (Item no.12	SMT	1			
27	Providing and laying polished kota stone slab 25mm thick in risers of steps, skirting Dedo and pillars laid on 10mm thick cement mortar 1:3 (1-Cement: 3 coarse sand) and jointed with gray cement slury mixed with pigment to match the shade of slab including rubbing and polishing etc. complete.	SMT	1			
28	Providing and laying 25mm thick polished Kota stone flooring/staircase treads (two pieces with three groves in front of steps) over 20mm (average) thick base of cement mortar 1:6 (1 cement 6 coarse sand) laid over and jointed with grey cement slurry including curing, rubbing, and polishing etc. complete.	SMT	1			
29	Providing & fixing average 25mm thick Double polished Kota stones for shelves in cup board, seating plat form, including curing, rubbing, polishing etc. complete. (As directed by Engineer in charge)	SMT	1			
30	Providing & Fixing 25mm thick double polished vertical Kotah stone for (partion)urinal as par drawing including round edge molding etc comp. (As directed by Engineer in charge)	SMT	1			
31	Providing and laying 18 mm thick mirror polished black granite stone machine cut in single piece (Max. available) in sill and jambs laid over 10 mm thick cement mortar 1 : 3 (1 cement : 3 coarse sand) and jointed with grey cement slurry with matching pigment incl. rubbing and polishing half rounding edge both side etc. complete colour and shed as approved by architect engineer in charge. (As directed by Engineer in charge)	SMT	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
32	Providing and laying water proofing including 0.23 mts. radius vata with water drip as directed with 5 years written guarantee, by laying 40 mm thick cement mortar 1:4 (1 cement : 4 fine sand) after thoroughly cleaning the base slab and removing all the loose materials with wire brush, applying cement & waterproofing slurry evenly spread on slab and mixing water proofing materials in cement mortar in proportion as recommended by manufacture, laying brick bats after thoroughly soaked in water on layer of cement mortar, applying cement slurry on brick between @ 0.08 bag/smt. with mixing water proofing materials in proportion as recommended by the manufactures & finishing top with China mosaic tiles chips with 12 mm thick C.M. 1:3 base and laying by keeping gaps which should be filled with white cement and color pigment including rounding or junction extending up to 15 cm along the wall, including curing etc. complete. Note: The measurement of this item shall be taken as that of the horizontal surface (length x width) that is from inside of the parapet walls, thus, not considering the surface measurement of the rounded vatas.	SMT	1			
33	Providing cement vata (10 cm X 10 cm size) quarter round in cement mortar 1:1 including neat cement finishing, watering etc. complete Respectably plaster activity shall be commenced only after completion of vata work.	RMT	1			
34	Providing & fixing in position mild steel door with ventilation frame 40x40x6 mm and shutter frame 35x35x5mm ,75x5 mm ms flate at lock rail,10 mm square bar in vent at10 cm c/c covered with corrugated ms sheet 0.6 mm thick, including applying a priming coat of read lead paint including cleaning the surface of all dirt, dust and other foreign matter (As directed by Engineer in charge& approved drawing and design etc.)	SMT	1			
35	Providing & fixing in position mild steel window with ventilation frame 35x35x5 mm and shutter frame 25x25x5mm ,10 mm square bar grill at10 cm c/c covered with corrugated ms sheet 0.6 mm thick, including applying a priming coat of read lead paint including cleaning the surface of all dirt, dust and other foreign matter (As directed by Engineer in charge& approved drawing and design etc.)	SMT	1			
36	Providing and fixing window having extruded aluminum Colour Powder Coated section frame main outer size 63.50 x 38.10 x 1.95 mm(of	SMT	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
	Jindal Section no:4605,@ Wt 1.094 Kg / Rmt), horizontal two track member size 61.85 mm x 31.75 mm x 1.20mm (of Jindal Section no: 8687 @ wt.of 0.695 Kg/mt), vertical member of size 61.85 mm x 31.75mm x 1.30 mm (of Jindal Section no:8758 @ wt.of 0.0.659 Kg/mt) with sliding shutters of horizontal member size 40mm x 18mm x 1.29mm (of Jindal Section no:8949 @ wt.of 0.456Kg/mt), vertical member of size 40mm x 18mm x 1.29mm (of Jindal Section no:8947 @ wt.of 0.456Kg/mt/ Section 8948, @ Wt. 0.457 Kg/mt) with 5 mm thick transparent bronze colour tinted float glass with powder coated aluminum fittings and fixtures and transparent silicon sealant glass fixing to frame as per details etc complete for window.					
37	Steel work, welded in built up sections framed work including cutting, hoisting, fixing in position and applying a priming coat of read lead paint. (A)In beams and joists, channels angles Tees, flats, with connecting plates or angle cleats as in main and cross beams. Hip and jack rafters, purlins connected to common rafters etc..	KG	1			
38	Providing & fixing G.I rain water Spout of 65mm dia and 60cm length.	No.	1			
39	Providing and fixing pre-cast Rubber Dye / steel Dye inter locking concrete block 60mm thick with grade of concrete M300 pneumatic compressed / vibrated mechanically and as per approved design Confirming to IS 15658 : 2006 including 35 mm Sand layer for levelling and filling the joint with sand in proper line and level as per guidelines of IRC : SP 63-2018 etc. Complete.	SMT	1			
40	Re-fixing of existing paver Blocks: Fixing of existing pre-cast Rubber Dye interlocking concrete block as per approved design including 35mm Sand layer for levelling and filling the joint with sand in proper line and level etc complete.	SMT	1			
41	Providing and fixing pre-cast concrete kerb stone of gray cement based concrete block 30 cm length, 30cm height and 15cm thick of M250 grade concrete as per approved design and including excavation for fixing in proper line and level, filling the joint with C:M 1:3 (1 Cement : 3 Fine sand) etc. complete (uptp 10 ton).	RMT	1			
42	Providing and fixing 0.90-meter-high fencing with 1.20-meter-long M.S. Angle posts 40 mm. X 40 mm. X 6 mm. And oil painting 3 coats fixed at	RMT	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
	2.5 mt. C/c with Three horizontal lines and two diagonals of galvanized steel barbed wire weighing 9.38 Kg. Per 100 meters, strained and fixed to posts with G.I. staples, including fixing posts in compound wall					
43	Providing and fixing of highly durable pre-coated Roofing Sheets having high quality color coating throughout the roof and having minimum 0.6 mm thickness .The Color Coated sheet Roofing fixed with galvanized iron /color powder coated J or L Hooks, Bolts and nuts 8mm diameter with bitumen and G.I. limpet washer or color powder coated limpet washer. filled with white lead complete as per approved sample and color as directed by engineer in charge	SMT	1			
44	Providing ridges or hips 600 mm overall in pre-coated G.I. sheet class-3 fixed with G.I.J. or L Hooks and nuts 8mm dia G.I. Limpet and bitumen washer complete. (1) 0.60 mm thick sheet.	SMT	1			
45	Providing and fixing 150mm wide 450mm over all semicircular plain G.I.sheet class-3 gutter with Iron brackets 40mm x 3mm size Bolts, Nuts, washers etc. including making necessary connection with rain water pipes. (i) 0.60 mm thick Sheet.	SMT	1			
46	Providing and Fixing 5mm thick Acrylic Name Plate for dark zink glare with braille lippi and fixing with double sided bonding tap and screws as per direction of Engineer in charge of Size having 12'. X 4' & 12' X 18' etc. compl.	No.	1			
47	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x15 mm having with water absorption less than 0.5% and conforming to IS:15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	SMT	1			
48	Providing and fixing Red Agra stone takti of size 1220*762*25 to 20 mm having with approved LOGO Letter and in ivory colour with water based sealant coating finishing on wall in cement mortar 1:3 (1 cement : 3 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of	No.	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
	Engineer-in-Charge.					
49	Providing and fixing washbasin with single hole for pillar tap with C.I.or M.S.brackets painted with including cutting holes and making good the same but including the fittings. (A) vitreous China (II) Flat back washbasin 550 mm x 400 mm size (I) in white colour.(Approved Brand - CERA, Jaquar, Hindware, Perryware, Hindustan, HR Jhonson(Green Series – Water Saving Fitting and Facuets) as directed and approved by engineer incharge.	No	1			
50	Providing & fixing Stainless steel 316 Grab Bar 40mm dia.75Cm long rail.as directed and approved by engineer incharge.	No.	1			
51	Providing & fixing screw down low flow bib taps of following size(B)brass chromium plated Screws down Bib Tap (i)15mm dia.(Approved Brand - CERA, Jaquar, Hindware, Perryware, Hindustan, HR Jhonson(Green Series – Water Saving Fitting and FACuets)as directed and approved by engineer incharge.	No.	1			
52	Providing & fixing urinal of Approved quality including connecting the urinal with waste pipe, trap etc. complete (A) White earthenware flat back or corner type (including Angle cock, Waste coupling, connection pipe & waste pipe) as approved by engineer in charge.	No	1			
53	Providing and fixing wash down water closet (European type W.C pan) with integral P or S trap including jointing the trap with soil pipe in cement mortar 1:1 (1 cement : 1 fine sand) (seat cover, Jet spray & Flush Tank to be measured Including) (A) Vitreous China (I) Long pattern white as directed and approved by engineer in charge.	No	1			
54	Providing and fixing water closet squatting pan (Indian type W.C pan) size 580 mm (earthwork, bed concrete, foot rests, Flush Cock and trap to be measured and including paid) (A) Vitreous China (I) Long pattern white as directed and approved by engineer in charge.	No.	1			
55	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace	Liter	1			

Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad city

Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
56	Providing laying and jointing in true line and level 40mm dia. U.P.V.C. Pipe (SCH-40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	RMT	1			
57	Providing laying and jointing in true line and level 25mm dia. U.P.V.C. Pipe (SCH-40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	Rmt	1			
58	Providing laying and jointing in true line and level 15mm dia. U.P.V.C. Pipe (SCH-40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	RMT	1			
59	Providing & fixing to wall ceiling and floor 6.0 kg F/cm ² working pressure PVC pipes of the following out side dia. Special density complete with special flange compression type fitting, wall clips etc. including making good the wall ceiling and floor. (A) 160 mm dia. (B) 110 mm dia. (C) 75 mm dia.	RMT	1			
60	Providing and fixing chromium plated brass half trun flush cock of approved quality including fixing in pipe line etc. complete. [ii] 25 mm	No.	1			
61	Providing and fixing Ball Cock of approved quality as directed. (A) copper metal - (II) 25 mm dia.	No	1			
62	Filling in plinth with sand under floors including watering griming, consolidating, and dressing complete (up to 10 ton)	CMT	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
63	Providing & filing with leveling work Sand in school all children play area	SMT	1			
64	Creating decorative side wall or garden wall as per side location	RMT	1			
65	Providing & Fixing 18 W.led Panel Light etc. comp. (Market Rate as per ssa)	Nos	1			
66	Carrying out wall treatment for termite control including spraying with chemical solution in oil base (0.5 Lit/Sq. m) including labor and material. Using heptachlor concentration 20 Ec. As per IS. 6316_ Paret- II concentration by weight 0.50 percent is recommended i.e., one-liter chemical emulsion dilute with 39-liter of IS concentration total dilute concentration will be 40 liters inclusive of one-liter chemical emulsion application at the rate of 7.5-liter chemical / Sqm of surface is recommended as per I.S.	SMT	1			
67	Major repair of Door/Windows/ventilators Shutters and frames including necessary fitting and fixtures. (As per Market rates)	Nos	1			
68	Providing and fixing 35mm thick shutter and frame for doors and windows and clear story windows including apodised aluminum butt hinges with necessary screws and required fittings. (A) Indian Tick wood (B) Partly paneled and partly glazed (C) Fully glazed (D) Fully Paneled	Sqm	1			
69	Handel for doors & windows & cupboards 15 cm	Each	1			
70	SS Doors and Windows Hinges	Nos	1			
71	SS Aldrop 20/25/30 cm long of ASIS 304 Grade	Nos	1			
72	SS Stopper 20/30/60 cm long of ASIS 304 Grade	Nos	1			
73	Providing & laying minimum 36"x36" vitrified minimum 8mm thick tiles flooring over Minimum 20mm (average) base of cement mortar 1:3(cement:6course sand) on new surface or fixing on exiting flooring by adhesive material including dismantling of existing	SMT	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
	flooring and jointed with color cement slurry including finish with flush pointing and cleaning the surface etc. complete.					
74	Providing & laying 24"x24" vitrified 8mm thick tiles flooring over 20mm (average) base of cement mortar 1:3(1cement:6course sand) on new surface or fixing on exiting flooring by adhesivematerial including dismentalling of existing flooring and jointed with colour cement slurry including finish with flush pointing and cleaning the surface etc. complete.	SMT	1			
75	Clearing and grubbing road including land including Porting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300mm removal of stumps of trees cut earlier and disposal of unserviceable materials etc.comp	HECTARE	1			
76	Point wiring for Light / Bell and Fen, speaker wire with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat. III	Point	1			
77	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat. III	Point	1			
78	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate	Point	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
	front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories.[II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat. III					
79	Providing & erecting Switch board for Computer or electric apparatus consisting of following modular type accessories mounted with PVC / Metallic concealed/open box with single mounting base frame covered with textured/metallic /white front plate,modules erected with necessary connections as directed 1 no. 6A/16A universal plug-switch combined. 3 nos. 6A Switch 3 nos. 6A 5 pin Plug for Modular Type Accessories Cat. III	Each	1			
80	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (iv)12 way (B) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) (b) sheet steel double door (iii)8 way (C) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) (b) sheet steel double door (i)4 way	Each	1			
81	providing and erecting Approved make ELCBs / RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed (i) 40Amps. DP Cat. III (ii) (iii) 63 Amps. FP Cat. III	Each	1			
82	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly		1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
	conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover.(approved make OEM has to submit test certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 \square / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted. (A)For Electrical installation up to 11 KV in normal soil. (B) For Electrical Installation up to 440V in normal soil Length of Pipe : 2.00 mtrs Back filling Compound :1 no. Bag of 25 Kg					
83	Providing and erecting XLPE (IS:7098) (I)-88 ISI armored cable multistrand Aluminum conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables. (b) 4 core 6 Sq. mm	RMT	1			
84	Minimum 15-Watt LED Panel Light with Metal Body (Minimum 600 X 600 MM)	Nos	1			
85	Providing & erecting Approved make Power Saving 50-Watt Ceiling Fan with double ball bearing ISI mark with Condenser 230-volt A.C. 50 Hz 1200 mm sweep complete having 3blades with aluminum blades with , canopy & 30 cm. down rod erected with 3 core flexible wire with earthing.(Make shall be approved by Engineer in charge))	Each	1			
86	Minimum3MM ACP sheet board Alu decor Alu Star Plaso (ACP Sheet Carving) Minimum 3MM acrylic Sheet Pasting for making of Carving. LED module: Power Supply, Board Depth – Minimum 3”MS pipe frame of Minimum 1”x1” (4 Kg Pipe of 20 ft length) Back Side GI Sheet Pasting covering Minimum 1 Year warranty on Electricals.	Nos	1			
87	Repair and replacement of all the sanitaryware plumbing accessories in both the male and female washroom and drinking water area etc..	Nos	1			
88	Museum Quality Bharat Mata and Saraswati Mata Canvas Photo with UV Ray Protective Layer and with Metal Frame (Inside image Size - 724 mm x 896 mm, 3 Side white Boarder Size - 40 mm, bottom Side white Boarder Size - 55 mm with Sanskrit Slok and others, Total Image Size: 804 mm x 1081 mm)	Nos	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
89	Providing and Fixing MS Cupboard Shutter	Sq. m	1			
90	Providing and fixing smart classroom in wooden box with laminated	Sq. m	1			
91	Providing & fixing Photo Frame size 19"X13"	Nos	1			
92	Providing & fixing 3D letter for building Names of Stainless steel 1" emboss size of letter in 6 - 10-inch height	Sq. ft.	1			
93	Supplying, fitting, and fixing GI sheet with cost all materials, labor	SMT	1			
94	Supplying, fitting, and fixing fibber sheet with cost all materials, labor	SMT	1			
95	Providing & fixing of expansion joint system related with wall and floor	Mt	1			
96	Labor charges for cleaning Municipal School U.G./O.H. water tank by modern science technology with six stage process as below (1) Turbidly cleaning i.e. dewatering water by submersible pump. (2) Cleaning of all the side walls & ceiling of the water tank by using rotary jet high pressure jet spray gun. (3) After that removing sludge % slurry out of water tank by sludge pump. (4) To spray anti-bacterial agent on the side wall, ceiling & flooring after the tank is cleaned. (5) Finally, to remove remaining disinfections in the water tank, ultraviolet light must be used in tank for sufficient time. Electric supply etc. shall be provided by M.S.B. without charging any extra cost. The complete tank cleaning by micro cleaning system shall be done as directed by engineer in charge. The complete tank cleaning by micro cleaning system shall be done as directed by officer in charge. It also includes carting away removed sludge up to 5km lead. (For below period)	No.	1			
97	Repair and restoration of benches including fixing any structural damage and applying a fresh coat of color to enhance their appearance and durability. The scope of work should include surface preparation repair of any cracks or damages and recoloring in accordance with the	No.	1			

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Sr. No	Name of Item	Unit	Qty.	Unit cost (Without Tax) (B)	Tax per unit (C)	Total Cost (D= (B+C) *A)
	original design or as specified by the project guidelines.					

Annexure C: Agreement Format

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Part I: Undertaking

(The Undertaking as per following format on non-judicial stamp paper of Rs. 100/- is to be furnished by contractor when asked by AMC School Board after opening of tenders/Price bid.)

Name of Work: Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.

Ref: Tender Notice No. -----

Respected Sir

We had participated for the above-mentioned work, and we were qualified for the criteria mentioned in the subjected works tender.

Upon asked by AMC School Board, we hereby give our consent with this undertaking to carry out and execute the works of Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city, if the same is awarded to _____ above/below the estimated rates.

We hereby agree and abide ourselves and assure AMC School Board that we will not deny to carry out and execute the work if the same is awarded to us by the competent authority of AMC School Board at above mentioned rates and terms mentioned in the subjected work's tender, failing which, competent authority of AMC School Board may take penalty actions like disqualifying or debarring us for future works of AMC School Board for the period as decided by AMC School Board upon their discretion, or any other action as decided by competent authority of AMC School Board.

This undertaking will remain in force up to

Sign and Stamp of Contractor.

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Part II: Master Service Agreement

(To be printed on Rs. 100/- Stamp Paper)

This AGREEMENT is made at _____, Ahmedabad, Gujarat on this ____ day of _____, _____, BETWEEN

-----, hereinafter referred to as "Client", or "AMC School Board" (which expression unless repugnant to the context therein shall include its administrator and permitted assignees) of the FIRST PART.

AND

-----, a company registered under the Companies Act, 1956 or partnership firm registered under Indian Partnership Act 1932 or Proprietary Firm having its registered office at -----, hereinafter referred to as "Service Provider" or "SP" or "Vendor" or "Bidder" or "SI", (which expression unless repugnant to the context therein, shall include its successors, administrators, executors and permitted assignees), of the SECOND PART.

Whereas AMC School Board has envisaged to Selection of Bidder for Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city. (Hereinafter referred to as the "Project");

And whereas AMC School Board published the RFP for Selection of Bidder for Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city.

And whereas M/s. ----- has submitted its proposal for "Selection of Implementation Agency for upgradation of AMC Municipal Schools to Smart School in Ahmedabad city".

AND whereas AMC School Board has selected M/s.....as successful bidder and issued Letter of Intent datedto the successful bidder who in turn signed and returned the same as a token of acceptance of Letter of Intent.

And whereas AMC School Board and M/s. ----- have decided to enter into this Agreement on the terms and conditions stipulated hereinafter.

NOW, THEREFORE, in consideration of the premises covenants and promises contained herein and other good and valuable considerations, the receipt and adequacy of which is hereby acknowledged, the parties intending to be bound legally, IT IS HEREBY AGREED between the Parties as follows:

Definitions

In this Agreement, the following terms shall be interpreted as indicated, -

"AMC School Board" means Ahmedabad Municipal Corporation School Board.

"Contract" means this Agreement entered into between AMC School Board and the Bidder including all attachments and annexure thereto and all documents incorporated by reference therein.

"Bidder" means M/s. ----- interchangeably referred to as "SI" in the contract; and

"RFP" means the Tender Published by AMC School Board (Ref. No. -----) and the subsequent Corrigenda / Clarifications issued.

"Go Live or successful completion of implementation of the project" date means the day after the date on which the proposed project stream becomes operational after successful conclusion of all acceptance tests to the satisfaction of AMC School Board.

"Deliverable" means any action / output generated by the SI while discharging their contractual obligations. This would include information and all the other services rendered as per the scope of work.

"Assets" refer to all the hardware / Software / furniture / data / documentations / manuals / catalogs /

Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad city brochures / or any other material procured, created or utilized by the SI for this Project.
Interpretation

The documents forming this Agreement are to be taken as mutually explanatory of one another. The following order shall govern the priority of documents constituting this Agreement, in the event of a conflict between various documents, the documents shall have priority in the following order:
this Agreement.

- Scope of Services for the Service Provider (hereby annexed as Annexure I)
- Detail Commercial proposal of the Service Provider accepted by AMC School Board (hereby annexed as Annexure II)
- Clarification & Corrigendum Documents published by AMC School Board subsequent to the RFP for this work (hereby annexed as Annexure III)
- RFP Document of AMC School Board for this work (hereby annexed as Annexure IV)
- LoI issued by the AMC School Board to the successful bidder (hereby annexed as Annexure V); and
- Successful bidder's "Technical Proposal" and "Commercial Proposal" submitted in response to the RFP (hereby annexed as Annexure VI).
- Payment Terms (hereby annexed as Annexure VII).
- Term of the Agreement
- The term of this agreement shall be a period of 3 Years (inclusive 3 Years of warranty) post acceptance

In the event of implementation period getting extended beyond implementation timelines, for reasons not attributable to the Service Provider, AMC School Board reserves the right to extend the term of the Agreement by corresponding period to allow validity of contract for 3 years post 3 months of successful running of complete network. (Note: Delay caused due to any reason not in control of the SI would not be attributed to the project period.)

AMC School Board also reserves the right to extend the contract at its sole discretion for additional duration, beyond the 3 years of post-implementation period. Terms and conditions of such an extension shall be prepared by AMC School Board and finalized in mutual discussion with the SI.

Payment Schedule & Milestone

The Payment Schedule & Milestone is as per the RFP and subsequent Addendum & Corrigendum released, if any. The same will form as Annexure VII of the Contract

Scope Extension

AMC School Board reserves right to extend the scope of services for the price & timelines as given in Annexure I & Annexure II to this Agreement.

Use & Acquisition of Assets during the term

Service Provider shall

take all reasonable & proper care of the entire hardware & software, network or any other information technology infrastructure components used for the project & other facilities leased/owned by the bidder exclusively in terms of the delivery of the services as per this Agreement (hereinafter the "Assets" which include all the hardware / Software / furniture / data / documentations / manuals / catalogs / brochures / or any other material procured, created or utilized by the SI or AMCs or AMC School Board) in proportion to their use & control of such Assets which will include all upgrades/enhancements & improvements to meet the needs of the project arising from time to time; Note: Hardware upgrades outside the RFP scope would not be part of the original contract and would be catered through change request. Assets would be owned by the AMC School Board however, the Service Provider would be custodian of the same during the entire contract period including O & M and would take care of all damage, insurance, theft etc.

Maintain sufficient spare inventory at all times, for all items of importance.

keep all the tangible Assets in good & serviceable condition (reasonable wear & tear excepted) &/or the intangible Assets suitably upgraded subject to the relevant standards as stated in of the RFP

ensure that any instructions or manuals supplied by the manufacturer of the Assets for use of Assets & which are provided to the bidder will be followed by the Bidder & any person who will be responsible for the use of the Asset;

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take such steps as may be recommended by the manufacturer of the Assets & notified to the bidder or as may be necessary to use the Assets in a safe manner.

provide a well-prepared documentation for users in the manual, a clear plan for training, education & hand holding the users & shall form part of hand holding phase until bringing up the users to use software solution with speed & efficiency.

To the extent that the Assets are under the control of the bidder, keep the Assets suitably housed & in conformity with any statutory requirements from time to time applicable to them,

Provide and facilitate access to AMC School Board/AMC or its nominated agencies & any persons duly authorized by him/her to enter any land or premises on which the Assets are for the time being sited so as to inspect the same, subject to any reasonable requirements.

Not, knowingly or negligently use or permit any of the Assets to be used in contravention of any statutory provisions or regulation or in any way contrary to law;

Use the Assets exclusively for the purpose of providing the Services as defined in the contract;

Obtain a sign off from AMC School Board or its nominated agencies at each stage as is essential to close each of the above considerations.

Ownership of the Assets shall vest with AMC School Board on Go Live of the project. Ownership of any asset, created during the contractual period after go Live, shall also vest with AMC School Board upon creation of such asset. Bidder shall not use AMC School Board data to provide services for the benefit of any third party, as a service bureau or in any other manner. If damage to the assets is found unacceptable to the AMC School Board, then corresponding penalty/liquidated damages shall be recovered from SI from the fees payable.

Security and safety

The Service Provider will comply with the directions issued from time to time by AMC School Board and the standards related to the security and safety in so far as it applies to the provision of the Services.

Bidder shall also comply with the AMC School Board Project's information technology security and standard policies in force from time to time as applicable.

Service Provider shall use reasonable endeavors to report forthwith in writing to all the partners / contractors about the civil and criminal liabilities accruing due to by unauthorized access (including unauthorized persons who are employees of any Party) or interference with AMC School Board's/ AMC's' data, facilities or Confidential Information.

The Service Provider shall upon reasonable request by AMC School Board or his/her nominee(s) participate in regular meetings when safety and information technology security matters are reviewed.

Bidder and its partners / sub-contractors shall promptly report in writing to each other and AMC School Board any act or omission which they are aware that could have an adverse effect on the proper conduct of safety and information technology security at AMC School Board's/AMC's Facilities.

Indemnity

The Service Provider agrees to indemnify and hold harmless AMC School Board/AMC/AMC School board, its officers, employees and agents(each a "Indemnified Party") promptly upon demand at any time and from time to time, from and against any and all losses , claims, damages, liabilities, costs (including reasonable attorney's fees and disbursements) and expenses (collectively, "Losses") to which the Indemnified Party may become subject, in so far as such losses directly arise out of, in any way relate to, or result from any mis-statement or any breach of any representation or warranty made by the Bidder or

The failure by the Service Provider to fulfil any covenant or condition contained in this Agreement, including without limitation the breach of any terms and conditions of this Agreement by any employee or agent of the Service Provider. Against all losses or damages arising from claims by third Parties that any Deliverable (or the access, use or other rights thereto), created Service Provider pursuant to this Agreement, or any equipment, software, information, methods of operation or other intellectual property created by Service Provider or sub-contractors pursuant to this Agreement, or the PERFORMANCE STANDARDSs (I) infringes a copyright, trade mark, trade design enforceable in India, (II) infringes a patent issued in India, or (III) constitutes misappropriation or unlawful disclosure or use of another Party's trade secretes under the laws of India (collectively, "Infringement Claims"); provided, however, that this will not apply to any Deliverable (or the access, use or other rights thereto) created by (A) "Implementation of Project by itself or through other persons other than Service Provider or its sub-contractors; (B) Third Parties (i.e., other than Service Provider or sub-contractors) at the direction of AMC School Board, or

any compensation / claim or proceeding by any third party against AMC School Board arising out of any act, deed or omission by the Service Provider or

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Claim filed by a workman or employee engaged by the Service Provider for carrying out work related to this Agreement. For the avoidance of doubt, indemnification of Losses pursuant to this section shall be made in an amount or amounts sufficient to restore each of the Indemnified Party to the financial position it would have been in had the losses not occurred.

Any payment made under this Agreement to an indemnity or claim for breach of any provision of this Agreement shall include applicable taxes.

Third Party Claims

a. Subject to Sub-clause (b) below, the Service Provider (the "Indemnified Party") from and against all losses, claims litigation and damages on account of bodily injury, death or damage to tangible personal property arising in favor or any person, corporation or other entity (including the Indemnified Party) attributable to the Indemnifying Party's performance or non-performance under this Agreement or the PERFORMANCE STANDARDS.

b. The indemnities set out in Sub-clause (a) above shall be subject to the following conditions:

The Indemnified Party, as promptly as practicable, informs the Indemnifying Party in writing of the claim or proceedings and provides all relevant evidence, documentary or otherwise;

The Indemnified Party shall, at the cost and expenses of the Indemnifying Party, give the Indemnifying Party all reasonable assistance in the defense of such claim including reasonable access to all relevant information, documentation and personnel. The indemnifying party shall bear cost and expenses and fees of the Attorney on behalf of the Indemnified Party in the litigation, claim.

if the Indemnifying Party does not assume full control over the defense of a claim as provided in this Article, the Indemnifying Party may participate in such defense at its sole cost and expense, and the Indemnified Party will have the right to defend the claim in such manner as it may deem appropriate, and the cost and expense of the Indemnified Party will be borne and paid by the Indemnifying Party.

The Indemnified Party shall not prejudice, pay or accept any proceedings or claim, or compromise any proceedings or claim, without the written consent of the Indemnifying Party;

bidder hereby indemnify & hold indemnified the AMC School Board harmless from & against any & all damages, losses, liabilities, expenses including legal fees & cost of litigation in connection with any action, claim, suit, proceedings as if result of claim made by the third party directly or indirectly arising out of or in connection with this agreement.

all settlements of claims subject to indemnification under this Article will: (a) be entered into only with the consent of the Indemnified Party, which consent will not be unreasonably withheld & include an unconditional release to the Indemnified Party from the claimant for all liability in respect of such claim; & (b) include any appropriate confidentiality agreement prohibiting disclosure of the terms of such settlement; the Indemnified Party shall take steps that the Indemnifying Party may reasonably require to mitigate or reduce its loss as a result of such a claim or proceedings; &

In the event that the Indemnifying Party is obligated to indemnify an Indemnified Party pursuant to this Article, the Indemnifying Party will, upon payment of such indemnity in full, be subrogated to all rights & defenses of the Indemnified Party with respect to the claims to which such indemnification relates;

in the event that the Indemnifying Party is obligated to indemnify the Indemnified Party pursuant to this Article, the Indemnified Party will be entitled to invoke the Performance Bank Guarantee, if such indemnity is not paid, either in full or in part, & on the invocation of the Performance Bank Guarantee, the Indemnifying Party shall be subrogated to all rights & defenses of the Indemnified Party with respect to the claims to which such indemnification relates.

Publicity

Any publicity by the bidder in which the name of AMC School Board is to be used should be done only with the explicit written permission from AMC School Board.

Warranties

a. The Service Provider warrants and represents that:

It has full capacity and authority and all necessary approvals to enter into and to perform its obligations under this Agreement;

This Agreement is executed by a duly authorized representative of the Service Provider;

It shall discharge its obligations under this Agreement with due skill, care and diligence so as to comply with the service level agreement.

b. In the case of the PERFORMANCE STANDARDSs, the Service Provider warrants and represents, that:

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the Service Provider has full capacity and authority and all necessary approvals to enter into and perform its obligations under the PERFORMANCE STANDARDSs and to provide the Services;

The PERFORMANCE STANDARDSs have been executed by a duly authorized representative of the Service Provider;

The Service Provider is experienced in managing and providing works similar to the Services and that it will perform the Services with all due skill, care and diligence so as to comply with service level agreement;

The Services will be provided and rendered by appropriately qualified, trained and experienced personnel as mentioned in the RFP;

Service Provider has and will have all necessary licenses, approvals, consents of third Parties free from any encumbrances and all necessary technology, hardware and software to enable it to provide the Services;

The Services will be supplied in conformance with all laws, enactments, orders and regulations applicable from time to time;

Service Provider will warrant that the goods supplied under the contract are new, unused, of the most recent higher version /models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The Service Provider further warrants that the goods supplied under this contract shall have no defects arising from design, materials or workmanship.

The overall system design shall be such that there is no choking point / bottleneck anywhere in the system (end-to-end) which can affect the performance / PERFORMANCE STANDARDSs.

Subject to the fulfillment of the obligations of the Service Provider as provided for in sub clause (viii) above, in the event that such warranties cannot be enforced by AMC School Board, the Service Provider will enforce such warranties on behalf of AMC School Board and pass on to AMC School Board, the benefit of any other remedy received in relation to such warranties.

c. Notwithstanding what has been stated elsewhere in this Agreement and the Schedules attached herein, in the event the Service Provider is unable to meet the obligations pursuant to the implementation of the Project, Operations and Maintenance Services and any related scope of work as stated in this Agreement and the Schedules attached herein, AMC School Board will have the option to invoke the Performance Guarantee after serving a written notice of thirty (30) days on the bidder.

Force Majeure & Vandalism

In the event that any Damages to items due to Vandalism (physical Majeure attack by public, tampering of equipment by AMC School Board / AMC School Board staff and damage due to accidents) or due to Force Majeure events (such as earthquake, fire, natural calamities, war, act of God) of any kind during Warranty Period and Maintenance Period shall be the liability of AMC School Board. In such case, AMC School Board/AMC shall request the successful Bidder to repair/replace the damaged unit and reinstall the same. All costs towards the same shall be reimbursed by AMC School Board to the successful Bidder less of insurance proceeds if need of replacement so arise then replacement shall be on tender rates only.

The Service Provider shall not be liable for forfeiture of its Performance Guarantee, imposition of liquidated damages or termination for default, if and to the extent that it's delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure. For purposes of this Clause, "Force Majeure" means an event beyond the "reasonable" control of the Service Provider , not involving the Service Provider 's fault or negligence and not foreseeable. Such events may include Acts of God & acts of Government of India in their sovereign capacity.

For the SI to take benefit of this clause it is a condition precedent that the SI must promptly notify the AMC School Board, in writing of such conditions and the cause thereof within 2 calendar days of the Force Majeure event arising. AMC School Board, or the consultant / committee appointed by the AMC School Board shall study the submission of the SI and inform whether the situation can be qualified one of Force Majeure. Unless otherwise directed by the AMC School Board in writing, the SI shall continue to perform its obligations under the resultant Agreement as far as it is reasonably practical, and shall seek all reasonable alternative means for performance of services not prevented by the existence of a Force Majeure event.

In the event of delay in performance attributable to the presence of a force majeure event, the time for performance shall be extended by a period(s) equivalent to the duration of such delay. If the duration of delay continues beyond a period of 30 days, AMC School Board and the SI shall hold consultations with each other in an endeavor to find a solution to the problem.

Notwithstanding anything to the contrary mentioned above, the decision of the AMC School Board shall be final and binding on the SI.

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Resolution of Disputes

The AMC School Board and the SI shall make every effort to resolve amicably, by direct informal negotiation, any disagreement or dispute arising between them under or in connection with the Agreement. If after 30 days from the commencement of such informal negotiations, the AMC School Board and the SI are unable to resolve amicably such dispute, the matter will be referred to the The Administrative Officer, AMC School Board his / her opinion shall be taken.

If the SI doesn't agree with the opinion of the The Administrative Officer, AMC School Board, matter shall be referred to two Arbitrators: one Arbitrator to be nominated by AMC School Board/ AMC and the other one to be nominated by the SI. In the case of the said Arbitrators not agreeing, then the matter will be referred to an umpire to be appointed by the Arbitrators in writing before proceeding with the reference. The award of the Arbitrators, and in the event of their not agreeing, the award of the Umpire appointed by them shall be final and binding on the parties. Proceedings under this clause shall be subject to applicable law of the Arbitration and Reconciliation Act, 1996 and the venue of such arbitration shall be Ahmedabad.

Cost of arbitration shall be borne by each party proportionately. However, expenses incurred by each party in connection with the preparation, presentation shall be borne by the party itself. The provisions of this clause shall survive termination of this Agreement.

Limitation of Liability towards AMC School Board/ AMC/AMC Schools

The SI's liability under the resultant Agreement shall be determined as per the Law in force for the time being. The SI shall be liable to the AMC School Board/ AMC for loss or damage occurred or caused or likely to occur on account of any act of omission on the part of the SI and its employees, including loss caused to AMC School Board/ AMC on account of defect in goods or deficiency in services on the part of SI or his agents or any person / persons claiming through or under said SI. However, such liability of SI shall not exceed the contract value.

This limitation of liability shall not limit the SI's liability, if any, for damage to Third Parties caused by the SI or any person or firm acting on behalf of the SI in carrying out the scope of work envisaged herein.

Conflict of Interest

A conflict of interest is any situation that might cause an impartial observer to reasonably question whether SI actions are influenced by considerations of your firm's interest at the cost of Government.

The SI shall disclose to the AMC School Board/ AMC in writing, all actual and potential conflicts of interest that exist, arise or may arise (either for the Service Provider or its Team) in the course of performing Services as soon as it becomes aware of such a conflict. However, SI shall hold AMC School Board's/ AMC's interest paramount, without any consideration for future work, and strictly avoid conflict of interest with other assignments.

Data Ownership

All the data created as the part of the project shall be owned by AMC School Board/ AMC. The SI shall take utmost care in maintaining security, confidentiality and backup of this data. Access to the data / systems shall be given by the SI only as per the IT Security Policy, approved by AMC School Board. AMC School Board / its authorized representative(s) shall conduct periodic / surprise security reviews and audits, to ensure the compliance by the SI Vendor to data / system security.

Intellectual Property Rights

For the customized solution developed for the project, IPR of the solution would belong exclusively to the AMC School Board/ AMC. The SI shall transfer the source code to AMC School Board/ AMC at the stage of successful implementation of the respective smart element. SI shall also submit all the necessary instructions for incorporating any modification / changes in the software and its compilation into executable / installable product. AMC School Board/ AMC may permit the SI, right to use the customized software for any similar project being executed by the same SI, with payment of reasonable royalty to AMC School Board/ AMC for the same.

Deliverables provided to AMC School Board/ AMC by Service Provider during the course of its performance under this Agreement, all rights, title and interest in and to such Deliverables, shall, as between Service Provider and AMC School Board/ AMC, immediately upon creation, vest in AMC School Board/ AMC. To the extent that the Service Provider Proprietary Information is incorporated within the Deliverables, Service

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Provider and its employees engaged hereby grant to AMC School Board a worldwide, perpetual, irrevocable, non-exclusive, transferable, paid-up right and license to use, copy, modify (or have modified), use and copy derivative works for the benefit of and internal use of AMC School Board.

Fraud and Corruption

AMC School Board/ AMC requires that SI must observe the highest standards of ethics during the execution of the contract. In pursuance of this policy, AMC School Board/ AMC/ AMC Libraries defines, for the purpose of this provision, the terms set forth as follows:

“Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of AMC School Board/ AMC/ AMC libraries in contract executions.

"Fraudulent practice" means a mis-presentation of facts, in order to influence a procurement process or the execution of a contract, to AMC School Board/ AMC/ AMC libraries, and includes collusive practice among bidders (prior to or after Proposal submission) designed to establish Proposal prices at artificially high or non-competitive levels and to deprive AMC School Board of the benefits of free and open competition.

“Unfair trade practices” means supply of services different from what is ordered on, or change in the Scope of Work which is given in the contract.

“Coercive Practices” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the execution of contract.

If it is noticed that the SI has indulged into the Corrupt / Fraudulent / Unfair / Coercive practices, it will be a sufficient ground for AMC School Board for termination of the contract and initiate black-listing of the vendor.

Exit Management

Exit Management Purpose

This clause sets out the provisions, which will apply during Exit Management period. The Parties shall ensure that their respective associated entities carry out their respective obligations set out in this Exit Management Clause.

The exit management period starts, in case of expiry of contract, at least 6 months prior to the date when the contract comes to an end or in case of termination of contract, on the date when the notice of termination is sent to the SI. The exit management period ends on the date agreed upon by the AMC School Board or Six months after the beginning of the exit management period, whichever is earlier.

Confidential Information, Security and Data

Service Provider will promptly on the commencement of the exit management period, supply to the AMC School Board or its nominated agencies the following:

Information relating to the current services rendered and performance data relating to the performance of the services; Documentation relating to Surveillance Project, Project’s Intellectual Property Rights; any other data and confidential information related to the Project;

Project data as is reasonably required for purposes of the Project or for transitioning of the services to its Replacing Successful Bidder in a readily available format.

All other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable the AMC School Board and its nominated agencies, or its Replacing Vendor to carry out due diligence in order to transition the provision of the Services to AMC School Board/ AMCor its nominated agencies, or its Replacing Vendor (as the case may be).

Employees

Promptly on reasonable request at any time during the exit management period, the Successful Bidder shall, subject to applicable laws, restraints and regulations (including in particular those relating to privacy) provide to AMC School Board/ AMCa list of all employees (with job titles and communication address) of the Successful Bidder, dedicated to providing the services at the commencement of the exit management period; To the extent that any Transfer Regulation does not apply to any employee of the Successful Bidder, AMC School Board/ AMCor Replacing Vendor may make an offer of contract for services to such employee of the Successful Bidder and the Successful Bidder shall not enforce or impose any contractual provision that would prevent any such employee from being hired by the AMC School Board/ AMCor any Replacing Vendor.

Rights of Access to Information

At any time during the exit management period, the Successful Bidder will be obliged to provide an access of

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information to AMC School Board/ AMCand / or any Replacing Vendor in order to make an inventory of the Assets (including hardware / Software / Active / passive), documentations, manuals, catalogs, archive data, Live data, policy documents or any other material related to the Surveillance Project.

Exit Management Plan

Successful Bidder shall provide AMC School Board/ AMC with a recommended exit management plan ("Exit Management Plan") within 90 days of signing of the contract, which shall deal with at least the following aspects of exit management in relation to the PERFORMANCE STANDARDS as a whole and in relation to the Project Implementation, the Operation and Management PERFORMANCE STANDARDS and Scope of work definition.

A detailed program of the transfer process that could be used in conjunction with a Replacement Vendor including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer;

Plans for the communication with such of the Successful Bidder, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on Project's operations as a result of undertaking the transfer;

Plans for provision of contingent support to the Surveillance Project and Replacement Vendor for a reasonable period (minimum one month) after transfer.

Successful Bidder shall re-draft the Exit Management Plan annually to ensure that it is kept relevant and up to date.

Each Exit Management Plan shall be presented by the Successful Bidder to and approved by AMC School Board or its nominated agencies.

The terms of payment as stated in the Terms of Payment Schedule include the costs of the Successful Bidder complying with its obligations under this Schedule.

During the exit management period, the Successful Bidder shall use its best efforts to deliver the services.

Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule.

Termination of Contract

AMC School Board may, without prejudice to any other remedy under this Contract and applicable law, reserves the right to terminate for breach of contract by providing a written notice of 30 days stating the reason for default to the SI and as it deems fit, terminate the contract either in whole or in part:

If the SI fails to deliver any or all of the project requirements / operationalization / go-live / performance parameters (PERFORMANCE STANDARDS) of the project within the time frame specified in the contract; or

If the SI fails to perform any other obligation(s) under the contract.

Prior to providing a notice of termination to the SI, AMC School Board shall provide the SI with a written notice of 30 days instructing the SI to cure any breach/ default of the Contract, if AMC School Board is of the view that the breach may be rectified.

On failure of the SI to rectify such breach within 30 days, AMC School Board may terminate the contract by providing a written notice of 30 days to the SI, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to AMC School Board. In such event the SI shall be liable for penalty/liquidated damages imposed by the AMC School Board. The performance Guarantee shall be forfeited by the AMC School Board

Consequences of Termination

In the event of termination of this contract, AMC School Board is entitled to impose any such obligations and conditions and issue any clarifications as may be necessary to ensure an efficient transition and effective continuity of the services which the SI shall be obliged to comply with and take all available steps to minimize the loss resulting from that termination/ breach, and further allow and provide all such assistance to AMC School Board and/ or succeeding vendor, as may be required, to take over the obligations of the SI in relation to the execution / continued execution of the requirements of this contract.

In the event of the SI being unable to service the contract for whatever reason, AMC School Board would evoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of department under the Contract in the matter, the proceeds of the PBG shall be payable to department as compensation for any loss resulting from the Bidder's failure to complete its obligations under the Contract. Department shall notify the Bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the

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contractual obligation(s) for which the Bidder is in default.

AMC School Board shall also be entitled to make recoveries from the Bidder's bills, performance bank guarantee, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement

Plans and drawings

All plans, drawings, specifications, designs, reports and other documents prepared by the Vendor in the execution of the contract shall become and remain the property of AMC School Board/ AMC and before termination or expiration of this contract the SI shall deliver all such documents, prepared under this contract along with a detailed inventory thereof, to AMC School Board/ AMC.

Miscellaneous

Confidentiality

"Confidential Information" means all information including Project Data (whether in written, oral, electronic or other format) which relates to the technical, financial and operational affairs, business rules, citizen information, video footages, alert information, any police department data, products, processes, data, crime / criminal secrets, design rights, know-how and personnel of each Party and its affiliates which is disclosed to or otherwise learned by the other Party or subcontractors (whether a Party to the contract or to the PERFORMANCE STANDARDS) in the course of or in connection with the contract (including without limitation such information received during negotiations, location visits and meetings in connection with the contract or to the PERFORMANCE STANDARDS) or pursuant to the contract to be signed subsequently.

Except with the prior written permission of AMC School Board/ AMC, the Service Provider and its Personnel shall not disclose such confidential information to any person or entity not expected to know such information by default of being associated with the project, nor shall the Service Provider and its Personnel make public the recommendations formulated in the course of, or as a result of the Project.

The Service Provider recognizes that during the term of this Agreement, sensitive data will be procured & made available to it, its Sub contractors & agents & others working for or under the Service Provider. Disclosure or usage of the data by any such recipient may constitute a breach of law applicable causing harm not only to AMC School Board/ AMC whose data is used but also to its stakeholders. Service Provider, its Subcontractors & agents are required to demonstrate utmost care, sensitivity & strict confidentiality. Any breach of this Article will result in AMC School Board & its nominees receiving a right to seek injunctive relief & damages from the Service Provider.

Each Party agrees as to any Confidential Information disclosed by a Party to this Agreement (the "Discloser") to the other Party to this Agreement (the "Recipient") &

to take such steps necessary to protect the Discloser's Confidential information from unauthorized use, reproduction & disclosure, as the Recipient takes in relation to its own Confidential Information of the same type, but in no event less than reasonable care;

to use such Confidential Information only for the purposes of this Agreement or as otherwise expressly permitted or expressly required by this Agreement or as otherwise permitted by the Discloser in writing; &

not, without the Discloser's prior written consent, to copy the Confidential Information cause or allow it to be copied, directly or indirectly, in whole or in part, except as otherwise expressly provided in this Agreement, or as required in connection with Recipient's use as permitted under this Article, or as needed for the purposes of this Agreement, or as needed for the purposes of this Agreement, provided that any proprietary legends & notices (whether of the Discloser or of a Third Party) are not removed or obscured; &

Not, to disclose, transfer, publish or communicate the Confidential Information in any manner, without the Discloser's prior written consent, to any person except as permitted under this Agreement.

The restrictions of this Article shall not apply to confidential Information that:

is or becomes generally available to the public through no breach of this Article by the Recipient; &

Was in the recipient's possession free of any obligation of confidence prior to the time of receipt of it by the Recipient hereunder; &

Is developed by the Recipient independently of any of discloser's Confidential Information; &

Is rightfully obtained by the Recipient from third Parties authorized at that time to make such disclosure without restriction; &

is identified in writing by the Discloser as no longer proprietary or confidential; or vi. Is required to be disclosed by law, regulation or Court Order, provided that the recipient gives prompt written notice to the

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Discloser of such legal & regulatory requirement to disclose so as to allow the Discloser reasonable opportunity to contest such disclosure.

to the extent that such disclosure is required for the purposes of this Agreement, either Party may disclose Confidential Information to:

its employees, agents & independent contractors & to any of its affiliates & their respective independent contractors or employees; &

its professional advisors & auditors, who require access for the purposes of this Agreement, whom the relevant Party has informed of its obligations under this Article & in respect of whom the relevant Party has informed of its obligations under this Article has used commercially reasonable efforts to ensure that they are contractually obliged to keep such Confidential Information confidential on terms substantially the same as set forth in this Article. Either Party may also disclose confidential Information or any entity with the other Party's prior written consent.

The provisions of this Article shall survive three years post expiration or any earlier termination of this Agreement.

confidential Information shall be & remain the property of the Discloser & nothing in this Article shall be construed to grant either Party any right or license with respect to the other Party's confidential Information otherwise than as is expressly set out in this Agreement.

Subject as otherwise expressly provide in this Agreement all Confidential information in tangible or electronic form under the control of the Recipient shall either be destroyed, erased or returned to the Discloser promptly upon the earlier of: (i) the written request of the Disclose, or, (ii) termination or expiry of this Agreement or, in respect of the PERFORMANCE STANDARDSs, the termination or expiry of the PERFORMANCE STANDARDSs. Notwithstanding the forgoing, both Parties may retain, subject to the terms of this Article, reasonable number of copies of the other Party's Confidential Information solely for confirmation of compliance with the confidentiality obligations of this Agreement.

Neither Party is restricted by the provisions of this clause from using (including using to provide products or perform services on behalf of third Parties) any ideas, concepts, know-how & techniques that are related to the Recipient's employees or agents (and not intentionally memorized for the purpose of later recording or use) (collectively, the "residuals"). This Article shall not permit the disclosure or use by either Party or any financial (including business plans), statistical, product, personnel or customer data or the other Party. Each party agrees not to disclose the source of the Residuals.

Both Parties agree that monetary damages would not be a sufficient remedy for any breach of this clause by the other Party & that AMC School Board/ AMC& bidder, as appropriate, shall be entitled to equitable relief, including injunction & specific performance as a remedy for any such breach. Such remedies shall not be deemed to be the exclusive remedies for a breach by a Party of this clause, but shall be in addition to all other remedies available at law or equity to the damaged Party.

in connection with the Services, Service Provider may from time to time undertake one or more quality assessment reviews for the purpose of improving the Project. In order for such reviews to be frank & candid, for the greatest benefit to both AMC School Board/ AMC& Service Provider, they shall be kept confidential to the greatest extent possible. The Parties agree that any documentation created in connection with such quality assessment reviews shall be confidential Information of Service Provider which is licensed to AMC School

Board/ AMCfor any internal use except that in no event shall such documentation or the results of such reviews be discoverable or admissible (or used for any purpose) in any arbitration or legal proceedings against Bidder related to this Agreement or the Services.

Standards of Performance

The SI shall provide the services and carry out their obligations under the Contract with due diligence, efficiency and professionalism/ethics in accordance with generally accepted professional standards and practices. The SI shall always act in respect of any matter relating to this contract. The SI shall abide by all the provisions/Acts/Rules/Regulations, Standing orders, etc. of Information Technology as prevalent in the country.

The SI shall also conform to the standards laid down by AMC School Board or AMC School Board or Government of Gujarat or Government of India from time to time.

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Subcontracts

Sub-contracting / outsourcing would be allowed only in O&M phase for work like Provisioning of technical manpower for operations and maintenance of application, hardware and cloud. The bidder is expected to provide details of the sub-contractors for the work which is allowed as mentioned in the clause. Use of personnel not on payroll of the SI shall be considered as sub-contracting. The SI shall solely responsible for the work carried out by subcontracting under the contract. SI shall be the sole point of contact for the entire project throughout the project period.

Care to be taken while working at Public Place

SI should follow instructions issued by concerned Competent Authority and AMC School Board from time to time for carrying out work at public places. SI should ensure that there is no damage caused to any private or public property. In case such damage is caused, SI shall immediately bring it to the notice of concerned organization and AMC School Board in writing and pay necessary charges towards fixing of the damage. SI should also ensure that no traffic congestion/public inconvenience is caused while carrying out work at public places.

SI shall ensure that its employees/representatives don't breach privacy of any citizen or establishment during the course of execution or maintenance of the project.

Compliance with Labor regulations

The SI shall pay fair and reasonable wages to the workmen employed by him, for the contract undertaken by him and comply with the provisions set forth under the Minimum wages Act and the Contract Labor Act 1970.

Independent Contractor

Nothing in this Agreement shall be construed as establishing or implying any partnership or joint venture or employment relationship between the Parties to this Agreement. Except as expressly stated in this Agreement nothing in this Agreement shall be deemed to constitute any Party as the agent of any other Party or authorizes either Party (i) to incur any expenses on behalf of the other Party, (ii) to enter into any engagement or make any representation or warranty on behalf of the other Party, (iii) to pledge the credit of or otherwise bind or oblige the other Party, or (iv) to commit the other Party in any manner whatsoever in each case without obtaining the other Party's prior written consent.

Waiver

A waiver of any provision or breach of this Agreement must be in writing and signed by an authorized official of the Party executing the same. No such waiver shall be construed to affect or imply a subsequent waiver of the same provision or subsequent breach of this Agreement.

Performance Guarantee

The successful bidder shall at his own expense, deposit with department, within 30 days of the notification of award (done through issuance of the Purchase Order/Letter of Acceptance/Letter of Intent), an unconditional and irrevocable Performance Bank Guarantee (PBG) from Nationalized or Scheduled Banks except Co-operative Banks in favor of "The Administrative Officer, Ahmedabad Municipal Corporation School Board" for the due performance and fulfilment of the contract by the bidder.

The SI shall submit performance guarantee for implementation phase for an amount equivalent to 5% of the Project Value which is unconditional & irrevocable bank guarantee.

This will be released to SI on successful Go-Live of project and submission of new performance guarantee for O&M phase on yearly basis as stated below which is unconditional & irrevocable bank guarantee.

- Year 1: 4% of Project Value
- Year 2: 3% of Project Value
- Year 3: 2% of Project Value

The SI should renew the yearly bank guarantee 30 days prior to the date of expiry till the end of entire contract period".

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All charges whatsoever such as premium, commission, etc. with respect to the Performance Bank Guarantee shall be borne by the bidder.

The successful bidder shall maintain a valid and binding Performance Guarantee for a period of three months after the expiry of the Contract Period ("Validity Period") i.e., 3 years from the go-live date.

The Performance Bank Guarantee letter format can be found in the Annexure- III of this document. The Performance Bank Guarantee may be discharged/ returned by department upon being satisfied that there has been due performance of the obligations of the Bidder under the contract. However, no interest shall be payable on the Performance Bank Guarantee.

If the Bidder, fails to furnish the Performance Guarantee, it shall be lawful for the Authority to forfeit the EMD and cancel the contract or any part thereof

In the event of the Bidder being unable to service the contract for whatever reason or receive frequent complaints from citizens, AMC School Board would evoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of AMC School Board under the Contract in the matter, the proceeds of the PBG shall be payable to AMC School Board as compensation for any loss resulting from the Bidder's failure to complete its obligations under the Contract. AMC School Board shall notify the Bidder in writing of the exercise of its right to receive such compensation within 14 days, indicating the contractual obligation(s) for which the Bidder is in default.

AMC School Board shall also be entitled to make recoveries from the Bidder's bills, performance bank guarantee, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction, or misstatement.

Personnel/Employees

Personnel/employees assigned by Service Provider to perform the services shall be employees of Service Provider or its sub-contractors, & under no circumstances will such personnel be considered as employees of AMC School Board. Service Provider shall have the sole responsibility for supervision & control of its personnel & for payment of such personnel's employee's entire compensation, including salary, legal deductions withholding of income taxes & social security taxes, worker's compensation, employee & disability benefits & the like & shall be responsible for all employer obligations under all laws as applicable from time to time. The AMC School Board shall not be responsible for the above issues concerning to personnel of Service Provider.

Service Provider shall use its best efforts to ensure that sufficient Service Provider personnel are employed to perform the Services, & that, such personnel have appropriate qualifications to perform the Services.

Each Party shall be responsible for the performance of all its obligations under this Agreement & shall be liable for the acts & omissions of its employees & agents in connection therewith.

Variations & Further Assurance

a. No amendment, variation or other change to this Agreement or the PERFORMANCE STANDARDSs shall be valid unless made in writing & signed by the duly authorized representatives of the Parties to this Agreement.

b. Each Party to this Agreement or the PERFORMANCE STANDARDSs agree to enter into or execute, without limitation, whatever other agreement, document, consent & waiver & to do all other things which shall or may be reasonably required to complete & deliver the obligations set out in the Agreement or the PERFORMANCE STANDARDSs.

Severability & Waiver

if any provision of this Agreement or the PERFORMANCE STANDARDSs, or any part thereof, shall be found by any court or administrative body of competent jurisdiction to be illegal, invalid or unenforceable the illegality, invalidity or unenforceability of such provision or part provision shall not affect the other provisions of this Agreement or the PERFORMANCE STANDARDSs or the remainder of the provisions in question which shall remain in full force & effect. The relevant Parties shall negotiate in good faith in order to agree to substitute any illegal, invalid or unenforceable provision with a valid & enforceable provision which achieves

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to the greatest extent possible the economic, legal & commercial objectives of the illegal, invalid or unenforceable provision or part provision within 7 working days.

No failure to exercise or enforce & no delay in exercising or enforcing on the part of either Party to this Agreement or the PERFORMANCE STANDARDSs of any right, remedy or provision of this Agreement or the PERFORMANCE STANDARDSs shall operate as a waiver of such right, remedy or provision in any future application nor shall any single or partial exercise or enforcement of any right, remedy or provision preclude any other or further exercise or enforcement of any other right, remedy or provision.

Entire Agreement

This MSA, the PERFORMANCE STANDARDSs & all schedules appended thereto & the contents of the RFP subsequent corrigenda issued thereon & clarification (undertakings) accepted by the AMC School Board constitute the entire agreement between the Parties with respect to their subject matter.

Survivability

The termination or expiry of this Agreement or the PERFORMANCE STANDARDSs for any reason shall not affect or prejudice any terms of this Agreement, or the rights of the Parties under them which are either expressly or by implication intended to come into effect or continue in effect after such expiry or termination.

The stamp duty payable for the contract shall be borne by the Service Provider.

Applicable Law

The contract shall be governed by the laws and procedures prescribed by the Laws prevailing and in force in India, within the framework of applicable legislation and enactment made from time to time concerning such commercial dealings/processing. All legal disputes are subject to the jurisdiction of Ahmedabad courts only.

IN WITNESS whereof the parties hereto have signed this on the day, month and year first herein above written.

Signed, sealed and delivered

By -----

-----,

For and on behalf of the AMC School Board. Ahmedabad

Signed, sealed and delivered

By -----

For and on behalf of the "Service Provider",

Witnesses:

(1)

(2)

Attachments to the Agreement:

- i. Scope of Services for the Service Provider
- ii. Detail Commercial proposal of the Service Provider accepted by AMC School Board
- iii. Corrigendum Document published by AMC School Board subsequent to the RFP for this work
- iv. RFP Document of AMC School Board for this work
- v. LoI issued by the AMC School Board to the successful bidder
- vi. The successful bidder's "Technical Proposal" and "Commercial Proposal" submitted in response to the RFP
- vii. Payment Schedule and Milestones

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Part III: Format for Performance Bank Guarantee

<< To be printed on Rs. 100/- Stamp Paper >>

IN CONSIDERATION OF Through
AMC School Board, Ahmedabad (Ahmedabad Municipal Corporation School Board) for Selection of Bidder for RFP for Smart School Project to enhance teaching-learning process in municipal schools through use of ICT technology and support infrastructure in Ahmedabad City (hereinafter referred to as the "said work") on the terms and conditions of the AGREEMENT dated theday of 2022 executed between AMC School Board on the one part and the Company (Name of the Company) on the other part (hereinafter referred to as "the said AGREEMENT) and on the terms and conditions specified in the Contract, Form of Offer and Form of acceptance of Offer, true and complete copies of the offer submitted by the Company, the said Acceptance of Offer and the said AGREEMENT are annexed hereto.

The Company has agreed to furnish AMC School Board in Guarantee of the Nationalized Bank for the sum of Rs (Agreement in Words and Figures) only which shall be the Security Deposit for the due performance of the terms covenants and conditions of the said AGREEMENT. We..... Bank Registered in India under Act and having one of our Local Head Office at..... do hereby guarantee to AMC School Board in Department.

Due performance and observances by the Company of the terms covenants and conditions on the part of the Company contained in the said AGREEMENT, AND

Due and punctual payment by the Company to AMC School Board of all sum of money, losses, damages, costs, charges, penalties and expenses that may become due or payable to AMC School Board by or from the Company by reason of or in consequence of any breach, non-performance or default on the part of the Company of the terms covenants and conditions under or in respect of the said AGREEMENT.

AND FOR THE consideration aforesaid, we do hereby undertake to pay to AMC School Board on demand without delay demur the said sum of Rs. (Rupees only) together with interest thereon at the rate prescribed under from the date of demand till payment or such lesser sum, as may be demanded by AMC School Board from us as and by way of indemnity on account of any loss or damage caused to or suffered by AMC School Board by reason of any breach, non-performance or default by the Company of the terms, covenants and conditions contained in the said AGREEMENT or in the due and punctual payment of the moneys payable by the Company to AMC School Board thereunder and notwithstanding any dispute or disputes raised by the Company in any suit or proceeding filed before the Court relating thereto our liability hereunder being absolute and unequivocal and irrevocable AND WE do hereby agree that –

The guarantee herein contained shall remain in full force and effect during the subsistence of the said AGREEMENT and that the same will continue to be enforceable till all the claims of AMC School Board are fully paid under or by virtue of the said AGREEMENT and its claims satisfied or discharged and till AMC School Board certifies that the terms and conditions of the said AGREEMENT have fully and properly carried out by the Company.

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We shall not be discharged or released from liability under this Guarantee by reason of any change in the Constitution of the Bank or any arrangement entered into between AMC School Board and the Company with or without our consent; any forbearance or indulgence shown to the Company, any variation in the terms, covenants or conditions contained in the said AGREEMENT; any time given to the Company, OR any other conditions or circumstances under which in a law a surety would be discharged.

Our liability hereunder shall be joint and several with that of the Company as if we were the principal debtors in respect of the said sum of Rs..... (Rupees Only).

We shall not revoke this guarantee during its currency except with the previous consent of AMC School Board in department in writing;

Provided always that notwithstanding anything herein contained our liabilities under this guarantee shall be limited to the sum of Rs..... (Rupees..... only) and shall remain in force until AMC School Board certifies that the terms and conditions of the said AGREEMENT have been fully and properly carried out by the Company.

Bank hereby agrees and covenants that if at any stage default is made in payment of any instalment or any portion thereof due to AMC School Board under the said AGREEMENT or if the Company fails to perform the said AGREEMENT or default shall be made in fulfilling any of the terms and conditions contained in the said AGREEMENT by the Company, the Bank shall pay to AMC School Board demand without any demur, such sum as may be demanded, not exceeding Rs..... (Rupees.....) and that the Bank will indemnify and keep AMC School Board indemnified against all the losses pursuant to the said AGREEMENT and default on the part of the Company. The decision of AMC School Board that the default has been committed by the Company shall be conclusive and final and shall be binding on the Bank/Guarantor. Similarly, the decision of AMC School Board as regards the Agreement due and payable by the Company shall be final and conclusive and binding on the Bank /Guarantor.

AMC School Board shall have the fullest liberty and the Bank hereby gives its consent without any way affecting this guarantee and discharging the Bank/Guarantor from its liability hereunder, to vary or modify the said AGREEMENT or any terms thereof or grant any extension of time or any facility or indulgence to the Company and Guarantee shall not be released by reason of any time facility or indulgence being given to the Company or any forbearance act or omission on the part of AMC School Board or by any other matter or think whatsoever which under the law, relating to sureties so releasing the guarantor and the Guarantor hereby waives all suretyship and other rights which it might otherwise be entitled to enforce.

That the absence of powers on the part of the Company or AMC School Board to enter into or execute the said AGREEMENT or any irregularity in the exercise of such power or invalidity of the said AGREEMENT for any reason whatsoever shall not affect the liability of the Guarantor/Bank and binding on the bank notwithstanding any abnormality or irregularity

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The Guarantor agrees and declares that for enforcing this Guarantee by..... against it, the Courts at Ahmedabad only shall have exclusive jurisdiction and the Guarantor hereby submits to the same

1.....

2.....

Being respectively the Director of the Company, who in token thereof, has hereto set his respective hands in the presence of –

1.....





2.....

Annexure D: Technical / Functional Specifications



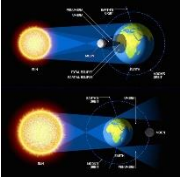
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Annexure: - 1 (Math's and Science Lab with working Models with Teachers Training and Charts with LED TV)

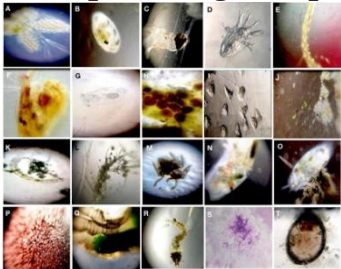

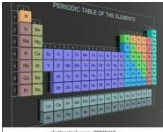

Bidder should align various Mathematics and Science Lab working models with syllabus of school. Bidder is required to submit a document in this regard in hard copy to AMC school board and also to the respective school officials. Bidder should also provide raw material and / or consumables for all the items procured under this RFP, wherever required during the course of entire contractual agreement period.

Sr. No.	Name of items and images	Technical / Functional Specification	Unit / Size
Details			
1	<p style="text-align: center;">JANTAR MANTAR</p> 	<p>DIY JANATAR MANTAR KIT</p> <p>The Jantar Mantar is an observatory comprising of 19 instruments to measure the position and distances of celestial bodies. These 19 instruments are structures carved out of stone, depicting interesting geometric shapes. Vrihat Smarat Yantra is a huge sun dial at the centre of Jantar Mantar observatory.</p>	1
2	<p style="text-align: center;">LOOP the Loop</p> 	<p>Working Model of ANGULAR MOMENTUM on Road.</p>	1
3	<p style="text-align: center;">LAZY TUBES</p> 	<p>Working Model of Experiment on Mangnetic Field effect on alluminium and metal.</p>	1
4	<p style="text-align: center;">Levers</p> 	<p>Working Model of 3 different types of lever.</p>	1

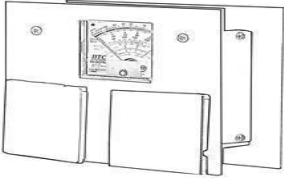

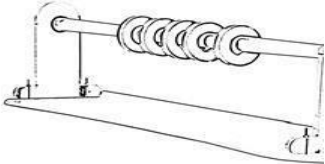
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5	Circuit Board (Electrical)	The working model is provided with a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material of size: 5" x 4" x 4" and 3mm wall thickness or It also has a molded HD plastic stand & unbreakable banded MS base with white/Gray	1
6	<p>Tesla Coil</p> 	<p>A Real Working Model of Tesla Coils. SIZE: The model provided with a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material & transparent & transparent casing of size: 10.5" x 10.5" x 10" and 3mm wall thickness. It also has a bottom casing to encase electrical connection and/or mechanism. (Front Loading Style which is fix in modular Platform)</p>	1
7	<p>Phases of moon</p> 	<p>Working Model of PHASES OF MOON. The eight lunar phases are, in order: new moon, waxing crescent, first quarter, waxing gibbous, full moon, waning gibbous, third quarter and waning crescent.</p>	1
8	<p>Eclipse</p> 	<p>Working model of Eclipses. There are two types of eclipses: lunar and solar. During a lunar eclipse, Earth's shadow obscures the Moon. During a solar eclipse, the Moon blocks the Sun from view.</p>	1
9	Seasons	<p>WORKING MODEL OF SEASONS, A season is a division of the year based on changes in weather, ecology, and the number of daylight hours in a given region. On earth, seasons are the result of the axial parallaogram of Earth's tilted around the sun.</p>	1

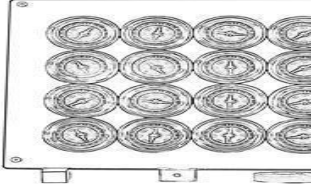
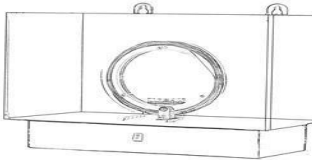
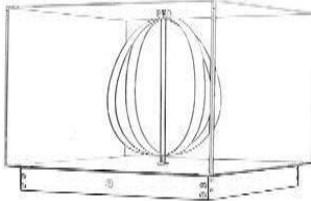
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<p>10</p>	<p>Waterproof Megnoscope</p> 	<p>Can visualize tiny things like bacteria and microorganism as well as samples like insects, plants, fabrics and tissues. Megnoscope can also attach to mobile phones for imaging. It is portable and waterproof.</p> <p>Specification : This model is made high quality materials with precision optics. Plastic, PVC. 135 X magnification. Size : 13 X 15 X 20 CM.</p>	<p>1</p>
<p>11</p>	<p>PROBABILIT WITH MANIPULATIVE</p> 	<p>SIZE:16"X10"X 2" MATERIAL: Colored Spinner, Dice, Jar Of Marbles,80 Marbles, Coin, Standard Playing Card, Probability Wooden Board</p>	<p>1</p>
<p>12</p>	<p>3 Dimension Modern Periodic Table</p> 	<p>Model of Periodic Table study resources provides everything a young scientist needs in order to learn and memorize all 118 elements. All 118 elements square can detach and fix for study purpose. Made with wood, Plastic, MDF, Mild steel etc. Materials are aligned with best-practice teaching methods, so you can rest easy about your child's academic growth.</p> <p>Specification : This model is made high quality materials with precision optics. Plastic, PVC. 135 X magnification. Size : 30X 24 X 3 inches.</p>	<p>1</p>
<p>13</p>	<p>BAROMETER, DIGITALCLOCK AND CALANDER Weather ForecastReceiver</p>	<p>SIZE: The model provided in wood and plastic as table top model of size8"X4"X1.25". MATERIAL: Plastic Body contain Electronics ircuit, LCD display, Controls USE: Indication of current weather along with atmospheric pressure Digital Circuit. Base station for Item No. 9, 22, 7 25. Size: 7.6" X 1.1" X 4.5". Data storage for weather forecast. Weight: 425 Gm.</p>	<p>1</p>
<p>14</p>	<p>WIND SPEED AND DIRECTION METER</p> 	<p>SIZE: 7" x 13" x 5" MATERIAL: Plastic, Aluminum, CONCEPT: Information received from Anemometer USE : Weather Forecast</p>	<p>1</p>


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<p>15</p>	<p style="text-align: center;">HUMAN BATTERY</p> 	<p>SIZE: The working model is provided with a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material of size: 10.5" x 10.5" x 4" and 3mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material bottom casing of 1mm wall thickness to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform)</p> <p>MATERIAL: The working model consist to two metallic plates 4" x 4" each with rounded edges, one being copper and other being galvanized iron. A good quality millimeter properly fixed inside the protective casing and connected to a 9V battery provided. An open able section provided to replace the battery. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>16</p>	<p style="text-align: center;">Solar Vapor Tower</p> 	<p>Size : This Working Model has base of 2 x 2 x 4 (Feet) Of wooden Sheet and Metal Tower .</p> <p>Material : The working Model consist of Metal updraft tower of thickness of of 2.5mm. consist of 4 fan, Solar Panels and Zig zag Bars. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video</p>	<p>1</p>
<p>17</p>	<p style="text-align: center;">MAGNETIC SPRING</p> 	<p>SIZE: The working model provided on a plastic/acrylic base of 510mm x 305mm and 2.7mm thickness and height of 160 mm.</p> <p>MATERIAL: The working model consist of an acrylic/plastic rod of 20 mm diameter. It has 5 ring magnets I.D. 25mm, O.D. 52 mm and 8 mm thick. It has two vertical supports to hold the acrylic rod horizontally. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video</p>	<p>1</p>

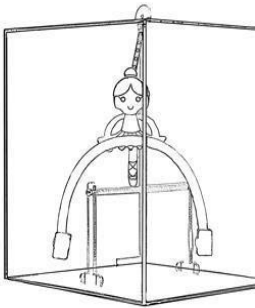

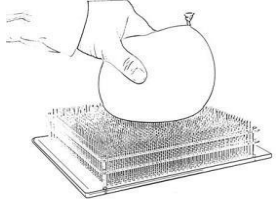
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<p>18</p>	<p>MAGNETIC FIELD VISUALIZATION WITH COMPASSES</p> 	<p>SIZE: The model is provided with a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material & transparent casing of size: 10.5" x 10.5" x 4" and 1mm wall thickness. It also has a bottom casing of 2.7mm wall thickness to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fixed in modular Platform)</p> <p>MATERIAL: This working model contains 16 magnetic compasses fixed inside the casing and 3 types of magnets, bar magnet 10mm x 10mm x 75mm, ring magnet I.D. 25mm O.D. 50mm and 10mm thick, horse shoe magnet. All magnets provided in a plastic box. A conceptual chart in Gujarati language of A3 size provided in 6 color print on minimum 3mm PVC base having a QR code that links to an application for seeing conceptual video</p>	<p>1</p>
<p>19</p>	<p>MAGNETIC EFFECT OF ELECTRIC CURRENT WITH COMPASS</p> 	<p>SIZE: The model provided with a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material & transparent & transparent casing of size: 10.5" x 10.5" x 10" and 3mm wall thickness. It also has a bottom casing to encase electrical connection and/or mechanism. (Front Loading Style which is fixed in modular Platform)</p> <p>MATERIAL: This working model has a tangent coil using 20SWG copper wire and a magnetic compass. A CE mark electric push button switch provided. Electrical connection and AC to DC adapter provided. Wall hooks and fittings provided. A conceptual chart in Gujarati language of A3 size provided in 6 color print on minimum 3mm PVC base having a QR code that links to an application for seeing conceptual video.</p>	<p>1</p>
<p>20</p>	<p>SHAPE OF EARTH DUE TO ROTATION</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 10.5" x 10" and 1mm wall thickness. It also has a bottom casing to encase electrical connection and/or mechanism if needed. The model provided with a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" (Front Loading Style which is fixed in modular Platform)</p> <p>MATERIAL: This exhibit consists of a 300 r.p.m. gear motor connected to an aluminium pipe I.D. 5.7 mm O.D. 10mm. A 1 meter plastic strip, a CE mark electric push button</p>	<p>1</p>

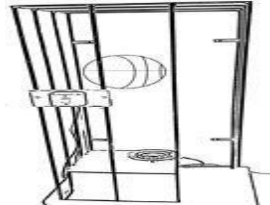
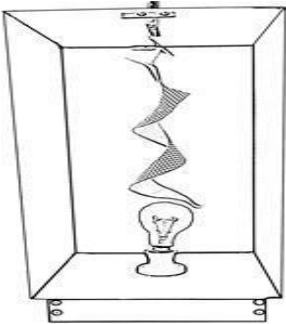
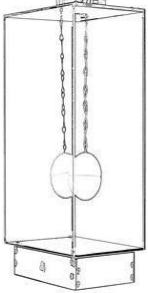
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		switch provided. Electrical connection and a CE mark 12V 1A AC to DC adapter provided. . A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.	
21	<p>Solar Water Heater</p> 	<p>Size : 15 x 15 x 8 (inch) Material : This working Model Consist of a Solar black heated Pipe, With a storage tank . A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum having a QR code that linked to an application for seeing conceptual video.</p>	1
22	<p>CONSERVATION OFMOMENTUM – MARBLES SLIDE</p>	<p>SIZE: 410mm x 80mm x 210mm MATERIAL: The exhibit consists of a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material & powdered coated metal slide and 5 marbles. A wall boundary provided to avoid the marbles from falling down on floor. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum having a QR code that linked to an application for seeing conceptual</p>	1
23	<p>Smoke Based Optical Bench For Convex Lens</p>	<p>When an object is placed at infinity, the real image is formed at the focus. The size of the image is much smaller than that of the object. Specification : This model is made with Smoke produce, Glass, PVC & Plastic, Laser etc. Work on 12 VDC or 230 VAC. Size : 33 X 60 X 20 CM.</p>	1
24	<p>Smoke Based Optical Bench for Concave Lens</p>	<p>When an object is placed at infinity, a virtual image is formed at the focus. The size of the image is much smaller than that of the object. Specification : This model is made with Smoke produce, Glass, PVC & Plastic, Laser etc. Work on 12 VDC or 230 VAC. Size : 33 X 60 X 20 CM.</p>	1
25	<p>Smoke Based Optical Bench for Convex Mirror</p>	<p>When an object is placed at infinity, a virtual image is formed at the focus. The size of the image is much smaller than compared to that of the object. Specification : This model is made with Smoke produce, Mirror Glass, PVC & Plastic, Laser etc. Work on 12 VDC or 230 VAC. Size : 33 X 60 X 20 CM.</p>	1

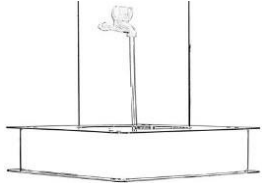
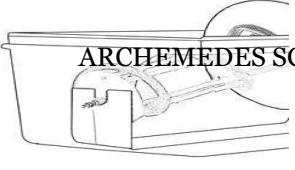
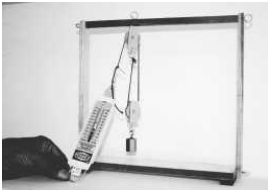
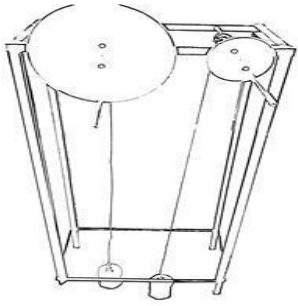
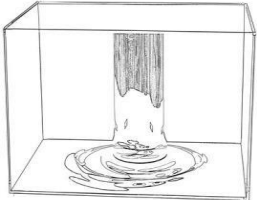
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<p>26</p>	<p>Smoke Based Optical Bench for Concave Mirror</p>	<p>Concave Mirror Ray Diagram lets us understand that, when an object is placed at infinity, a real image is formed at the focus. The size of the image is much smaller compared to that of the object. Specification : This model is made with Smoke produce, Mirror Glass, PVC & Plastic, Laser etc. Work on 12 VDC or 230 VAC. Size : 33 X 60 X 20 CM.</p>	<p>1</p>
<p>27</p>	<p>SELF BALANCING DOLL</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 10.5" x 10" and 2.7mm wall thickness. It also has a plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism if needed. MATERIAL: This exhibit consist of a balancing doll with counterweights placed over a horizontal support. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video. USE: This working model consist of a mechanism in which a doll balances on a thin rope and even if it is given a deflection, it does not fall down. The center of gravity of the system is altered so that it is well low the point of balance, thereby making the system very stable and self- balancing.</p>	<p>1</p>
<p>28</p>	<p>TOWER OF PISA</p> 	<p>SIZE: 260mm x 260mm x 400mm MATERIAL: This exhibit consist of 8 mm square section solid rod metal frame – MS, and a metal ball with hook. The ball hung such that it is exactly at the center of gravity of the frame. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing Conceptual video.</p>	<p>1</p>
<p>29</p>	<p>D OF NAILS</p> 	<p>SIZE: The model provided with a transparent casing of size: 12" x 12" x 2" and 2.7mm wall thickness. MATERIAL: This exhibit consist of 2" nails minimum 2mm diameter anti-rust quality and more than 750 units neatly arranged in a square pattern. The nails locked within the casing such that it does not fall out. Minimum 10 balloons provided along-with in a separate plastic box. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>

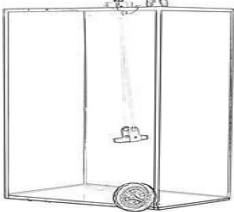
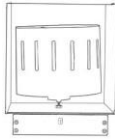
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<p>30</p>	<p>THE FLOATING BALL</p> 	<p>SIZE: 400mm x 410mm x 1220mm MATERIAL: This exhibit consist of 8 mm square section solid rod – MS frame. A high speed air blower provided connected to an external on-off switch, a light-weight ball, an electric wire with 2 pin plug 1.5 meter provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>31</p>	<p>HEAT SPIRAL</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 10.5" x 18" and minimum 2.7mm wall thickness. It also has a bottom casing to encase electrical connection and/or mechanism if needed. The model provided with a molded HD plastic stand & unbreakable banded MS basesize: 12" x 14" x 3.5" (Front Loading Style which is fix in modular Platform) . MATERIAL: The exhibit consist of a standard 200 Watt bulb properly fitted inside the casing using a bulb holder and a 2pin plug with wire minimum 1.5 meter and a spiral snake template on 80 gsm paper hung from the top using thread. The bulb operated by a CE mark push button switch. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>32</p>	<p>BERNOULLI BALLS</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 10.5" x 18" and 2.7mm wall thickness. It also has a bottom casing to encase electrical connection and/or mechanism if needed. The model provided with a molded HD plastic stand & unbreakable banded MS basesize: 12" x 14" x 3.5" MATERIAL: The exhibit consist of two moulded hollow plastic HDPE balls hung using metal chains and cup hooks. A high speed air blower provided connected to an external CE mark push button switch, a 2 pin plug with electric wire minimum 1.5 meter provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>


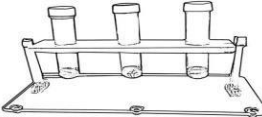
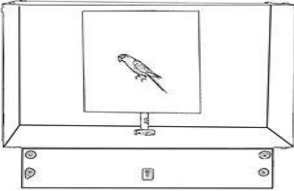
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<p>33</p>	<p>MAGIC WATER TAP</p> 	<p>SIZE: The model provided with a transparent casing of size 305mm x 305mm x 620mm. MATERIAL: The model consist of a plastic tap and acrylic pipe connected to it at one end and a pump on the other end. The entire assembly water tight so that no water leaks out. An on off electric switch with 2 pin plug and minimum 1.5 meter wire provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>34</p>	<p>ARCHEMEDES SCREW</p> 	<p>SIZE: 230mm x 310mm x 125mm MATERIAL: The exhibit consist of a metal handle and frame fixed inside the plastic casing. The entire assembly water tight so that no water leaks out. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>35</p>	<p>Simple Machines - To understand the functions of Lever – Pulley</p> 	<p>Type : Activity to prepared by teacher Material & Size: This activity contains 5 pulleys of ABS plastic material, 30 marbles, rope looped, 8 coated steel screws, 5 polished wooden strips, 3 hooks, 6 net bags 21.2 x 16.8 x 5.2 cm. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>36</p>	<p>WHEEL AND AXLE LOAD LIFTING</p> 	<p>SIZE: 20" x 12" x 36" MATERIAL: This exhibit consists of a metal frame with powder coating and two identical 5 kg weights with hooks and two metal rods connected to two plastic/acrylic wheels 5" and 10" both having handle for rotation. The weights connected to the rod using standard quality 6mm nylon rope. A rubber mat provided at the base to absorb impact of weight. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>37</p>	<p>ANAMORPHOSE</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 10.5" x 10" and 2.7mm wall thickness. The model provided with a molded HD plastic stand & unbreakable banded MS basesize: 12" x 14" x 3.5" MATERIAL: The exhibit consist of a 75mm O.D., 175 mm height cylindrical pipe with highly reflective surface, a template of a distorted image proper fixed inside the protective plastic casing. A conceptual chart in</p>	<p>1</p>



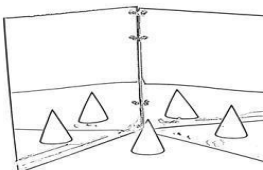
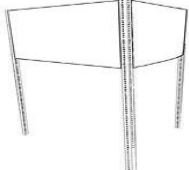
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		Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.	
38	<p>FREELY SUSPENDED MAGNET</p> 	<p>SIZE: The model is provided with a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material & transparent casing of size: 8.5" x 8.5" x 10" and 1mm wall thickness. It also has a bottom casing of 1mm wall thickness to encase electrical connection and/or mechanism if needed. The model is provided with a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material size: 10" x 3.5" x 12" and 1mm wall thickness. (Front Loading Style which is fix in modular Platform)</p> <p>MATERIAL: The working model consist of a freely suspended bar magnet of 38mm x 13mm x 8mm size with vertical axial rotation mechanism and a magnetic compass. If needed wall hook and fittings provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video</p>	1
39	<p>ZOETROPE</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 10.5" x 10" and 2.7mm wall thickness. If needed it also has a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism.</p> <p>MATERIAL: The exhibit consist of a plastic/wooden wheel connected to a 300 rpm geared motor. A printed template 300gsm stuck on the wheel. The motor connected to a CE marked push button switch and electrical connectors. A CE marked 9V 1A AC to DC adapter provided along-with. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1

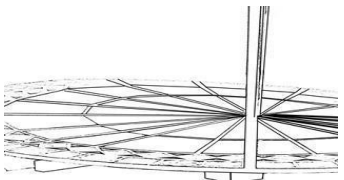
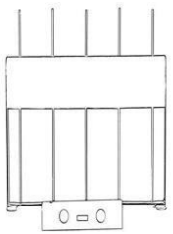


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<p>40</p>	<p>COLOURED SHADOWS</p> 	<p>SIZE: 381mm x 605mm x 305mm MATERIAL: This exhibit consist of three LEDs – red, blue and green fixed on a frame. The angle of the lights individually adjustable. A 2 pin plug with minimum 1.5 meter wire provided. If needed, wall fittings – pointed screws and plugs provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptualvideo.</p>	<p>1</p>
<p>41</p>	<p>VISCOSITY</p> 	<p>SIZE: 12" x 8" & 2.7mm wall thickness MATERIAL: This exhibit consist of 3 transparent tubes fixed inside a flipping frame attached on a 12" x 8" molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material base. The three tubes contain water, vegetable oil and glycerin and a marble each. The tubes leak proof. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video. USE: The working model consist of 3 large tubes containing fluids of different viscosity and each having a marble inside. When flipped, the marbles start falling down with a different speed. The tu with the slowest falling marble has the highest viscosity amongst the three fluids.</p>	<p>1</p>
<p>42</p>	<p>THAUMATROPE</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 10.5" x 10" and 2.7mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform) MATERIAL: The exhibit contain a 500 rpm motor, aluminum tubes 5.7mm I.D. 10mm O.D. 160mm long, colour template with bird on one side and a cage on the other side stuck on PVC sheet. The motor connected to a CE mark push button switch and electrical connectors. AC to DC adapter provided along-with. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>


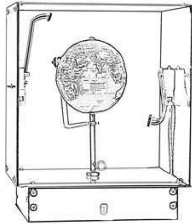
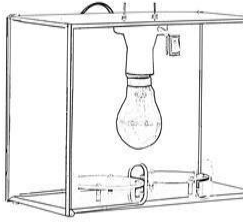
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<p>43</p>	<p>INTERNAL REFLECTION</p> 	<p>SIZE: The exhibit provided on a transparent base of 10.5" x 10.5" x 4" wall thickness. The model provided with a molded HD plastic stand & unbreakable banded MS basesize: 12" x 14" x 3.5"</p> <p>MATERIAL: The exhibit contain a laser light, attached on to the base. A transparent acrylic rod 10mm diameter provided with minimum 3 nds – 90 degrees each. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>44</p>	<p>Newton's Disc</p> 	<p>Type : Model</p> <p>Material & Size: This activity contains of a wheel and colour template, motor and stand. It works on electricity. 10.5" x 10.5" x 4" A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an applicationfor seeing conceptual video. The model provided with a molded HD plastic stand & unbreakable banded MS basesize: 12" x 14" x 3.5" (Front Loading Style which is fix in modular Platform)</p> <p>Use: The Newton disc is a well-known physics experiment with a rotating disc with segments in different colours(usually Newton's primary colours: red, orange, yellow, green, blue, indigo, and violet) appearing as white (or off-whiteorbgray) when it spins very fast. This type of mix of light stimuli is called temporal opticalmixing, a version of additive-averaging mixing.</p>	<p>1</p>
<p>45</p>	<p>MULTIPLE REFELECTION OF LIGHT</p> 	<p>SIZE: 10" x 20" x 2.7mm.</p> <p>MATERIAL: This exhibit consist of three mirrors 10" x 10" x 2.7mm. Two of the mirrors attached to each other using a metal hinge such that the angle tween them can vary from 0 to 180 degree. A base depicting theangle 0 to 180 degree, provided. Any loose items packed inside a plastic box. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>46</p>	<p>HUMAN KALEIDOSCOPE</p> 	<p>SIZE: 4 feet triangular side, 5 feet height.</p> <p>MATERIAL: The exhibit made with 16 to 18 gauge L bracket metal frame. Three acrylic mirrors of 2 feet x 4 feet attached to form a triangular framework. Rubberr/PVC corks provided at the base of the metal brackets. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked</p>	<p>1</p>

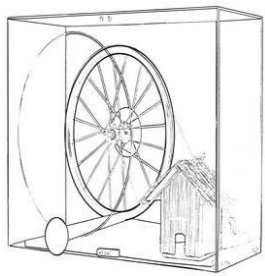
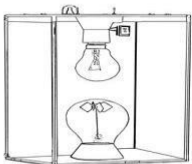
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		to an application for seeing conceptual video.	
47	<p>THE ODD DININGTABLE</p> 	<p>SIZE: The working model provided in a transparent casing of size: 8.5" x 8.5" x 10" and 2.7mm wall thickness. The model provided with a molded HD plastic stand & unbreakable banded MS basesize: 12" x 10" x 3.5"</p> <p>MATERIAL: The exhibit consist of two 6" x 6" x 2.7mm mirrors properly fixed inside the protectivemolded HD plastic stand & unbreakable banded MS base with white/Gray insulated material casing. A colorful printed template of a dining table provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
48	<p>LATERAL SHIFT</p> 	<p>SIZE:70mm x 230mm x 200mm</p> <p>MATERIAL: This exhibit consists of 5 identical metal rods powder coated in different colours, a frame as stand to hold the rods in vertical position and a viewing piece in plastic body made using prisms in such a way that the vision is shifted laterally by 25 to 30 degrees. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
49	<p>Volcano Eruption</p> 	<p>Size : It has amolded HD plastic stand & unbreakable banded MS base size : 12'X10"x3.5" with white/Gray insulated material casing Material : This Project Consist of a Acryalic base Moulded Mountain .onthe MS BASE.</p> <p>A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
50	<p>DAY & NIGHT</p> 	<p>Type : Model</p> <p>Size & Material (L x W x H): 10.5" x 10.5" x 10" electrical, coated wood,aconceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video. It also has a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x</p>	1

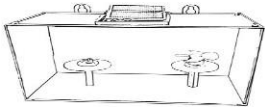


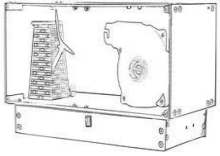
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		3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform) Use: This activity will help to understand how days and nights areformed.	
51	<p>The Universe - SolarSystem</p> 	<p>Type : Model Size & Material: Dimensions (L x W x H): 30 cm x 21 cm x 25 cm, ABSplastic, fibre, wood. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video. Use: This activity will help to understand 8 planets position.</p>	1
52	<p>SATELLITES</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 10.5" x 10" and 2.7mm wall thickness. It also has molded HD plastic stand & unbreakable banded MS base12"x14"x3.5" with white/Gray insulated material a bottom casing to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform)</p> <p>MATERIAL: The exhibit consist of a 4" Earth globe, 3.5 rpm geared motor and two 60 rpm motors connected to CE mark push button switch and electrical connectors. A metal pipe I.D. 5.7mm O.D. 10mm, 3 objects representing satellites and a DC adapter provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
53	<p>HEAT ABSORPTION</p> 	<p>SIZE: The model provided with a moulded ABS casing of size: 8.5" x 8.5" x 10" and 2.7mm wall thickness. It also has amolded HD plastic stand & unbreakable banded MS base size : 12'X10"x3.5" with white/Gray insulated material casing to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform)</p> <p>MATERIAL: This model consist of two same size acrylic discs, one white and one black. A 100 watt bulb and bulb holder connected to a rocker switch, 2 pin plug wire 1.5 m long provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked</p>	1

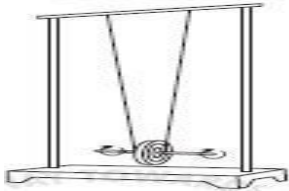
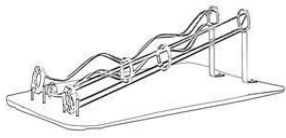


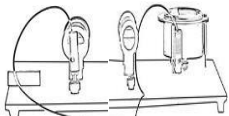
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		to an application for seeing conceptual video.	
54	<p>HAND POWERED GENERATOR</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 18.5" x 10" and 2.7mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base size : 14"x20"x3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fixed in modular Platform)</p> <p>MATERIAL: This exhibit consists of a wheel with handle for rotation, LED, dynamo type motor, motor pulley, 1" GI clamp, long lasting PVC O-ring, model of a house. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
55	 <p>RADIOMETER</p>	<p>SIZE: The model provided with a transparent casing of size: 8.5" x 8.5" x 10" and 2.7mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base size : 12"x10"x3.5" with white/Gray insulated material bottom/top casing to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fixed in modular Platform)</p> <p>MATERIAL: This exhibit consists of a 200 watt bulb with bulb holder, radiometer properly fixed inside the protective plastic casing. The bulb connected to a CE mark switch and electrical connectors. A 2 pin plug with minimum 1.5 meter wire provided. Wall hooks and fittings are to be provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1

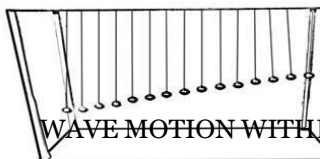
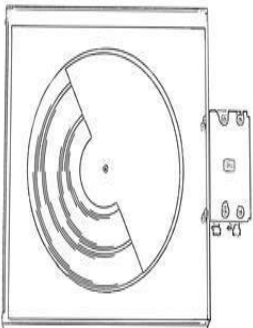

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56	<p style="text-align: center;">SOLAR ENERGY KIT</p> 	<p>SIZE: The model provided with a transparent casing of size: 8.5" x 8.5" x 10" and 2.7mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base size 12"x10"x3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform)</p> <p>MATERIAL: This exhibit consist of a solar cell, toy motor with plastic propeller, 2.5 V LED, 100 Ohm resistor, a CE mark push button switch and electrical connections. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
57	<p style="text-align: center;">Newtons Law 3rd Model</p> 	<p>Size : 10 x 12 x 30 (Inch)</p> <p>Material : This Model consist of Pipe Model of Newtons Third Law which Clearly indicates that Action and Reaction are equal and opposite . IT has also a Bottle Rocket and a Pump. . A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
58	<p style="text-align: center;">Magnetic Fluid</p> 	<p>Size : 6 x 10 x 5 (Inch)</p> <p>Material : This model Consist of Magnetic Liquid Fluid in a Transparent ABS MORLD JAR. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
59	<p style="text-align: center;">WINDMILL</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 18.5" x 10" and 2.7mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base size :14"X20"X3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism. (Front Loading Style which is fix in modular Platform)</p> <p>MATERIAL: This exhibit consist of a blower, a dynamo, plastic propeller, 2.5 V 10mm Dome green LED, windmill body. The blower connected to a CE mark push button switch and a 2 pin plug with minimum 1.5 meter long wire. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC</p>	1

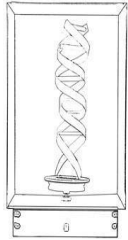
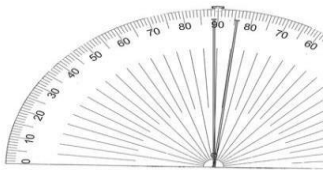
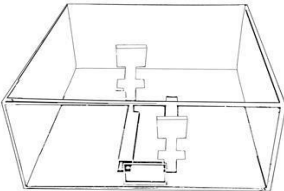

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		base having a QR code that linked to an application for seeing conceptual video.	
60	<p>K.E. P.E. WHEEL</p> 	<p>SIZE: 305 mmx 180 x 460mm MATERIAL: This exhibit consist of a metal frame with base having a solid wheel hung with threads. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
61	<p>MARBLE RACE</p> 	<p>SIZE: 305mm x 510mm x 80mm MATERIAL: This exhibit consist of two metal frame slides, one with constant slope and one with varying slope attached on a base made of plastic/acrylic – 12” x 24”, two 25mm marbles. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
62	<p>Force and types – FRICTION</p> 	<p>Size & Material: This activity contains casing caping 32mm X 300 mm, 3 marbles, Polish paper 50 micron grade, velvet and a cu/block.</p>	1
63	<p>ELECTRICBELL</p> 	<p>SIZE: 12” x 14” x 3.5” (Front Loading Style which is fix in modular Platform) Material: Shockproof molded HD plastic stand. This working model of electric bell contain magnet, transparent enameledcopper wire, coated wood. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video. Casing Size : 10.5" x 10.5" x 4" Use: Unlike a permanent magnet, the strength of an electromagnet can be easily changed by changing the amount of electric current that flows through it</p>	1
64	<p>MAGNETIC EFFECT OF ELECTRIC CURRENT WITH GALVANOMETER</p> 	<p>SIZE: 305mm x 200mm x 50 mm (Front Loading Style which is fix in modular Platform) MATERIAL: The exhibit consists of 2 plastic spools with stand having 26 SWG copper wire wound on them with lengths in 2:1 ratio and properly fixed on acrylic base of size 305 mm x 200 mm. A galvanometer, 3” bar magnet, electrical connectors provided.</p>	1

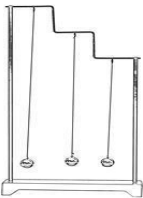

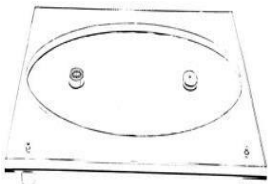

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		The exhibit water tight. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.	
65	 <p>WAVE MOTION WITH PENDULUM</p>	<p>SIZE: 310mm x 180mm x 300mm</p> <p>MATERIAL: This exhibit consist of a metal frame 15" x 7" x 10" made in 8mm square section MS rod, 15 metal bobs with hook and suspended using thread. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
66	<p>NHAM'S DISC</p> 	<p>SIZE: The working model provided in a transparent casing of size: 10.5" x 10.5" x 10" and 2.7mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform)</p> <p>MATERIAL: This exhibit consist of a disc template having pattern attached on a 120 rpm gear motor. The motor operated using a CE mark push button switch. A CE mark 12V 1A AC to DC adapter provided along-with. Wall hooks and fittings are topprovided if needed. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p> <p>USE: This working model consists of a spinning disc having black and white design. When the disk is spun, arcs of pale colour, called Fechner colours or pattern-induced flicker colours visible at different places on the disk.</p>	1
67	<p>VOLUME VS DENSITY</p> 	<p>SIZE: 10" cu, 5" cu</p> <p>MATERIAL: This exhibit consists of two metal boxes one of 10" cu and other 5" cu, both having handles to lift, a 5 kg weight. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1

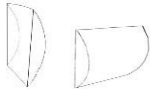
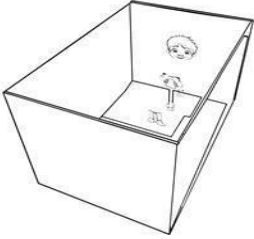
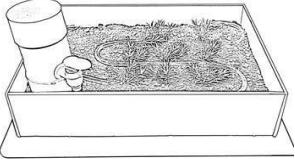

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<p>68</p>	<p>DNA MODEL</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 10.5" x 10" and 2.7mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base size 12"x14"x3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism. (Front Loading Style which is fixed in modular Platform)</p> <p>MATERIAL: This exhibit consists of a model of DNA structure made in plastic/aluminium, 3.5 rpm motor, CE mark switch, CE mark 9V 1A adapter and other necessary attachments. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that links to an application for seeing conceptual video.</p>	<p>1</p>
<p>69</p>	<p>Rain Gauge</p>	<p>SIZE :6" x 3.5" x 2.5"</p> <p>MATERIAL: Plastic, Aluminium,</p> <p>USE : Weather Forecast</p>	<p>1</p>
<p>70</p>	<p>ANGLE OF VISION</p> 	<p>SIZE: 304mm x 608mm x 5mm</p> <p>MATERIAL: This exhibit consists of a 0 to 180 degree angle template stuck on a 5mm PVC/sun board base, a fixed acrylic pointer and a movable acrylic pointer. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that links to an application for seeing conceptual video.</p>	<p>1</p>
<p>71</p>	<p>DEPTH PERCEPTION –NEAR AND FAR</p> 	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 18.5" x 10" and 2.7mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base size : 14"X20"X3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism. (Front Loading Style which is fixed in modular Platform) MATERIAL:This exhibit consists of two movable rectangular pieces inside a protective plastic casing with a view port in front. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that links to an application for seeing conceptual video.</p>	<p>1</p>
<p>72</p>	<p>SIMPLE PENDULUM</p> 	<p>SIZE: 12" x 12" x 3"</p> <p>MATERIAL: The exhibit consists of a metal frame 12" x 7" x 18" made in 8mm square section MS rod with powder coating. A metal bob with hook attached to the frame by a thread. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR</p>	<p>1</p>


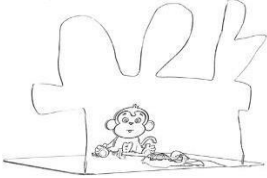
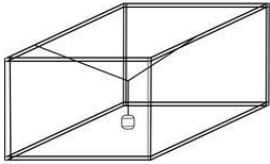
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		code that linked to an application for seeing conceptual video. USE: This working model consist of a simple pendulum which used to explain what a pendulum is, its time period, amplitude, frequency and oscillations.	
73	<p>PENDULUMS OF VARYING LENGTH</p> 	<p>SIZE: 12" x 7" x 18" MATERIAL: The exhibit consist of a metal frame 12" x 7" x 18" made in 8mm square section MS rod with powder coating. Three metal bobs with hook attached to the frame by individual threads. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
74	<p>SYMPATHETIC PENDULUMS</p> 	<p>SIZE: 12" x 7" x 18" MATERIAL: The exhibit consist of a metal frame 12" x 7" x 18" made in 8mm square section MS rod with powder coating. Two metal bobs with hook attached to an aluminium rod, by individual threads. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video</p>	1
75	<p>WEIGHT ON DIFFERENT PLANETS</p>	<p>SIZE: 46" x 12" x 46" MATERIAL: This exhibit consist of 9 containers representing the planets of our Solar system, 9 plastic rings with smooth edges, 1 meter 4mm thread for each of the container, all on a square section powder coated metal pipe frame of size 46" x 12" x 46". Relevant weights places inside the boxes. A vinyl background of 4ft by 4 ft and A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
76	<p>ALL ROADS LEAD TO DELHI</p> 	<p>SIZE: 520mm x 385mm x 15mm MATERIAL: This exhibit consist of an ellipse board with two discs at the foci, one fixed and one movable. The movable disc a carom board striker. Carom board powder provided along-with. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
77	<p>ANGULAR MOMENTUM WHEEL</p> 	<p>SIZE: 16" diameter with wall fittings. MATERIAL: This exhibit consist of a metal frame cycle wheel 16" in diameter, thin and strong nylon rope for hanging the wheel from a powder coated metal frame and wall fittings. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1

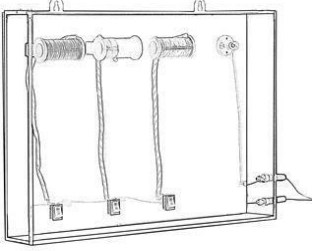

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78	Clap Switch	<p>SIZE: The model provided with a transparent casing of size: 10.5" x 12.5" x 10" and 2.7mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base size : 14"X12"X3.5" with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism.</p>	1
79	<p>FUNNY MIRRORS</p> 	<p>SIZE: 305mm x 75mm x 460mm MATERIAL: This exhibit consist of two mirrors, one fixed in concave shape and other in convex shape. Wall fitting provided if needed. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
80	<p>DEPTH PERCEPTION DOLL</p> 	<p>SIZE: The model provided with a transparent casing of size: 10" x 20" x 12" and 2.7mm wall thickness. It also has a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material bottom casing to encase electrical connection and/or mechanism. MATERIAL: This exhibit consist of 3 parts of a doll/template fixes inside the casing, a view port in the front. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
81	<p>DRIP IRRIGATION</p> 	<p>SIZE: The working model is provided with a transparent casing of size: 12" x 12" x 3" and 2.7mm wall thickness. MATERIAL: This model consist of a water storage unit with a drip system attached to it that runs through a model of an artificial farm. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
82	<p>WEIGHT BALANCING SCALE</p> 	<p>SIZE: 640mm x 180mm x 305mm MATERIAL: This exhibit consist of a 2 foot wooden / plastic scale with holes at every centimetre, two sets of slotted weights with hook, a balancing base. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1

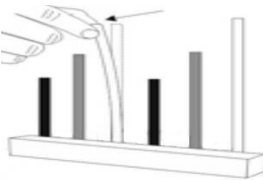
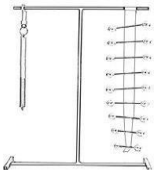
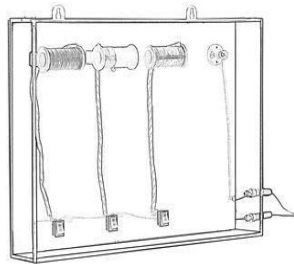
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<p>83</p>	<p>Measurement of physical quantities : Weighing Machine</p> 	<p>Type : Model Size & Material: 240 X 170 X 30 mm- fibre, electronic. Accurate, very light weight and elegant. It uses AAA batteries and not the coin cell kinds. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video. Use: This activity will help to understand how to measure various things.</p>	<p>1</p>
<p>84</p>	<p>ELECTRIC MAZE</p> 	<p>SIZE: The model has a molded HD plastic stand banded MS base with white/Gray insulated ma of size: 12" x 14" x 3.5" and 1mm thickness. It has a banded MS base with white/Gray insulate material bottom casing of 1mm wall thickness t encase electrical connection and/or mechanism needed. (Front Loading Style which is fix in mo Platform) MATERIAL: The working model consist of a 3 LED and 3V buzzer, 100 Ohms resistor, 14 aluminum wire, 6V 1A CE mark adapter, elec connectors, handle with hook and a m template. A conceptual chart in Gujarati langua A3 size is provided in 6 colour print on mini 3mm PVC base having a QR code that linked application for seeing conceptual video.</p>	<p>1</p>
<p>85</p>	<p>SAND PATTERNS OF A COMPOUND PENDULUM</p> 	<p>SIZE: 24" x 24" x 24" MATERIAL: This exhibit consist of a powder coated MS pipe frame of size 24" x 24" x 24", a pendulum weight with hollow cavity for sand attached to the frame using thin and strong nylon threads. A PVC/sunboard base provided at the bottom, a brush for collecting the sand and storage box provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video</p>	<p>1</p>
<p>86</p>	<p>THE IRONIC BORDER / COLOUR BOUNDARY</p>	<p>SIZE: 12"x18" MATERIAL: This exhibit consist of A3 vinyl sticker stuck on 3mm PVC/Sunboard, two 2 feet ribbon and wall fittings. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>87</p>	<p>CHANGE IN ELECRITICAL RESISTANCE DUE TODIMENSION</p>	<p>SIZE: The working model is provided with amolded HD plastic stand & banded MS base</p>	<p>1</p>



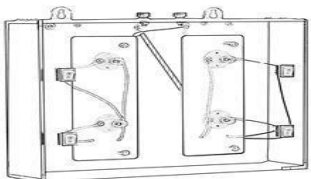

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		<p>size: 12" x 14" x 3.5" with white/Gray insulated material & transparent casing of size: 10.5" x 10.5" x 4" and 1mm wall thickness. It also has a moulded bottom casing of 2.7mm wall thickness to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform)</p> <p>MATERIAL: The six materials provided are Copper wire, Aluminum wire, Ni-chrome wire, Rubber band, plastic straw, wooden stake, 4mm thread. Individual switches (CE mark push button) are provided for testing the conductivity of each material. A 6V bulb with holder is provided to indicate the conductivity. A 6V 1A CE mark adapter is provided along-with. If needed wall hooks and fittings are provided.</p> <p>A conceptual chart in Gujarati language of A3 size are provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	
<p>88</p>	<p>PIN SCREEN</p>	<p>SIZE: The model provided in size: 12" x 12" x 2" and minimum 2.7mm wall thickness.</p> <p>MATERIAL: This exhibit consist of 2" nails minimum 2mm diameter anti-rust quality and more than 750 units neatly arranged in a square pattern. The nails locked within the casing such that they not fall out. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>89</p>	<p>Periscope (Submarine)</p>	<p>MATERIAL : Acrylic Body CONCEPT : Reflection of light from mirror installed at 45 degree.</p>	<p>1</p>
<p>90</p>	<p>NEWTON'S CRADLE</p> 	<p>SIZE: 138mm x 163mm x 135mm MATERIAL: This exhibit consist of a metal frame with powder coating and 5 metal balls, hung from the frame such that they are just in contact with each other in a straight line. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>




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<p>91</p>	<p>RESONANCE</p> 	<p>SIZE:15 cm x 4 cm x 15 cm MATERIAL: This exhibit consist of 6 metal strips mounted on a solid wooden or metal stand such that when one of the strip is disturb and made to vibrate, it make the other strips resonate. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>92</p>	<p>MOMENT OF INERTIA</p>	<p>SIZE:15 cm x 6 cm x 20 cm – 2 units MATERIAL: This exhibit consist of two metal bars of T shape. The weight concentrated at the center of T joint on one of the metal bar whereas on the other T bar the weight at the edges. It powder coated. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>93</p>	<p>LATERAL AND LONGITUDINAL WAVES</p> 	<p>SIZE:305mm x 180mm x 460mm MATERIAL: This exhibit consist of a metal stand having a spring attached on one end and a lateral wave unit attached on the other end. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	<p>1</p>
<p>94</p>	<p>CHANGE IN ELECRITICAL RESISTANCE DUE TO DIMENSION</p> 	<p>SIZE: The working model is provided with a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material & transparent casing of size: 10.5" x 10.5" x 4" and 2.7mm wall thickness. It also has a molded HD plastic stand & banded MS base with white/Gray insulated material casing of 1mm wall thickness to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform) MATERIAL: This model consist of Ni-Chrome wire 20 SWG and Ni- Chrome 26 SWG. Three wires wound on individual ABS plastic molded spool with stand and connected to individual CE mark push button switches. A 6V bulb with holder is provided to indicate the conductivity of different wires. AC to DC adapter is provided for connecting the working model in to electrical socket. If needed wall hooks and fittings provided. A</p>	<p>1</p>

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		conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.	
95	<p>Sound - Transmission of various types of sound waves. – Xylophone</p> 	<p>Type : Model Size & Material: 13.4 cm x 25.4 cm - wood and coated metal. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
96	<p>Natural resources</p> 	<p>Type : Model Material: .40 rock specimens covering igneous, sedimentary and metamorphic rocks. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
97	<p>SERIES AND PARALLEL CIRCUITS</p> 	<p>SIZE: The working model provided with a molded HD plastic stand & unbreakable banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material & transparent casing of size: 10.5" x 10.5" x 4" and 2.7mm wall thickness. It also has a bottom casing of 1mm wall thickness to encase electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform)</p> <p>MATERIAL: This working model consists of two circuits, one having two 6V bulbs in series circuit with individual CE mark switches and the other having two 6V bulbs in parallel circuit. A 6V 1A CE mark AC to DC adapter is provided for connecting the working model in to electrical socket. If needed wall hooks and fittings provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.</p>	1
98	<p>ELECTRICAL RESISTANCE OF MATERIALS</p> 	<p>SIZE: The working model provided with a molded HD plastic stand & banded MS base size: 12" x 14" x 3.5" with white/Gray insulated material casing of size: 10.5" x 10.5" x 4" and 2.7mm wall thickness. Electrical connection and/or mechanism if needed. (Front Loading Style which is fix in modular Platform)</p> <p>MATERIAL: The working model consists</p>	1

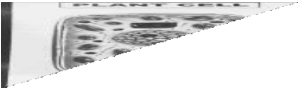


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		of 26 SWG Copper wire, 26 SWG Ni-chrome wire, 26 SWG galvanized wire, all wound on individual ABS molded spool with stand. Each of the wire is provided with a CE mark push button switch. A 6V bulb is provided with bulb holder to indicate the conductivity of each wire. AC to DC adapter is provided along-with. If needed wall hooks and fittings are to provided. A conceptual chart in Gujarati language of A3 size provided in 6 colour print on minimum 3mm PVC base having a QR code that linked to an application for seeing conceptual video.	
<u>Biology LAB</u>			
1	Student Microscope	The working model is provided of size: 12" x 8" x 6.5". Three different type of magnification must. Facilities of Detachable eyepiece and reflected light source on object. Two layer of safety packing	1
2	Human torso 	Minimum Requirement: 10" x 8" x 30" MATERIAL: This exhibit must consist of a colored Human body torso provided in a standard quality fibre with removable organs – heart, lungs, liver, stomach, intestine, brain and eye.	1
3	Human heart model 	Minimum Requirement: 10 cm x 8 cm x 15 cm. 4Times bigger than human size with sections hinged for observation. Display Stand to be included. MATERIAL: This exhibit should be made in fibre or plastic and mounted in a metallic stand.	1
4	Human brain & skull 	Minimum size: 30x24x6 cm. A three dimensional model; half skull with removable brain section for observation and study.	1



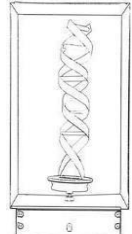

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5	Human Digestive Model(21*8")	The working model is provided with a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material of 3mm wallthickness or It also has a molded HD plastic stand & unbreakable banded MS base with white/Gray	1
6	Human Nervous Model(21*8")	The working model is provided with a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material 3mm wall thickness	1
7	Foot Joint	The working model is provided with a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material of 3mm wallthickness or It also has a molded HD plastic stand.	1
8	Flip Joint	The working model is provided with a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material of 3mm wallthickness or It also has a molded HD plastic	1
9	Hand Joint	The working model is provided with a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material of 3mm wall	1
10	Amoeba (9*13")	The working model is provided with a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material of and 3mm wallthickness.	1
11	Hydra	The working model is provided with a molded HD plastic stand & unbreakable banded MS base with white/Gray insulated material of 3mm wallthickness.	1




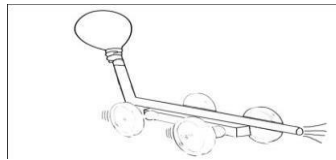

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12	<p>Plant cell</p> 	<p>Minimum Requirement: Material: Fibre/plastic fixed on a wooden/MDF frame with neat labelling of various parts of the cell. A conceptual chart in Gujarati language of A3 size must be provided in 6 color prints on minimum 3mm PVC base having a QR code that can be linked to an application for seeing conceptual video</p>	1
13	<p>Animal cell</p> 	<p>Minimum Requirement: Material: Fibre/plastic fixed on a wooden/MDF frame with neat labelling of various parts of the cell. A conceptual chart in Gujarati language of A3 size must be provided in 6 color print on minimum 3mm PVC base having a QR code that can be linked to an application for seeing conceptual video.</p>	1
14	Prepared Slide for Microscope	6CMX2CMX0.2mm Transparent Glass. Set of 10 Different slides.	1
15	Specimen in Plastic Jar,	10CMX4CMX0.2mm Transparent Glass. Set of different Specimen.	1
16	HUMAN BODDY 11 layers KNOWLEDGE KIT		1
17	Coverslips	6CMX2CMX0.2mm Transparent Glass	1
18	Glass slides	6CMX2CMX0.2mm Transparent Glass	1

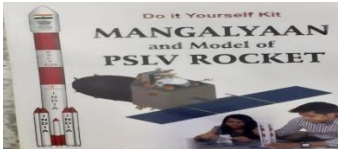

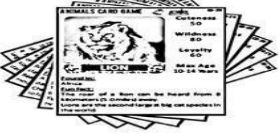
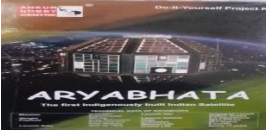
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19	Motor and Pestle	6CMX2CMX0.2mm Transparent Glass	1
20	<p>Human eye model</p> 	<p>Display stand to be included. Material: this exhibit must consist of a human eye model made in plastic or fir. It should have a moving mechanism for the eye-ball. A conceptual chart in gujarati language of a3 size must be provided in 6 colours printed on minimum 3mm pvc base having a qr code that can be linked to an application for seeing conceptual video.</p>	1
21	<p>Human ear</p> 	<p>Larger than life size inner ear sections exposed for observation and study of canals, drum and nerves. Material: anatomically accurate plastic kit. Must be a table top model of human ear. An instruction manual must also be provided.</p>	1
22	<p>DNA model</p> 	<p>Minimum requirement: the model must be provided with a transparent casing of size: 10.5" x 10.5" x 10" and 2.7mm wall thickness. It must also have a molded hd plastic stand & unbreakable banded ms base size 12"x14"x3.5" with white/gray insulated material bottom casing to encase electrical connection and/or mechanism. (front loading style which is fix in modular platform) material: this exhibit should consist of a model of dna structure made in plastic/aluminum, 3.5 rpm motor, ce mark switch, ce mark 9v 1a adapter and other necessary attachments. A conceptual chart in gujarati language of a3 size must be provided in 6 color print on minimum 3mm pvc base having a qr code that can be linked to an application for seeing conceptual video.</p>	1
23	<p>Human skeleton</p> 	<p>Size : Minimum Dimensions (L x W x H): 42 cm height Type: Model Material: The skeletal system must consist of the body's bones and joints made of fibre material. A conceptual chart in Gujarati language of A3 size must be provided in 6 color print on minimum 3mm PVC base having a QR code that can be linked to an application for seeing conceptual video.</p>	1

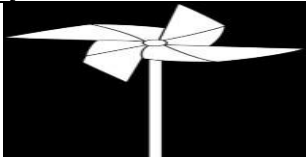



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24	<p>The Muscular system and digestive system in Humans - Teeth</p> 	<p>Type : Model Dimensions (L x W x H): 11 x 8 x 9 cm Model of human teeth Use: It helps to understand 4 types of teeth in human body.</p>	1
SCIENCE NON-TECHNICAL₁			
1	<p>Properties of Air</p> 	<p>Type: Activity to prepared by teacher. Material: 2 rubber balloons, boat</p>	1
2	<p>AIR CAN LIFT WEIGHT</p>	<p>SIZE: Packed in plastic box of size - 236mm x 137mm x 35mm MATERIAL: This kit contains food grade clear plastic tu, attached with sealed clear plastic bag – 2 sets. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
3	<p>RELATIONSHIPS QUIZCARDS</p> 	<p>SIZE: Packed in plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: This kit contain 32 quiz cards on relations of a family minimum size 100mm x 150mm. The cards colourful and non-tearable paper quality. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
4	<p>BALLOON CAR</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3" MATERIAL: This kit contain 5 sets of: a thin plastic moulded/wooden base with 4 plastic wheels, a straw and 2 large and good quality balloons. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
5	<p>CLAY ANIMALS</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3" MATERIAL: This kit contain 4 sets of: Clay bars brown yellow black red, set of eyes, 1 plastic mould each of a land based animal, water based animal, air borne animal and an animal that can live both in water and on land. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1

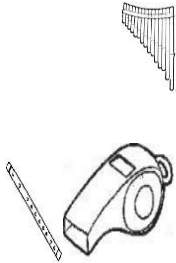
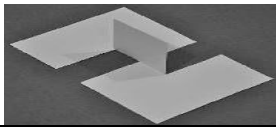
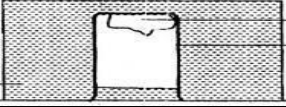
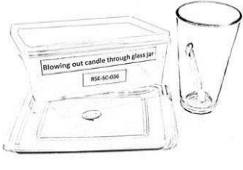
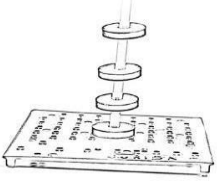
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6	<p>Do it YOURSELF kit of MANGALYAN and Model of PSLV ROCKET.</p> 	<p>SIZE: Packed in plastic box of size 8" x 6.2" x 3.4" MATERIAL: This kit contain 4 sets of: ISRO's PSLV C25 and MANGALYAN CARD BOARD Model. An instruction manual mentioning the purpose and how to conduct the activity provided</p>	1
7	<p>COLOSSO S & L –SPACE THEME</p> 	<p>SIZE: 100 BLOCKS. 10X10 FEET MAT MATERIAL: This kit contain 100 blocks, 10X10 feet rubber mat and jumbo 8 inches dice</p>	1
8	<p>ANIMALS' ZOO – CARD GAME</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3" MATERIAL: This kit contain 4 sets of: a card game having 36 colourful cards of animals and their properties in a trump card game style. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
9	<p>ARYABHATA Model</p> 	<p>SIZE: Packed in plastic box of size 7.3" x 4.8" x 1.95" MATERIAL: This kit contain Paper Model kit of INDIA's 1st EVER SATELLITE Model.. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
10	<p>KEBO</p>	<p>SIZE: Packed in plastic box of size Flat 9.8" x 6.3" x 2.7" MATERIAL: This kit contain a flat circular transparent base with printed message and a spinning disc on top with a gibrish message. The discs made of minimum 2mm clear acrylic of plastic. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
11	<p>3D BALL FOR SOLAR SYSTEM WITH ACRYLIC PAINT AND PAINTBRUSH</p>	<p>Solar system, Mercury, Venus, Earth, Mars, Jupiter, Saturn with rings, Uranus, Neptune and Pluto. The planets nearly the actual ratio of their sizes. A yellow colour plastic moulded Sun provided. A set of acrylic paint and paintbrush provided. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
12	<p>PINWHEEL</p>	<p>SIZE: Packed in plastic box of size 13.2" x 11.3" x 6.5" MATERIAL: This kit contain one assembled pinwheel using origami paper, thick straw and pin. Material provide to make 50 such pin wheels. An instruction manual mentioning the purpose and how to</p>	1





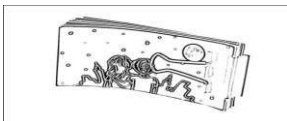
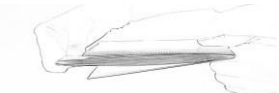
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		conduct the activity provided.	
13	<p>ANIMALS JIGSAW</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3"</p> <p>MATERIAL: This kit contain 4 different animals jigsaw – colourful and cut in MDF/PVC/good quality hard board. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
14	<p>INSECTS JIGSAW</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3"</p> <p>MATERIAL: This kit contain 4 different animals jigsaw – colourful and cut in MDF/PVC/good quality hard board. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
15	<p>BIRDS JIGSAW</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3"</p> <p>MATERIAL: This kit contain 4 different animals jigsaw – colourful and cut in MDF/PVC/good quality hard board. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
16	<p>POPSICLE STICKWHISTLE</p>	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3"</p> <p>MATERIAL: This kit contain an assembled popsicle stick whistle using 2 popsicle sticks, 1 thick rubr band, thread/cello tape/rubber bands and 2 spacers. Material provided to prepare 50 more whistles. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
17	<p>BALLOON BUGLE</p>	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3"</p> <p>MATERIAL: This kit contain a balloon cut and connect to a tu at one end and a plastic cup/cut bottle on the other end such that when one blows air into to tu it produces sound like a bugle. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1


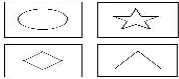




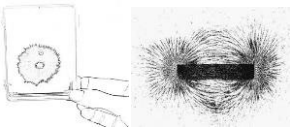
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18	PAPER CUP TELEPHONE	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3"</p> <p>MATERIAL: This kit contain 5 sets of: paper cup telephones having 2 paper cups attached together at the centre of the base using 4 meter thread and clips such that when two students are at opposite end, one speaking softly in the cup and other listening with the string taut, the listener able to hear the spoken words. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
19	<p>PAN PIPES</p> 	<p>SIZE: Packed in plastic box of size 9.4" x 5.6" x 1.4"</p> <p>MATERIAL: This kit contain a plastic moulded model of pan pipes. An instruction manual mentioning the purpose and how to conduct the activity provided. This box also contain a Flute and a Whistle.</p>	1
20	<p>THE IMPOSSIBLE FOLD</p> 	<p>SIZE: Packed in plastic box of size 9.4" x 5.6" x 1.4"</p> <p>MATERIAL: This kit contain a made activity of the impossible fold using 220 gsm card paper. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
21	<p>WATERPROOF TISSUEPAPER</p> 	<p>SIZE: Packed in plastic box of size Flat 4.9" x 3.3" x 1.3"</p> <p>MATERIAL: This kit contain a transparent plastic test tu, tissue paper, paper cup and a 15 cm long wooden stick. An instruction manual mentioning the purpose and how to conduct the activity provided</p>	1
22	<p>BLOWING OUT CANDLETHROUGH BOTTLE</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3"</p> <p>MATERIAL: This kit contain a candle, matchstick box, a transparent cylindrical object, a rectangular block of minimum size. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
23	<p>MAGNETIC SPRING</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3</p> <p>MATERIAL: This kit contain 4 sets of: an ABS plastic moulded base plate of size 110mm x 110mm, 4 ferrite ring magnets and a thick straw. An instruction manual mentioning the purpose and how to conduct</p>	1




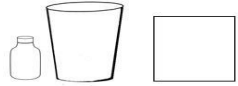

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		the activity provided	
24	<p>Solar eclipse Viewer</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3"</p> <p>MATERIAL: This kit contain 5 sets of Solar eclipse glasses from which students can see sun without damaging the eyes. An instruction manual mentioning the purpose and how to conduct the activity provided</p>	1
25	<p>COSMOS : FROM BIGBANG TO EARTH</p> <p>H</p> 	<p>SIZE: Packed in plastic box of size 6.6" x 4.3" x 1.2"</p> <p>MATERIAL: This kit contain 5 units of COSMOS BOOK, Which will explain the students all the details regarding UNIVERSE.</p>	1
26	<p>SUN AND THE ZODIAC BAND</p> 	<p>SIZE: Packed in plastic box of size 8" x 6.2" x 3.4"</p> <p>MATERIAL: This kit contain a yellow ball representing the sun and a black card paper roll with print of the 13 zodiacs such that the roll form a large circle. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
27	<p>SUNDIAL</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3"</p> <p>MATERIAL: This kit contain a base with a printed template of the sundial and a fixed gnome. A magnetic compass provided. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
28	<p>MOON FLIP BOOK</p> 	<p>SIZE: Packed in plastic box of size 9.4" x 5.6" x 1.4"</p> <p>MATERIAL: This kit contain 4 sets of: a 31 cards flip book of the lunar cycle with each card of minimum 55mm x 105mm and 220gsm with soft lamination, held together with a binder clip. An instruction manual mentioning the purpose and how to conduct the activity provided</p>	1
29	<p>FRICITION BOOKS</p> 	<p>SIZE: Packed in plastic box of size 9.4" x 5.6" x 1.4"</p> <p>MATERIAL: This kit contain 2 100 page notebooks of standard quality. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1

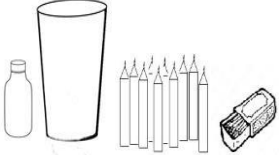

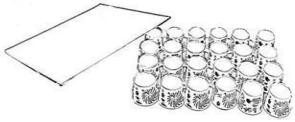
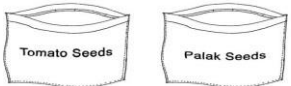



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<p>30</p>	<p>FLOATING RICEBOTTLES</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3" MATERIAL: This kit contain 2 bottles of 200 ml filled with rice, 2 longwooden stakes. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>31</p>	<p>LIGHT IS NEEDED FOR PHOTOSYNTHESIS</p> 	<p>SIZE: Packed in plastic box of size 4.7" x 3" x 1" MATERIAL: This kit contain stickers with shape cut-outs like circle, square and star. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>32</p>	<p>AIR IS NEEDED FOR PHOTOSYNTHESIS</p> 	<p>SIZE: Packed in plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: This kit contain a zip lock bag and iodine solution in 20ml bottle. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>33</p>	<p>STARCH TEST FOR GREEN LEAVES</p> 	<p>SIZE: Packed in plastic box of size 4.7" x 3" x 1" MATERIAL: This kit contain iodine solution in 20 ml bottle. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>34</p>	<p>STATES OF MY COUNTRY JIGSAW</p> 	<p>SIZE: Packed in plastic box of size 8" x 6.2" x 3.4" MATERIAL: This kit contain 4 sets of Indian map jigsaw puzzle with minimum size 8" x 10" made using 3 mm thick MDF/PVC or good quality hard board material. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>35</p>	<p>TORNADO IN A BOTTLE</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3" MATERIAL: This kit contain two 200 ml bottles with a plastic moulded twin cap with hole in the centre such that both bottles can attached on opposite ends and the unit leak proof. 3 extra twin bottle cap connectors provided. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>36</p>	<p>MAGNETIC FIELDVIEWER</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3" MATERIAL: This kit contain a plastic box of size 6.6" x 4.3" x 1.2" containing iron filings, a 25mm diameter ring magnet, a 25mm diameter disc magnet, a bar magnet 10mm x 23mm x 38mm. An instruction</p>	<p>1</p>





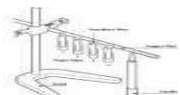
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		manual mentioning the purpose and how to conduct the activity provided.	
37	<p><u>PLANETS CARD GAME</u></p> 	<p>SIZE: Packed in plastic box of size 6.6" x 4.3" x 1.2"</p> <p>MATERIAL: This kit contain 4 sets of: minimum 20 cards of planet and celestial bodies cards made in laminated 220gsm card paper each card minimum 65mm x 85mm, gameplay ing in quiz cards style. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
38	<p>CATAPULT</p> 	<p>SIZE: Packed in plastic box of size 13.2" x 11.3" x 6.5"</p> <p>MATERIAL: This kit contain 4 made models of catapult made in wood/particle board/plastic such that it can move ahead/back using 4 plastic ABS moulded wheels attached on 2 plated metal shafts 3mm diameter x 90 mm length. A launcher with O-ring and clay ball provided. The launcher attached to a thick rubber band by hooks. 2 extra rubber bands provided with each model. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
39	<p>STRENGTH OF PAPERPILLAR</p> 	<p>SIZE: Packed in plastic box of size 9.4" x 5.6" x 1.4"</p> <p>MATERIAL: This kit contain 8 A5 size 220 gsm card paper, cello tape. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
40	<p>INVERTED GLASS OF WATER WITH CARD</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3"</p> <p>MATERIAL: This kit contain a hard transparent glass, 10 gram food colour, a PVC/sunboard sheet of 3" x 3" size. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
41	<p>INVERTED GLASS OF WATER WITH CLOTH</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3"</p> <p>MATERIAL: This kit contain a hard transparent glass, 10 gram food colour, 4 rubber bands and a plain white cotton handkerchief/netted cloth. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1





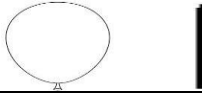
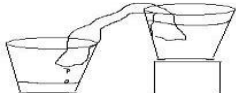
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42	<p>WATER RISING IN CUP</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3" MATERIAL: This kit contain a pack of 10 thin birthday candles, match stick box, hard quality plastic plate minimum 5" in diameter, 10 gram food colour, glass (glass – not plastic) An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
43	<p>INVERTED BOTTLE OF WATER</p> 	<p>SIZE: Packed in plastic box of size 150mm x 110mm x 70mm MATERIAL: This kit contain a 200ml plastic bottle with hole in cap and food colour. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
44	<p>STRUCTURES – PAPER CUPS</p> 	<p>SIZE: MDF/PVC board size 1.5 x 1.5 ft and plastic box of size 10.5" x 7.7" x 4.3" MATERIAL: This kit contain 25 identical paper cups of good quality and a MDF/PVC board of size minimum 15" x 15" x 3mm thickness. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
45	<p>GERMINATION OF SEEDS</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3" MATERIAL: This kit contain a packet of palak seeds, a packet of tomato seeds and 4 mini-pots for planting the seeds. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
46	<p>STARCH TEST OF FOOD ITEMS</p> 	<p>SIZE: Packed in plastic box of size 4.7" x 3" x 1" MATERIAL: This kit contain a 20 ml bottle of iodine solution. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
47	<p>LEVITATING PENCIL</p> 	<p>SIZE: Packed in plastic box of size 8" x 6.2" x 3.4" MATERIAL: This kit contain 4 ring magnets and 4 disc magnets, a plastic moulded base and a pencil. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
48	<p>WHICH ONE HAS MORE VOLUME</p> 	<p>SIZE: Packed in plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: This kit contain 2 A5 size 220 gsm card paper, cello tape. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1

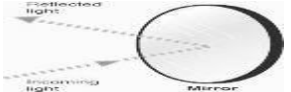

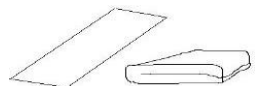
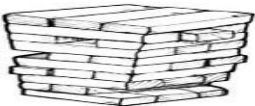
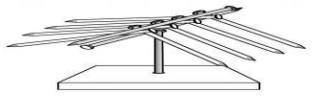


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<p>49</p>	<p>LUNGS MODEL</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3" MATERIAL: This kit contain a plastic or glass jar with a Y – tu attached into its base and 2 balloons attached to the Y tubes. A rubber diaphragm attached to the mouth of the jar. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>50</p>	<p>INERTIA CHALLENGE</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3" MATERIAL: This kit contain a hard plastic cup, a dummy metal coin and a card paper. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>51</p>	<p>SMALL LIFTS HEAVY</p> 	<p>SIZE: Packed in plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: This kit contain a plastic tubes, a bird and an elephant template a thread. An instruction manual mentioning the purpose and how to conduct the activity provided</p>	<p>1</p>
<p>52</p>	<p>ELECTROMAGET</p> 	<p>Type: Model Material & Size: This activity contains ABS plastic, copper wire, steel nail, cell.11 x 6.5 x 3 cm Use: An electromagnet is a type of magnet in which the magnetic field is produced by an electric current. The magnetic field disappears when the current is turned off.</p>	<p>1</p>
<p>53</p>	<p>Measurement of physical quantities: Measuring Units</p>	<p>Type : Model - Activity Material: Lab thermometer, thermometer, digital thermometer, measuringcylinder Use: This activity will help to understand how to measure various things in various objects, like temperature.</p>	<p>1</p>
<p>54</p>	<p>Heat: Modes of heattransfer: Conduction</p> 	<p>Type : activity to prepared by teacher Material: .bar of iron with wooden handle, 5 pins, wax, spirit lamp. Use: This activity will help to understand conduction of heat takes place through solid substances, shows that a medium id required for the conduction of heat.</p>	<p>1</p>

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<p>55</p>	<p>Modes of heat transfer: Expansion and Contraction of a solid substance</p> 	<p>Type : Model - activity to prepared by teacher Material: .a metal ball, a metal ring, heating source Use: This activity will help to understand that metals expand on heating and contract on cooling.</p>	<p>1</p>
<p>56</p>	<p>TELESCOPE 3.0</p> 	<p>Type : Model - .KYS 3.0 RF900 Telescope</p>	<p>1</p>
<p>57</p>	<p>Folding Flyers</p> 	<p>SIZE: Packed in plastic box of size:6.7" x 5.2" x 3" MATERIAL: This kit consist of 5 Paper planes with respective size of needles. Learn Aerodynamic Laws from this plane paper model rockets.An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>58</p>	<p>THAUMATROPE</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3" MATERIAL: This kit contain 50 templates of thaumatrope, 50 straws. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>59</p>	<p>PIERCING A BALLOON</p> 	<p>SIZE: Packed in plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: This kit contain 100 good quality balloons and 100 pointed wooden stakes. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>59</p>	<p>CLOTH SIPHON</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3" MATERIAL: This kit contain 2 plastic/ paper cups and a cotton handkerchief. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>

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60	<p>REFLECTION OF LIGHT</p> 	<p>SIZE: L 24.7"XW16.3"X H 6.5 CM plastic box MATERIAL: This kit contain torch, plane mirror, 1 laser, protractor, and duster. An A4 manual provided for explanation.</p>	1
61	<p>MAGIC STRAW – STATIC ELECTRICITY</p> 	<p>SIZE: Packed in plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: This kit contain two clear plastic straws, a thumb-stack and a stand/support. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
62	<p>STATIC ELECTRICITY</p> 	<p>SIZE: Packed in plastic box of size Flat 7.3" x 4.8" 1.95" MATERIAL: This kit contain a plastic/acrylic scale and a woollen cloth. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
63	<p>JENGA</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3" MATERIAL: This kit contain a set of the Jenga game in wooden finish. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
64	<p>BALANCING NAILS</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3" MATERIAL: This kit contain 11 nails of 2" – non-rusting, a wooden/plastic base with a fixed nail. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
65	<p>PING PONG BALL CUP CHALLENGE</p> 	<p>SIZE: Packed in plastic box of size 6.7" x 5.2" x 3" MATERIAL: This kit contain of 4 sets of: 2 paper cups and a table tennis ball. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
66	<p>REFLECTION IN A PLANE MIRROR</p> 	<p>SIZE: This activity is provided in a common optics box with of size 13"x 11.2" x 6.5". MATERIAL: This experiment consists of a plane mirror, a light source and a white paper. The light source has a 12V AC to Dc power supply.</p>	1

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67	LAWS OF REFLECTION Common Optics Box	SIZE: This activity is provided in a common optics box with of size 13”x 11.2” x 6.5”. MATERIAL: This experiment consists of a plane mirror, a light source and a white paper. The light source has a 12V AC to Dc power supply.	1
68	LAWS OF REFLECTION Common Optics Box	SIZE: This activity is provided in a common optics box with of size 13” x 11.2” x 6.5”. MATERIAL: This experiment consists of a plane mirror, a light source and a white paper. The light source has a 12V AC to Dc power supply.	1
69	MULTIPLE REFLECTIONIN MIRRORS AT AN ANGLE Common Optics Box	SIZE: This activity is provided in a common optics box with of size 13”x 11.2” x 6.5”. MATERIAL: This experiment consists of 2 plane mirrors, a light source and a white paper. The light source has a 12V AC to Dc power supply:	1
70	MULTIPLE REFLECTIONIN PARALLEL MIRRORS Common Optics Box	SIZE: This activity is provided in a common optics box with of size 13”x 11.2” x 6.5”. MATERIAL: This experiment consists of 2-plane mirror, a light sourceand a white paper. The light source has a 12V AC to Dc power supply USE: Using this activity the child can explained how light gets reflected when two plane mirrors are place parallel to each other.	1
71	NO INVERSION –PRINCIPLE OF PERISCOPE Common Optics Box	SIZE: This activity is provided in a common optics box with of size 13”x 11.2” x 6.5”. MATERIAL: This experiment consists of 2-plane mirror, a light source and a white paper. The light source has a 12V AC to Dc power supply	1
72	DISPERSION OF LIGHT Common Optics Box	SIZE: This activity is provided in a common optics box with of size 13”x 11.2” x 6.5”. MATERIAL: This experiment consists of a prism, a light source and a white paper. The light source has a 12V AC to Dc power supply	1
73	RECOMBINING LIGHTUSING TWO PRISMS Common Optics Box	SIZE: This activity is provided in a common optics box with of size 13”x 11.2” x 6.5”. MATERIAL: This experiment consists of 2 prisms, a light source and awhite paper. The light source has a 12V AC to Dc power supply	1




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74	ANGLE OF PRISM Common Optics Box	SIZE: This activity is provided in a common optics box with of size 13" x 11.2" x 6.5". MATERIAL: This experiment consists of 1 prism, a light source and a white paper. The light source has a 12V AC to Dc power supply	1
75	RAINBOW FORMATION Common Optics Box	SIZE: This activity is provided in a common optics box with of size 13" x 11.2" x 6.5". MATERIAL: This experiment consists of a water drop, a light source and a white paper. The light source has a 12V AC to Dc power supply	1
76	EYE DEFECTS AND CORRECTION Common Optics Box	SIZE: This activity is provided in a common optics box with of size 13" x 11.2" x 6.5". MATERIAL: This experiment consists of a convex lens, a concave lens, a light source and a white paper. The light source has a 12V AC to Dc power supply	1
77	LATERAL INVERSION Common Optics Box	SIZE: This activity provided in a common box with of size 13" x 11.2" x 6.5". MATERIAL: This experiment contain of 2-plane mirror, a light source and a white paper. The light source has a 12V AC to Dc power supply	1
78	REFLECTION THROUGH RECTANGULAR BLOCK Common Optics Box	SIZE: This activity provided in a common box with of size 13" x 11.2" x 6.5". MATERIAL: This experiment contain a rectangular glass slab, a light source and a white paper. The light source has a 12V AC to Dc power Supply	1
79	REFRACTION AND REFLECTION AT PLANESURFACE Common Optics Box	SIZE: This activity provided in a common box with of size 13" x 11.2" x 6.5". MATERIAL: This experiment contain a rectangular glass slab, a light source and a white paper. The light source has a 12V AC to Dc power Supply	1
80	REFRACTION THROUGH SEMICIRCULAR BLOCK Common Optics Box	SIZE: This activity provided in a common box with of size 13" x 11.2" x 6.5". MATERIAL: This experiment contain a semi circular glass slab, a light source and a white paper. The light source has a 12V AC to Dc power Supply	1

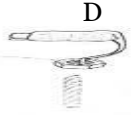

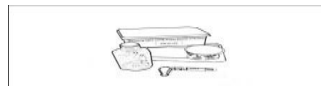

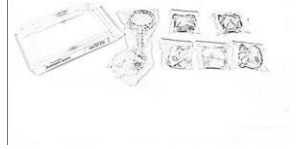

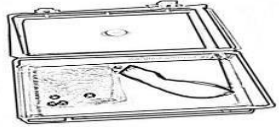
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81	CRITICAL ANGLE Common Optics Box	SIZE: This activity provided in a common box with of size 13" x 11.2"x 6.5". MATERIAL: This experiment contain a semi circular glass slab, a light source and a white paper. The light source has a 12V AC to Dc power Supply	1
82	TOTAL INTERNAL REFLECTING PRISM Common Optics Box	SIZE: This activity provided in a common box with of size 13" x 11.2"x 6.5". MATERIAL: This experiment contain a prism, a light source and a white paper. The light source has a 12V AC to Dc power supply	1
83	FOCAL LENGTH OF CONVEX LENS Common Optics Box	SIZE: This activity can provided in a common optics box with of size 13" x 11.2" x 6.5" MATERIAL: This experiment consists of a convex lens, a light source and a white paper. The light source has a 12V AC to Dc power supply	1
84	FOCAL LENGTH OF CONCAVE LENS Common Optics Box	SIZE: This activity can provided in a common optics box with of size 13" x 11.2" x 6.5" MATERIAL: This experiment consists of a concave lens, a light source and a white paper. The light source has a 12V AC to Dc power supply	1
85	FOCAL LENGTH OF CONVEX MIRROR Common Optics Box	SIZE: This activity can provided in a common optics box with of size 13" x 11.2" x 6.5" MATERIAL: This experiment consists of a convex mirror, a light source and a white paper. The light source has a 12V AC to Dc power Supply	1
86	FOCAL LENGTH OF CONCAVE MIRROR Common Optics Box	SIZE: This activity can provided in a common optics box with of size 13" x 11.2" x 6.5" MATERIAL: This experiment consists of a concave mirror, a light source and a white paper. The light source has a 12V AC to Dc power Supply	1
87	FOCAL LENGTH OF CONVEX LENS USING PLANE MIRROR Common Optics Box	SIZE: This activity can provided in a common optics box with of size 13" x 11.2" x 6.5" MATERIAL: This experiment consists of a convex lens, a plane mirror, a light source and a white paper. The light source has a 12V AC to Dc power supply	1

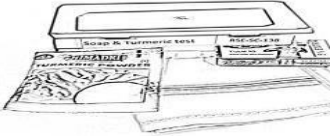

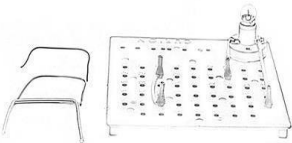


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88	<p>FOCAL LENGTH OF CONVEX LENS - IMAGE AND OBJECT METHOD Common Optics Box</p>	<p>SIZE: This activity can be provided in a common optics box with a size of 13" x 11.2" x 6.5" MATERIAL: This experiment consists of a convex lens, a light source and a white paper. The light source has a 12V AC to DC power supply</p>	1
89	<p>CONVEX LENS AS A COMBINATION OF PRISMS Common Optics Box</p>	<p>SIZE: This activity can be provided in a common optics box with a size of 13" x 11.2" x 6.5" MATERIAL: This experiment consists of 3 prisms, a light source and a white paper. The light source has a 12V AC to DC power supply</p>	1
90	<p>CONCAVE LENS AS A COMBINATION OF PRISMS Common Optics Box</p>	<p>SIZE: This activity can be provided in a common optics box with a size of 13" x 11.2" x 6.5" MATERIAL: This experiment consists of 3 prisms, a light source and a white paper. The light source has a 12V AC to DC power supply</p>	1
91	<p>SIMPLE KALEIDOSCOPE</p> 	<p>Type: Model Material & Size: 8.5" x 1.34" x 1.34". This activity contains ABS plastic, colorful glass pieces, mirror Use: object wheels or carousels rotating on an axis attached to the centre of the kaleidoscope can introduce shapes and colours into the kaleidoscope image</p>	1
92	<p>REFRACTION TRICKS - BROKEN PENCIL & DISAPPEARING COIN</p> 	<p>SIZE: This activity is provided in a plastic box of size 8" x 6.2" x 3.4" MATERIAL: The activity contains a transparent plastic glass, a standard pencil and a coin of minimum diameter 25 mm.</p>	1
93	<p>ISRO GSLV MK2 Making Kit</p> 	<p>SIZE: This activity is provided in a plastic box of size 10.6" x 6.3" x 1.5" MATERIAL: It contains a set of ISRO GSLV MK2 rocket model. Each and every single rocket model is made of blocks type shape of parts of the rocket. An instruction manual mentioning the purpose and how to conduct the activity is provided.</p>	1
94	<p>RESPIRATORY SYSTEM JIGSAW</p>	<p>SIZE: This activity is provided in a plastic box of size 10.5" x 7.7" x 4.3" MATERIAL: It contains a printed template pasted on MDF board/PVC or hardboard with machine cut finishing. An instruction manual mentioning the purpose and how to conduct the activity is provided.</p>	1

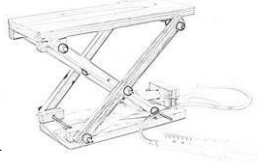
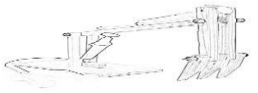
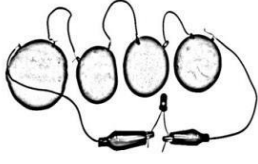
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95	<p>HEAT RESISTANTTHREA</p> 	<p>SIZE: This activity is provided in a plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: It contain a candle, a thread piece of length 1000mm and a plated metal hexagonal nut of min dia 4 mm. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
96	<p>HEAT RESISTANTBALLOON</p> 	<p>SIZE: This activity is provided in a plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: It contain a candle of minimum 90 mm and at least 2 mid- sized balloons of good quality with a length of 100 mm. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
97	<p>FINDING OF LIGHT USINGWATER BOTTLE AND LASER</p> 	<p>SIZE: This activity is provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: It contain a plastic bottle, a stiff quality paper cup and a good quality laser light. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
98	<p>PAPER CHROMATOGRAPHY</p> 	<p>SIZE: This activity is provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: It contain a stiff quality paper cup, a 4-colour sketch pen set and some standard quality tissue paper. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
99	<p>BALLOON WARS</p> 	<p>SIZE: This activity is provided in a plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: It contain good quality balloons. They of 5colours and 5 quantity of each. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
100	<p>JAL TARANG</p> 	<p>SIZE: This activity is provided in a plastic box of size 8" x 6.2" x 3.4" MATERIAL: This contain 7 glasses made of good quality glassware, a spoon and 10 grams of food colour. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
101	<p>SCREAMING BALLOONS</p> 	<p>SIZE: This activity is provided in a plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: This contain a balloon of good quality and a metal plated hexagonal nut of a min diameter of 4mm. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1





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<p>102</p>	<p>SOAP AND TURMERIC TEST</p> 	<p>SIZE: This activity is provided in a plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: This contain at least 50 grams of powdered turmeric, a 60 grams soap bar and a cloth piece of the size of a standard handkerchief. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>103</p>	<p>FLOATING AND SINKING LEMONS</p> 	<p>SIZE: This activity is provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: This contain 2 transparent plastic glasses, a plastic spoon of size 90 mm and minimum of 100 gm common salt. An instruction manual mentioning the purpose and how to conduct the activity provided. USE: This activity is useful to explain to the child why lemons float in water and why they sink when salt is added to the same water. It is useful to explain the concept of density.</p>	<p>1</p>
<p>104</p>	<p>SIMPLE CIRCUITS – CONDUCTORS AND INSULATORS</p> 	<p>SIZE: This activity is provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: This activity contains a circuit board made of ABS plastic of a minimum size of 110 x 110 mm, 15 copper plated spring connectors, a good quality 6v bulb and plastic holder, 2 nuts and bolt of plated metal, a soft multithread wire of minimum length 200mm, a piece of straw, a wooden piece and small pieces of Ni-Chrome, copper and aluminium wires. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>105</p>	<p>DOPPLER EFFECT</p> 	<p>SIZE: This activity is provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: This activity contains a transparent plastic box of minimum size 25 x 45 x 85 mm, a standard quality 3 v buzzer, a rope of 1000mm, a metal plated round hook, 2 metal nut & bolts, a 9v battery cap and a multi thread wire of minimum 100 mm. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>106</p>	<p>FLOATING BALL CHALLENGE</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain ant straw of good quality with a minimum length of 205mm and dia of 5mm. It\ also has a Styrofoam ball of minimum 35mm dia. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>


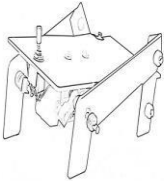

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<p>107</p>	<p>HYDRAULIC JACK</p> 	<p>SIZE: This activity provided in a plastic box of size 13.2" x 11.3" x 6.5" MATERIAL: The activity contain plastic/wooden blocks of light weight preferably deodar in the following sizes: 10 x 77 x 209 mm, 10 x 77 x 170 mm, 10 x 10 x 29 mm, 15 x 23 x 43 mm, 10 x 10 x 180 mm, a 10 ml plastic syringe, a 5 ml plastic syringe, 3 wire ties of 100 mm length, 1 clear plastic food grade quality tu of minimum length 300 mm, some rubr bushes and a minimum of 8 gms glue. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>108</p>	<p>HYDRAULIC EXCAVATOR</p> 	<p>SIZE: This activity provided in a plastic box of size 13.2" x 11.3" x 6.5" MATERIAL: The activity contain plastic/wooden blocks of light weightpreferably deodar in the following sizes: 5 x 80 x 178 mm, 10 x 10 x 110 mm, 10 x 10 x 45 mm, 10 x 10 x 120 mm, 10 x 10 x 65</p>	<p>1</p>
<p>109</p>	<p>LEMON BATTERY & Potato battery</p> 	<p>SIZE: This activity provided in a plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: The activity contain a 600 mm long multi thread soft wire,4 copper strips, 4 galvanized iron strips, 2 wires with alligator clips and a 1.5 v LED. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>110</p>	<p>KABHIE SOLID KABHIELIQUID</p>	<p>SIZE: This activity provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: The activity contain a minimum of 100 gms corn starch powder and a medium plastic bowl. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>111</p>	<p>CRYSTAL MODEL</p>	<p>SIZE: This activity provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: The activity contain plastic parts to assemble a crystal structure. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	<p>1</p>
<p>112</p>	<p>The Structure of an atom</p>	<p>Type: Activity to prepared by teacher. Material: This activity contains Atoms are of the correct relative sizes, with a scale of 2.5cm to 1 Angstrom. Includes a plastic box and instructions for building many different structures. Includes 51 total atoms and 35 links. Use: This activity will help to understand to understand atomic andmolecular structure in an element or compound.</p>	<p>1</p>



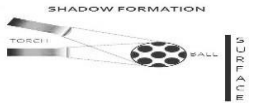
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113	<p>FOOD CHAIN JIGSAW</p> 	<p>SIZE: Packed in plastic box of size 10.5" x 7.7" x 4.3" MATERIAL: The activity contain 4 colour printed template of food chain pasted on a good quality MDF board/sunboard/PVC/good quality hard board. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
114	<p>GUESS THE STATEFLASH CARDS</p>	<p>SIZE: This activity provided in a plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: The activity contain 29 printed 4 colour printed cards of a minimum size of 145 x 100 mm of 270 gsm paper. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
115	<p>GUESS THE PROFESSIONS</p> 	<p>SIZE: This activity provided in a plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: The activity contain 9 printed 4 colour printed cards of a minimum size of 145 x 100 mm of 270 gsm paper. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
116	<p>WHO AM I</p>	<p>SIZE: This activity provided in a plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: The activity contain 24 printed 4 colour printed cards of a minimum size of 145 x 100 mm of 270 gsm paper. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
117	<p>PAPER CIRCUIT</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain an LED, Pencil, sharpener, clips and paper. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
118	<p>Colour Blending Top</p> 	<p>SIZE: This activity provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: The activity contain playing tops with different types of fillusive colouring Card board rings. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1

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119	ELECTRIC BUG	<p>SIZE: This activity provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: The activity contain, a 3 pin toggle switch, a 3v battery holder, small piece two way tape, connecting wire, motor with vibrator, plastic base plate, aluminium wires for legs, 2 cable ties, and a pair of eyes. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
120	<p>ART BOT</p> 	<p>SIZE: This activity provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: The activity contain 4 sketch pens of small length, 1 wheel with minimum 4 holes, one 3 pin toggle switch, a 3v batteryholder, small piece two way tape, connecting wire, motor with vibrator, 2 cable ties and a blank white paper. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
121	<p>FOUR LEGGED WALKING TOY</p> 	<p>SIZE: This activity provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: The activity contain the following parts of ABS plastic: base plate of size minimum 75 x 143 mm, 2 L shaped legs of size 105mm, 2 Straight legs of 60 mm length, connecting logs of length 60mm, 2cams of minimum length 20mm, 2 L clamps of 1 x 2, 2 standard cabletie, a 3 pin toggle switch, a 9v battery cap, 100 mm of soft multi thread wire, 2 aluminium rivets of 3 x 40 mm, 4 aluminium rivets of 3 x 12 mm, 2 metal nuts and bolt, 2 screws of 4 x 10 mm, 10 rubr bushes, 2 small pieces of two way tape and an I shaft BO motor with two way shaft. An instruction manual mentioning the purpose and how to conduct the activity provided.</p>	1
122	<p>Water filtration</p> 	<p>Type: Activity to prepared by teacher. Material: This activity contains sand, activated carbon, granite, filterpapers, 3 filter papers, 3 abs Plastic containers.</p>	1
123	TELESCOPE MAKING KIT	<p>Type : Activity to prepared Under teacher Supervisor. Material: .Preassembled Telescope Making Kit (5 Set)</p>	1

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124	THE ODD MOUS STRIPS	SIZE: This activity provided in a plastic box of size 6.6" x 4.3" x 1.2" MATERIAL: The activity contain A5 size cards of 170 gsm paper. Aninstruction manual mentioning the purpose and how to conduct the activity provided.	1
125	Effects of Light : LIGHTTRAVELS IN A STRAIGHT LINE 	L 24.7"X W16.3"X H 6.5 CM plastic boxType: Activity to prepared by teacher. Material: .duster, laser, small mirror, protractor.	1
126	Light & Shadow: i. Sourcesof Light, ii. How shadows form 	Type : Activity to prepared by teacher Material: This activity contains ball, torch	1
127	Make your own home	Type : DIY ACTIVITY for students set of 5.	1
128	Different types of Currencies	Type : DIY ACTIVITIES PERFORMED IN PRESENCE OF TEACHERS	1
129	Different Types of Masala	Type : DIY ACTIVITIES PERFORMED IN PRESENCE OF TEACHERS	1

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130	Working of Clock	Type : DIY ACTIVITIES PERFORMED IN PRESENCE OF TEACHERS	1
131	Gujarati Globe	Type : DIY ACTIVITIES PERFORMED IN PRESENCE OF TEACHERS	1
132	Pin Hole camera	Type : DIY ACTIVITIES PERFORMED IN PRESENCE OF TEACHERS	1
133	Stethoscope	Type : DIY ACTIVITIES PERFORMED IN PRESENCE OF TEACHERS (HIGH QUALITY MATERIAL)	1
134	Sand Clock	Type : DIY ACTIVITIES PERFORMED IN PRESENCE OF TEACHERS (HIGH QUALITY MATERIAL)	1
135	Gujarat Map with (Famous Places, udhyog , khani, paak, river & Hills)	Type : DIY ACTIVITIES PERFORMED IN PRESENCE OF TEACHERS	1
Chemistry Lab1			
1	Test Tubes	To Perform all Chemicals Tests. Set of 100 Tubes	1

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2	Conical Flask (250ml)	To Perform Chemicals Experiments Not Plastics	1
3	Measuring Cylinder (100ml)	To Perform Chemicals Experiments Not Plastics	1
4	Syring	5 Different Sizes, all in set of 2.	1
5	Funnels (75 mm)	To Perform Chemicals Experiments Not Plastics	1
6	Glass Rods	To Perform Chemicals Experiments Not Plastics	1
7	Glass Trough (8*4")	To Perform Chemicals Experiments Not Plastics	1
8	Round Bottom Flask	To Perform Chemicals Experiments Not Plastics	1

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9	Tripod Stand	To Perform Chemicals Experiments Not Plastics	1
10	Wire Gauze	To Perform Chemicals Experiments Not Plastics	1
11	Spirit Lamp	To Perform Chemicals Experiments Not Plastics	1
12	Spatula	To Perform Chemicals Experiments Not Plastics	1
13	Tongs	To Perform Chemicals Experiments Not Plastics	1
14	Forceps	To Perform Chemicals Experiments Not Plastics	1
15	Filter Paper	To Perform Chemicals Experiments Set of 100	1

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16	Rubber Cork – one Hole, Two holes & Without holes	To Perform Chemicals Experiments All in set of 2	1
17	Test tube stand	To Perform Chemicals Experiments Plastic Only	1
18	Plastic Tray		1
19	Delivery Tube for test tubes	To Perform Chemicals Experiments Not Plastics	1
20	Test tube holders	To Perform Chemicals Experiments Not Plastics	1
20	Test tube holders	To Perform Chemicals Experiments Not Plastics	1
21	Test tube Cleaning brush	To Perform Chemicals Experiments Not Plastics	1

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22	Wash Battles (250ml)	To Perform Chemicals Experiments Not Plastics	1
23	Bunsen Burner	To Perform Chemicals Experiments Not Plastics	1
24	LITMUS PAPER BLUE	Set of 100	1
25	Litmus paper red	Set of 100	1
Chemicals			
1	Iodine Solution	500GM. Packed in air tith Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
2	Sodium Hydroxide	500GM. Packed in air tith Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
3	Vinegar	500GM. Packed in air tith Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1

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4	Sodium Bicarbonate	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
5	Sodium carbonate	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
6	Methylene Blue	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
7	Lime Water	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
8	Copper Sulphate	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
9	Sodium Nitrate	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
10	Hydrochloric acid N10	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1

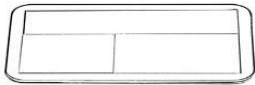
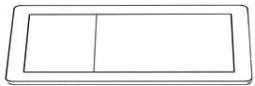
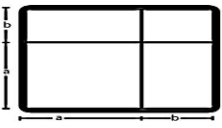
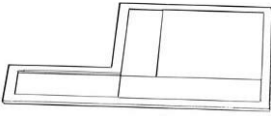
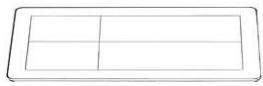
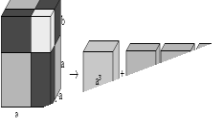

Selection of Implementation Agency for upgradation of Ahmedabad Municipal Schools to Smart School in Ahmedabad city

11	Sulphur Powder	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
12	Magnesium Ribbons	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
13	Acetic Acid	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
14	Calcium Chloride Fused	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
15	Copper Oxide Red	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
16	Lead Nitrate	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
17	Potassium Chloride	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1

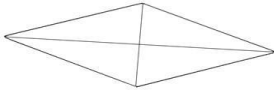
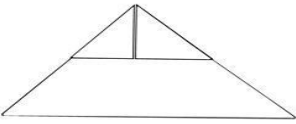
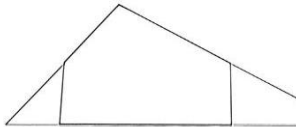


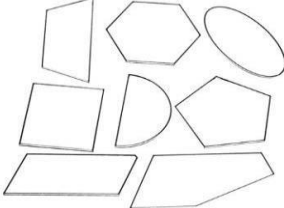
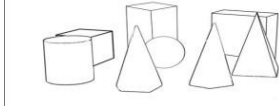
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18	Sodium sulphate	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
19	Ammonium Chloride	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
20	Lime water	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
21	Acetone Extra pure	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
22	Phenolphtheline indicator	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
23	Methelyne blue	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
24	Sulphuric Acid	500GM. Packed in air tithe Acid resistance Bottle with label and upside narrow for proper use. With Expiry date mention	1
MATHEMATICS KITS			

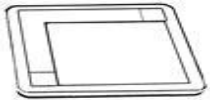


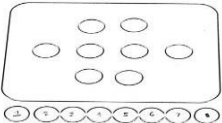

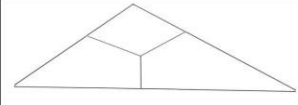

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<p>1</p>	<p>$A(B + C) = AB + AC$</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 2 rectangular pieces, 1 square piece and a tray made of minimum 5.5mm MDF A4 manualprovided</p>	<p>1</p>
<p>2</p>	<p>$(A + B)(C + D) = AC + AD + BC + BD$</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 4 rectangular pieces and a tray madeof minimum 5.5mm MDF A4 manual provided.</p>	<p>1</p>
<p>3</p>	<p>$(A + B)^2 = A^2 + 2AB + B^2$</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 2 square pieces and 2 rectangular pieces and a tray made of minimum 5.5mm MDF A4manual provided.</p>	<p>1</p>
<p>4</p>	<p>$(A^2 - B^2) = (A+B)(A-B)$</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain a square piece, 2 congruent trapeziums and a tray made of minimum 5.5mm MDF A4manual provided.</p>	<p>1</p>
<p>5</p>	<p>$(A + B + C)^2 = A^2 + B^2 + C^2 + 2AB + 2BC + 2CA$</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 3 square pieces, 3 pairs congruent trapeziums and a tray made of minimum 5.5mm MDF. A4manual provided.</p>	<p>1</p>
<p>6</p>	<p>$(A + B)^3$</p> 	<p>SIZE: This activity provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: The activity contain 8 cus of plastic/wooden pieces with non-toxic paint such that they combine into a large cu and represent the expansion formula for (a+b)^3. A4 manual provided.</p>	<p>1</p>
<p>7</p>	<p>$(A+B)^2 - (A-B)^2 = 4AB$</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain a square piece, 4 pairs congruent rectangles and a tray made of minimum 5.5mm MDF. A4 manual provided.</p>	<p>1</p>

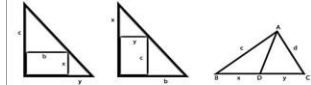
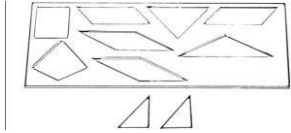

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<p>8</p>	<p>AREA OF RHOMBUS</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 98 pieces of hexagon shapes of size 20 x 20mm made of minimum 5.5mm MDF A4 manual provided.</p>	<p>1</p>
<p>9</p>	<p>AREA OF TRIANGLE 1</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain a trapezium and 2 right angled triangles made of minimum 5.5mm MDF. The size of the complete triangle at least 140 x 149 mm. A4 manual provided.</p>	<p>1</p>
<p>10</p>	<p>AREA OF TRIANGLE 2</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain a 5 sided polygon and 2 right angled triangles made of minimum 5.5mm MDF. A4 manual provided. USE: This activity able to help the child understand that area of a triangle = $\frac{1}{2}$ base x height.</p>	<p>1</p>
<p>11</p>	<p>AREA OF PARALLELOGRAM</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain a trapezium and 1 right angled triangle made of minimum 5.5mm MDF A4 manual provided.</p>	<p>1</p>
<p>12</p>	<p>AREA OF TRAPEZIUM</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 2 trapeziums made of minimum 5.5mm MDF. A4 manual provided.</p>	<p>1</p>
<p>13</p>	<p>2 D GEOMETRICAL SHAPES</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain machine cut pieces of minimum 5.5mm MDF in colour with following sizes: A4 manual provided.</p>	<p>1</p>
<p>14</p>	<p>3 D GEOMETRICAL SHAPES</p> 	<p>SIZE: This activity provided in a plastic box of size 6.7" x 5.2" x 3" MATERIAL: The activity contain 3D plastic/wooden pieces representing geometrical shapes with non-toxic paint. A4 manual provided.</p>	<p>1</p>

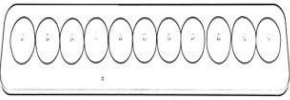
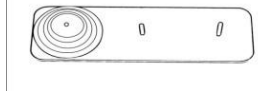
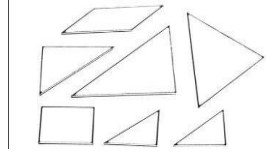
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<p>15</p>	<p>$(A+B)^2 + (A-B)^2 = 2A^2 + 2B^2$</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 1 square piece, 3 pair's congruent rectangles and a tray made of minimum 5.5mm MDF. A4 manual provided.</p>	<p>1</p>
<p>16</p>	<p>Multiplication Strips</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain Napier strips template on MDF/PVC/Arcylic. A4 manual provided</p>	<p>1</p>
<p>17</p>	<p>FRACTION STRIPS</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain a tray, a strip of 1 unit length, 2 strips of 1/2 unit length, 3, 4, 5....10 strips with lengths of 1/3, 1/4, 1/5.... 1/10. A4 manual provided.</p>	<p>1</p>
<p>18</p>	<p>NUMR PUZZLE GAME -ARRANGE 1 TO 8</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain machine cut base of at least 3mm acrylic having size 134 x 165 mm, 1 - 8 number coins of at least 5.5mm MDF. A4 manual provided.</p>	<p>1</p>
<p>19</p>	<p>EQUILATERAL TRIANGLE TO SQUARE PUZZLE</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain three quadrilaterals and a triangle, of different colours. The size of the square around 105 x 105 mm.</p>	<p>1</p>
<p>20</p>	<p>SUM OF ANGLES OF A TRIANGLE</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 3 quadrilaterals made of minimum 5.5mm MDF. A4 manual provided.</p>	<p>1</p>
<p>21</p>	<p>SUM OF ANGLES OF A QUADRILATERAL</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 4 quadrilaterals made of minimum 5.5mm MDF. A4 manual provided.</p>	<p>1</p>


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22	PENTOMINOES	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain a base of size 120 x 120 mm with 12pentomines. A4 manual provided.	1
23	MID-POINT THEOREM	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain a triangle and a trapezium machine cut in minimum 5.5 mm. manual provided.	1
24	SET OF TRIANGLES	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 25 triangular pieces machine cut inminimum 3mm mdf 5.5 MM A4 manualprovided.	1
25	<p>ANGLE BISECTOR THEOREM</p> 	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 3 triangles and a triangular machinecut in minimum 3mm acrylic sheet / plastic. A4 manual provided.	1
26	<p>TWO CONGRUENT RIGHT TRIANGLES</p> 	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 2 congruent right triangular pieces and a tray with different shapes made of minimum 3mm acrylic sheet /plastic. A4 manual provided.	1
27	PLUG IN 3 HOLES	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain a board machine cut in acrylic of minimum 3mm and a plug/piece that just passes through all holes. A4 manual provided.	1
28	 <p>PARKING PUZZLE</p>	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain machine cut base tray, 3 red counters,3 yellow counters, 6 metal screws 3 x 25 mm, and 6 rubber bushes of 5mm. A4 manual provided.	1


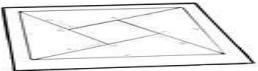
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<p>29</p>	<p>PEGBOARD PUZZLE</p> 	<p>SIZE: This activity provided in a plastic cover or pouch. MATERIAL: The activity contain a base having 11 pins and tokenswith 5 black and 5 white. A4 manual provided.</p>	<p>1</p>
<p>30</p>	<p>1 TO 9 = 15 MATHS puzzle</p>	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain MDF 5.5mm. A4 manual provided</p>	<p>1</p>
<p>31</p>	<p>TOWER OF BRAHMAPUZZLE</p> 	<p>SIZE: This activity provided in a plastic cover or pouch. MATERIAL: The activity contain a base having 3 pins of 50mm, 5discs of reducing sizes. A4 manual provided.</p>	<p>1</p>
<p>32</p>	<p>L.C.M</p>	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain machine cut acrylic pieces of thefollowing sizes: 3 pieces of 14 x 210mm, 3 pieces of 14 x 180 mm, 4 pieces of 14 x 150 mm, 5 pieces of 14 x 120 mm, 7 pieces of 14 x 90 mm, 7 pieces of 14 x 60 mm. A4 manual provided.</p>	<p>1</p>
<p>33</p>	<p>1 TO 9 = 20 MATHS PUZZLE</p>	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain MDF 5.5mm. A4 manual provided</p>	<p>1</p>
<p>34</p>	<p>1TO 12 =26 MATHS PUZZLE</p>	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: MDF 5.5mm. A4manual provided.</p>	<p>1</p>
<p>35</p>	<p>TANGRAM PUZZLES</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain Plastic Moulded a big right angled triangle, 2 pairs of congruent right angled triangles of different sizes, a square and a parallelogram. A4 manual provided. Make 300 DifferentDesigns from these.</p>	<p>1</p>

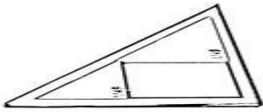
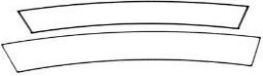
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<p>36</p>	<p style="text-align: center;">INTEGERS</p> 	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 24 square pieces in 2 different colours. A4 manual provided.</p>	<p>1</p>
<p>37</p>	<p style="text-align: center;">FACTORS Reuse material of Integerskit</p>	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 24 square pieces in 2 different colours. A4 manual provided.</p>	<p>1</p>
<p>38</p>	<p style="text-align: center;">EVEN & ODD NUMRS Reuse material of Integerskit</p>	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 24 square pieces in 2 different colours. A4 manual provided.</p>	<p>1</p>
<p>39</p>	<p style="text-align: center;">TURN-TURN GAME Reuse material of Integerskit</p>	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 24 square pieces in 2 different colours. A4 manual provided.</p>	<p>1</p>
<p>40</p>	<p style="text-align: center;">Make a Square puzzle</p>	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4".</p>	<p>1</p>
<p>41</p>	<p style="text-align: center;">Circle into Rectangular</p>	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4"</p>	<p>1</p>
<p>42</p>	<p style="text-align: center;">Rectangular Geoboard</p>	<p>SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" Geoboard with 100 Rubberbands</p>	<p>1</p>

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43	Circular geoboard	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" Geoboard with 100 Rubberbands	1
44		SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain a fixed right triangle and a square oneeach of its sides to from a tray, 4 congruent quadrilaterals and 1 small square all machine cut in minimum 5.5mm MDF. A4 manual provided.	1
45	PYTHAGORASTHEOREM 2 	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 4 congruent right triangles and square a tray machine cut in minimum 5.5mm MDF. A4 manualprovided.	1
46	UNDERSTANDING PI	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4"	1
47	SUM OF ANGLES OF TRAIANGLE WITH RESPECT TO SHAPE OF EDGE	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4"	1
48	constructions of parabola	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4"	1
49	Soma Cube	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4"	1

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50	$AD^2 = BD \times DC$ 	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4" MATERIAL: The activity contain 2 small triangles and a big triangular tray made of minimum 5.5mm MDF. A4 manual provided.	1
51	construction of ellipse	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4"	1
52	1 to 16 =36 math's Puzzle	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4"	1
53	FIND THE BIGGER CURVE 	SIZE: This activity provided in a plastic box of size 9.4" x 5.6" x 1.4"	1
CHARTS – CONTRIBUTORS OF SCIENCE			
1	Johannes Kepler	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
2	Sushrut	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
3	Aryabhata	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1

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4	Varahmihira	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
5	Brahmagupta	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
6	Nagarjuna	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
7	Bhaskaracharya	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
8	Raja Sawai Jai Singh	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
9	SrinivasaRamanujan	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
10	Jagdish Chandra Bose	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1

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11	Prafulla Chandra Roy	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
12	Homi Jahangir Bhabha	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
13	Vikram Sarabhai	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
14	Alrt Einstein	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
15	Sir C V Raman	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
16	SatyendraNath Bose	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
17	SubrahmanyamChandrashekar	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1

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18	Edwin Hubble	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
19	Baudhayana	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
20	Charak	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
21	Rishi Kanad	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
22	Galileo Galilei	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
23	Isaac Newton	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
24	Nicolaus Copernicus	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1

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25	Charles Darwin	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
CHARTS – CONTRIBUTORS OF MATHEMATICS			
26	Rene Descartes	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
27	D R Kaprekar	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
28	R C Bose	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
29	John Napier	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
30	Galileo Galilei	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
31	Fibonacci	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1

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32	Varahmihira	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
33	Bhaskaracharya 1	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
34	Bhaskaracharya 2	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
35	Brahmagupta	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
36	Mahaviracharya	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
37	Archimedes	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
38	Aryabhata	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1

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39	Pythagoras	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
40	Euclid	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
41	P C Vaidya	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
42	A R Rao	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
43	Isaac Newton	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
44	G W Leibniz	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
45	Leonhard Euler	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1

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46	C F Gauss	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
47	George Boole	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
48	Alrt Einstein	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
49	Srinivasa Ramanujan	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
50	Harish Chandra	18" x 24" – 6 colour print on minimum 3mm PVC base – Gujarati and English	1
51	Stand for charts	Metal stand with hooks for hanging charts – 30" x 14" x 60" made in metal	1
52	Pen drive	SanDisk Extreme PRO USB 3.2 Solid State Flash Drive General Specifications -Brand:SanDisk -Model: Extreme PRO USB 3.2 Solid State Flash Drive Storage Capacity -Available Capacities: 128GB	1

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		<p>Performance -Interface: USB 3.2 Gen 1 (backward compatible with USB 3.0 and USB 2.0) -Read Speed: Up to 420 MB/s -Write Speed: Up to 380 MB/s</p> <p>Build Quality -Material: Durable aluminum metal casing -Design: Sleek, compact, and portable</p> <p>Security -Encryption: 128-bit AES encryption -Software: SanDisk Secure Access software for password protection</p> <p>Features -Plug and Play: Yes, no additional drivers required -Compatibility: Compatible with Windows and macOS - Warranty: Limited lifetime warranty</p> <p>Additional Features -Retractable Design: Yes, for added protection of the USB connector -LED Indicator: Yes, indicates data transfer activity</p>	
53	Platform	<p>Minimum SIZE:14" x 48" x 27" – 8 units and 30" x 48" x 27" – 8 units made using metal having pre-laminated particle board/hardener sheet on the top (Wooden Top) Or Metal stand with hooks for hanging charts – 30" x 14" x 60" made in metal</p>	1
54	Storage cupboards	<p>Minimum SIZE:76" x 36" x 19" – 5 partition, steel Almirah</p>	1
55	LED tv	<p>42-inch 4K UHD Smart LED TV</p> <p>General Specifications Model: 42UP7690PUB (or similar latest model) Display Screen Size: 42 inches Resolution: 3840 x 2160 (4K UHD) Panel Type: LED Refresh Rate: 60 Hz HDR: HDR10, HLG Aspect Ratio: 16:9 Viewing Angle: Wide viewing angle</p> <p>Performance Processor: α5 AI Processor 4K Picture Quality: AI Picture, 4K Upscaling</p>	1

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		<p>Audio Speakers: 2.0 Channel Audio Output: 20W total (10W + 10W) Audio Enhancement: AI Sound, Dolby Audio Smart TV Features Operating System: webOS Voice Assistants: Built-in Google Assistant, Amazon Alexa Streaming Services: Netflix, Amazon Prime Video, Disney+, Hulu, YouTube, etc. Screen Mirroring: Yes (Miracast, Apple AirPlay 2) Connectivity HDMI Ports: 3 (HDMI 2.0) USB Ports: 2 (USB 2.0) Ethernet (LAN): 1 Wi-Fi: Built-in Wi-Fi 802.11ac Bluetooth: Yes (version 5.0) Other Ports: Composite In, RF In (Antenna/Cable), Optical Audio Out</p> <p>Additional Features Remote Control: Magic Remote with voice control Smart Home Integration: Works with Apple HomeKit, Google Home, Amazon Alexa Gaming Features: Auto Low Latency Mode (ALLM), Game Optimizer</p> <p>Physical Specifications Dimensions (without stand): Approximately 37.8" x 22.4" x 3.3" Dimensions (with stand): Approximately 37.8" x 23.8" x 8.6" Weight (without stand): Approximately 8.0 kg Weight (with stand): Approximately 8.4 kg VESA Mounting: 200 x 200 mm</p> <p>Warranty Standard Warranty: 1-year limited warranty for parts and labor. Extended Warranty: Optional extended warranty available (typically up to 3-5 years)</p>	
56	Common tools box	Screw drivers, Scissors, duct tape, glue, spanner, stapler & pins, wire stripper, plier	1
57	Trouble shooting and repairs box	Extra switches, 6v bulbs, leds, electrical connectors, rechargeable batteries, connecting wires, safety goggles, rubber gloves, soldering kit	1

Annexure: -2 (3D Educational Chart with Wall Waterproofing)

Sr No.	3D Educational Chart Technical / Functional Specifications	Unit/ Sq. ft.
1	<p>Design, approve, provide and fixing the thematic 3D Educational pvc wallpaper of 250-micron pvc sheet with 100-micron matte lamination. Certified by Cipet Lab, Printing to be done by water base, smell less, eco-friendly Latex ink Certified by Green Guard, Green Guard Gold and Eco Logo Lab.</p> <p>Providing and applying 2coat waterproofing of high elongation acrylic based liquid membrane as per direction of manufacturer-after</p> <p>Providing and applying base coat of acrylic primer as per manufacturer's application guideline, after removal of existing lime coat and surface preparation needed. Applying base coat of Final coat of liquid membrane mentioned as above to bond with PVC.</p> <p>Content for wallpaper should be in line with the curriculum of respective grade. Bidder is requested to propose the wallpaper design during the requirement gathering phase and same should be approved from competent authority. Bidder would be required to amend the design as per the suggestions received from client – AMC School Board. Bidder is requested to install 3D educational chart on 3 walls of a room only and remaining wall should be kept free for the installation of soft board.</p> <p>This wallpaper should be temper and tear proof. After installation of 3D chart all charts should be framed with acrylic patti or similar material.</p>	11000 Sq ft

Annexure: -3 (3D Paint)

Sr. No.	3D Paint SPECIFICATIONS	Unit/ Sq. ft
1	Color water-based emulsion (weatherproof exterior emulsion) for High performance. The vendor's 3D paint submissions shall be deemed acceptable solely on the condition that the visual representation thereof is deemed meaningful by the AMC School Board. The inclusion of letters or words within the 3D paint will not be a determining factor for consideration by the Board.	1000 Sq. ft.

Annexure: -4 (Future Classroom)

The future classroom shall augment the teaching-learning process through digital devices like laptop, integrated projector with computer (or projector with computer/laptop), classroom management software, digital content, console management software with support infrastructure like storage cabinet, benches etc. as mentioned in this document.

Sr. No.	Future Classroom Specification	
	Features	Integrated Community Computer The requirement for future classroom is of a compact projector integrated with computer. Bidder may offer similar solution to meet the functional & technical requirement of future classroom.
	Technology Integration	Multiple components integrated into a single compact unit including large screen TV
	Ease of Setup & Use	Ease to use plug in device

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Interactive Multimedia Content	Pre-Loaded modules approved by AMC School board
Image Size	Min 300 Inch Diagonally

Component	Feature	Minimum Requirement
Computer	CPU	Intel i3 Processor or Better
	Chipset	Intel or better
	Memory	Minimum 4 GB RAM
	Graphics	Integrated Graphics
	Storage	Minimum 1 TB
Advanced Projection System	Brightness	Min 3000 Lumens (Short Throw)
	Contrast Ratio	18000:1
	Lamp Life	5000 Hrs (Standard Mode) 3000 Hrs (Bright Mode)
In-built Interactivity		Image Processing Technology
DVD Player	Optical Drive	DVD-RW
In Built Audio System	Audio	Min 30W Audio Speakers, with option for external speaker connectivity
I/O	Input	Microphone input
	Ports	Minimum 4 USB Ports
	LAN	1*Gbps
	Wi-Fi	802.11 ax (Latest version)
	Bluetooth	Bluetooth 5.0 or higher
Certification		UL Certified

Hardware Requirement per school		
1	Chromebook/NetBook	40
2	Integrated computer projector	1
3	Wireless Router	1
4	Device cart & Storage Facility	1
5	UPS (Minimum 60 minutes back up)	1
6	Networking and Cabling	1
SOFTWARE/APPLICATION		
1	Multimedia Learning Modules in Hindi/English/Gujarati	1
2	Device Management Console	40
3	Cloud based Suite for Education (G suite or similar) – For 5 Years	-
PROJECT MANAGEMENT		
1	Minimum 1 days of Professional Development Program for Teachers at the inception of Project	-
2	Refresher Training (one per year for Five years)	-
3	School Coordinator for minimum 12 months min. one (1) resource for every five (5) schools	-
4	Project Management for minimum 36 months (Including VAS)	-
5	Basic Electrification of all IT Equipment	-

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S. No.	Item	Description
1	Chromebook /Netbook for students	<p>Minimum Requirement:</p> <ul style="list-style-type: none"> Processor: Latest generation Intel or AMD or equivalent with dual core or i3 or higher processor, base frequency of 1.1 GHz (or higher speed) with latest generation chipset or Equivalent 64-bit x86 processor. Display: Minimum: 11.6" Diagonal IPS/TFT/SVA HD Widescreen with minimum 1366 x 768 resolution (16:9 ratio) RAM: 4 GB DDR4 Internal Storage: 16 GB Graphics Card: Integrated HD Graphics Ports: 2 USB Ports (out of which 1 should be USB 3.1), headphone/Microphone combo; Minimum 1 HDMI port Operating System: Pre-loaded latest version of Chrome OS/Windows/iOS and all necessary and latest patches and updates. All Utilities and driver software must be pre-installed. <p>The bidder needs to assure minimum specification of Digital Learning Device if they provide operating system based on Window or iOS.</p> <ul style="list-style-type: none"> Web Camera: Built in 720p web cam Wireless Connectivity: WiFi, Bluetooth Audio: Built-in Stereo Speakers Battery backup: Minimum 40 Whr lithium ion or lithium polymer battery with a backup of minimum 10 hours under standard test conditions with long life battery and min. 5 Years of life and comprehensive insurance of battery and adapter. OEM should provide an undertaking. Keyboard and Touchpad: 74 Keys Full size spill resistant keyboard, Integrated Multi-touch Pad. Device Administration: Pre-loaded Device Management Console with perpetual license & letter of support from OEM. Web Based interface, Lock Devices, push apps and extensions, Enforce policies, Administrator tests at scale. Accessories: Adapter, Charger from same OEM, Carrying backpack Digital Content & Teaching-Learning Platform: Access to pre-loaded digital content & teaching-learning platform. The learning platform should enable the teacher and students to perform the key tasks of STEM labs such as attendance, assignments, sharing of study material, access to STEM lab digital content etc.

Annexure: - 5 (Benches for Future Class)

Sr. No.	Benches for Future Class	Unit/ Sq. ft
1	<p>Group learning along with the activity-based learning is being promoted across Municipal Schools. To support this initiative, bidder is encouraged to propose a lightweight design for benches, which would also support group learning activities or usual teaching – learning activities in future classroom. The design must be proposed in consultation with AMC School board and upon their approval on sample benches, this should be installed, commissioned at various schools. Bidder must complete the activity of design approval during the requirement gathering phase only.</p> <p>Size: - Minimum (L-36" X W-36" X H-30"/32") Material :- Minimum 18 MM Plywood with laminate, Pipe minimum 1 MM Thickness</p>	20

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Annexure: -6 (CIVIL WORK)

Sr. No	Civil work Description	Unit
1	Dismantling tiled or stone floors laid in mortar including stacking of serviceable materials and disposal of under serviceable materials with all lead and lift	SMT
2	Demolition of Brick work and stone masonry including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (ii) in cement mortar	CMT
3	Demolition including stacking of serviceable materials and disposal of unserviceable materials with lead and lift. (i) RCC work	CMT
4	Demolition of brick work and stone masonry including stacking of serviceable materials and disposal of unserviceable materials with all lead and lift. (i) In Lime mortar (ii) in Cement mortar.	CMT
5	Dismantling sanitary fittings like wash basin, Indian WC pan, European WC pan, flushing tank etc. including stacking the materials with all lead and lift	No.
6	Excavation for foundation up to 1.5m depth including sorting out, stacking of useful materials and disposing of the excavated stuff up to 50mt. lead.	CMT
6 A	(A) Loose soil or soft soil	CMT
6 B	(C) Hard murrum	CMT
7	Providing & Laying Brick bat cement Concrete 1:5:10 (1 Cement: 5Coarse sand: 10 graded brick aggregates 40mm nominal size) and curing complete excluding cost of form work. Foundation and plinth.	CMT
8	Providing & laying Cement Concrete 1:4:8 (1 Cement :4 Coarse sand :8 hand Brocken stone aggregates of 40mm nominal size) in plinth and curing complete including cost of formwork. (A) Foundation and Plinth - At plinth level	CMT
9	Providing & laying Cement Concrete 1:2:4 (1 Cement: 2 Coarse Sand: 4 graded stone aggregate 20 mm nominal size) & curing complete including cost of form work (A) Foundation and Plinth -Below Tie beam, Plinth protection & surface leveling work.	CMT
10	Providing and laying cement concrete flooring 1:2:4 (1-cement: 2-coarse sand: 4-graded stone aggregate 20mm nominal size) laid in one layer and finished with a floating coat of neat cement. (A) 40mm thick.	SMT
11	Providing and laying controlled cement concrete M.200 and curing complete including the cost of formwork and excluding the cost of reinforcement for reinforced concrete work in (C) Coping Vertical and horizontal for all floor (Cement Level 360 Kg)	CMT
12	Providing and laying controlled cement concrete M.250 and curing complete including the cost of formwork and excluding the cost of reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete. (Cement Level 380 Kg)	CMT

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Sr. No	Civil work Description	Unit
	(B) Columns, Pillars posts and struts all floor (Cement Level 380 Kg) (C) Slab all floor (Cement Level 360 Kg)	
13	Providing I.S.I. T.M.T Bars Fe.500D steel reinforcement (ISI mark) Confirmed to IS-1786 for R.C.C. work including Cutting, bending, binding and placing in position etc. complete. For all floors	KG
14	Brick work using common burnt clay building bricks having crushing strength not less than 35Kg./sq.cm. In foundation and plinth in cement mortar 1:4 (1 cement :6 Coarse sand) (B) Conventional.	CMT
15	Brick work using common burnt clay building bricks having crushing strength not less than 35Kg./sq.cm. In foundation and plinth in cement mortar 1:6 (1 cement :6 Coarse sand) (B) Conventional.	CMT
16	Half brick in common brunt clay building bricks having crushing strength not less than 35 Kg/sq.cm in cement mortar 1:4 (1 cement: 4 coarse sand) (C) Fly Ash Bricks in super structure including curing etc. complete. For all floors	SMT
17	Providing 10mm thick cement plaster in single coat on brick/concrete walls & Ceiling & Soffit of stair interior plastering in cement mortar 1:4(1 cement 4 sand) watering, curing etc. complete. For all floors	SMT
18	Providing 15mm thick cement plaster in single coat on rough or fair side of single or half brick wall for interior plastering in cement mortar 1:4(1 cement 4 sand) watering, curing etc. complete. For all floors	SMT
19	20mm thick sand faced cement plaster on walls above ground level consisting of 12mm thick backing coat of cement mortar 1:3(1 cement 3 sand) and 8mm thick finishing coat of cement mortar 1:1(1 cement 1 sand) watering, curing etc. complete for any Height.	SMT
20	Providing and laying White glazed tiles minimum 6mm thick in flooring, treads of steps, skirting or dado and landings laid on a bed of minimum 12mm thick cement mortar 1:3(1 cement: 3 coarse sand) finishing with flush pointing in white cement.	SMT
21	Providing and laying white glazed tiles 6mm thick in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1-cement : 3-coarse sand) finishing with flush pointing in white cement.	SMT
22	Finishing walls with 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot Tinted) with silicon additives. New work (Two or more coats applied @ 1.43 liter/ 10sqm. Over and including priming coat of exterior primer applied @ 0.90 liter/10 sqm, Item Includes two coat of primer and putty with scaffolding at all level of work. As per Approval of Engineer In charge.	SMT
23	Distempering (Two coats) with oil bound washable distemper having VOC content les than 50 grm/liter of approved brand and manufacture and of required shade on wall surfaces to give an even shade, over and including a priming coat with alkali resistance primer of approved brand after thoroughly brushing the surface and other foreign matter and also including preparing the surface even and sand papered smooth As per Approval of Engineer In charge. Rate are inclusive of Applying Two Coats of Lappy (Putty) and One Coat of Primer on New Wall Surfaces to give an even shade including thoroughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth. Material shall be used As per Approved make list of SSA	SMT

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Sr. No	Civil work Description	Unit
24	Painting two coats (Including priming coat) having Low VOC content on new wood and wood based surface with enamel paint, Primer coat, interior to give an even shade including cleaning the surface of all dirt, dust, oil, grease and other foreign matter sand papering, knotting and stopping. (As directed by Engineer in charge)	SMT
25	Painting two coats (Including Priming coat)having Low VOC content over new steel and other metal surfaces with enamel paint, primer coat, brushing, interior to give an even shade including cleaning the surface of all dirt, oil, grease, dirt, dust and other foreign matter with fine steel wood, scrapers and sand paper with ready mixed priming paint brushing red lead etc. complete.(As directed by Engineer in charge)	SMT
26	Providing and laying Minimum 25 mm Kotta stone Polish work, with Polish Kota stone slab flooring over 20mm. (average) base of cement mortar 1:6 (1 cement :6 coarse sand) of L.M. 1:1.5 and laid and jointed with grey cement slurry including rubbing and polishing complete. (Item no.12)	SMT
27	Providing and laying polished kota stone slab 25mm thick in risers of steps, skirting Dedo and pillars laid on 10mm thick cement mortar 1:3 (1-Cement: 3 coarse sand) and jointed with gray cement slury mixed with pigment to match the shade of slab including rubbing and polishing etc. complete.	SMT
28	Providing and laying 25mm thick polished Kota stone flooring/staircase treads (two pieces with three groves in front of steps) over 20mm (average) thick base of cement mortar 1:6 (1 cement 6 coarse sand) laid over and jointed with grey cement slurry including curing, rubbing, and polishing etc. complete.	SMT
29	Providing & fixing average 25mm thick Double polished Kota stones for shelves in cup board, seating plat form, including curing, rubbing, polishing etc. complete. (As directed by Engineer in charge)	SMT
30	Providing & Fixing 25mm thick double polished vertical Kotah stone for (partion)urinal as par drawing including round edge molding etc comp. (As directed by Engineer in charge)	SMT
31	Providing and laying 18 mm thick mirror polished black granite stone machine cut in single piece (Max. available) in sill and jambs laid over 10 mm thick cement mortar 1 : 3 (1 cement : 3 coarse sand) and jointed with grey cement slurry with matching pigment incl. rubbing and polishing half rounding edge both side etc. complete colour and shed as approved by architect engineer in charge. (As directed by Engineer in charge)	SMT
32	Providing and laying water proofing including 0.23 mts. radius vata with water drip as directed with 5 years written guarantee, by laying 40 mm thick cement mortar 1:4 (1 cement : 4 fine sand) after thoroughly cleaning the base slab and removing all the loose materials with wire brush, applying cement & waterproofing slurry evenly spread on slab and mixing water proofing materials in cement mortar in proportion as recommended by manufacture, laying brick bats after thoroughly soaked in water on layer of cement mortar, applying cement slurry on brick between @ 0.08 bag/smt. with mixing water proofing materials in proportion as recommended by the manufactures & finishing top with China mosaic tiles chips with 12 mm thick C.M. 1:3 base and laying by keeping gaps which should be filled with white cement and color pigment including rounding or junction extending up to 15 cm along the wall, including curing etc. complete. Note: The measurement of this item shall be taken as that of the horizontal surface (length x width) that is from inside of the parapet walls, thus, not cosidering the surface measurement of the rounded vatas.	SMT

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Sr. No	Civil work Description	Unit
33	Providing cement vata (10 cm X 10 cm size) quarter round in cement mortar 1:1 including neat cement finishing, watering etc. complete Respectably plaster activity shall be commenced only after completion of vata work.	RMT
34	Providing & fixing in position mild steel door with ventilation frame 40x40x6 mm and shutter frame 35x35x5mm ,75x5 mm ms flate at lock rail,10 mm square bar in vent at10 cm c/c covered with corrugated ms sheet 0.6 mm thick, including applying a priming coat of read lead paint including cleaning the surface of all dirt, dust and other foreign matter (As directed by Engineer in charge& approved drawing and design etc.)	SMT
35	Providing & fixing in position mild steel window with ventilation frame 35x35x5 mm and shutter frame 25x25x5mm ,10 mm square bar grill at10 cm c/c covered with corrugated ms sheet 0.6 mm thick, including applying a priming coat of read lead paint including cleaning the surface of all dirt, dust and other foreign matter (As directed by Engineer in charge& approved drawing and design etc.)	SMT
36	Providing and fixing window having extruded aluminum Colour Powder Coated section frame main outer size 63.50 x 38.10 x 1.95 mm(of Jindal Section no:4605,@ Wt 1.094 Kg / Rmt), horizontal two track member size 61.85 mm x 31.75 mm x 1.20mm (of Jindal Section no: 8687 @ wt.of 0.695 Kg/mt), vertical member of size 61.85 mm x 31.75mm x 1.30 mm (of Jindal Section no:8758 @ wt.of 0.0.659 Kg/mt) with sliding shutters of horizontal member size 40mm x 18mm x 1.29mm (of Jindal Section no:8949 @ wt.of 0.456Kg/mt), vertical member of size 40mm x 18mm x 1.29mm (of Jindal Section no:8947 @ wt.of 0.456Kg/mt/ Section 8948, @ Wt. 0.457 Kg/mt) with 5 mm thick transparent bronze colour tinted float glass with powder coated aluminum fittings and fixtures and transparent silicon sealant glass fixing to frame as per details etc complete for window.	SMT
37	Steel work, welded in built up sections framed work including cutting, hoisting, fixing in position and applying a priming coat of read lead paint. (A)In beams and joists, channels angles Tees, flats, with connecting plates or angle cleats as in main and cross beams. Hip and jack rafters, purlins connected to common rafters etc..	KG
38	Providing & fixing G.I rainwater Spout of 65mm dia and 60cm length.	No.
39	Providing and fixing pre-cast Rubber Dye / steel Dye inter locking concrete block 60mm thick with grade of concrete M300 pneumatic compressed / vibrated mechanically and as per approved design Confirming to IS 15658 : 2006 including 35 mm Sand layer for levelling and filling the joint with sand in proper line and level as per guidelines of IRC : SP 63-2018 etc. Complete.	SMT
40	Re-fixing of existing paver Blocks: Fixing of existing pre-cast Rubber Dye interlocking concrete block as per approved design including 35mm Sand layer for levelling and filling the joint with sand in proper line and level etc complete.	SMT
41	Providing and fixing pre-cast concrete kerb stone of gray cement based concrete block 30 cm length, 30cm height and 15cm thick of M250 grade concrete as per approved design and including excavation for fixing in proper line and level, filling the joint with C:M 1:3 (1 Cement : 3 Fine sand) etc. complete (upto 10 ton).	RMT
42	Providing and fixing 0.90-meter-high fencing with 1.20-meter-long M.S. Angle posts 40 mm. X 40 mm. X 6 mm. And oil painting 3 coats fixed at 2.5 mt. C/c with Three horizontal lines and two diagonals of galvanized steel	RMT

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Sr. No	Civil work Description	Unit
	barbed wire weighing 9.38 Kg. Per 100 meters, strained and fixed to posts with G.I. staples, including fixing posts in compound wall	
43	Providing and fixing of highly durable precoated Roofing Sheets having high quality color coating throughout the roof and having minimum 0.6 mm thickness .The Color Coated sheet Roofing fixed with galvanized iron /color powder coated J or L Hooks, Bolts and nuts 8mm diameter with bitumen and G.I. limpet washer or color powder coated limpet washer. filled with white lead complete as per approved sample and color as directed by engineer in charge	SMT
44	Providing ridges or hips 600 mm overall in precoated G.I. sheet class-3 fixed with G.I.J. or L Hooks and nuts 8mm dia G.I. Limpet and bitumen washer complete. (1) 0.60 mm thick sheet.	SMT
45	Providing and fixing 150mm wide 450mm over all semicircular plain G.I.sheet class-3 gutter with Iron brackets 40mm x 3mm size Bolts, Nuts, washers etc. including making necessary connection with rain water pipes. (i) 0.60 mm thick Sheet.	SMT
46	Providing and Fixing 5mm thick Acrylic Name Plate for dark zink glare with braille lippi and fixing with double sided bonding tap and screws as per direction of Engineer in charge of Size having 12' X 4' & 12' X 18' etc. compl.	No.
47	Providing and laying tactile tile (for vision impaired persons as per standards) of size 300x300x15 mm having with water absorption less than 0.5% and conforming to IS:15622 of approved make in all colours and shades in for outdoor floors such as footpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar 1:4 (1 cement : 4 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	SMT
48	Providing and fixing Red Agra stone takti of size 1220*762*25 to 20 mm having with approved LOGO Letter and in ivory colour with water based sealant coating finishing on wall in cement mortar 1:3 (1 cement : 3 coarse sand) in all shapes & patterns including grouting the joints with white cement mixed with matching pigments etc. complete as per direction of Engineer-in-Charge.	No.
49	Providing and fixing washbasin with single hole for pillar tap with C.I.or M.S.brackets painted with including cutting holes and making good the same but including the fittings. (A) vitreous China (II) Flat back washbasin 550 mm x 400 mm size (I) in white colour.(Approved Brand - CERA, Jaquar, Hindware, Perryware, Hindustan, HR Jhonson(Green Series – Water Saving Fitting and Facuets) as directed and approved by engineer incharge.	No
50	Providing & fixing Stainless steel 316 Grab Bar 40mm dia.75Cm long rail.as directed and approved by engineer incharge.	No.
51	Providing & fixing screw down low flow bib taps of following size(B)brass chromium plated Screws down Bib Tap (i)15mm dia.(Approved Brand - CERA, Jaquar, Hindware, Perryware, Hindustan, HR Jhonson(Green Series – Water Saving Fitting and FACuets)as directed and approved by engineer incharge.	No.
52	Providing & fixing urinal of Approved quality including connecting the urinal with waste pipe, trap etc. complete (A) White earthenware flat back or corner type (including Angle cock, Waste coupling, connection pipe & waste pipe) as approved by engineer in charge.	No

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Sr. No	Civil work Description	Unit
53	Providing and fixing wash down water closet (European type W.C pan) with integral P or S trap including jointing the trap with soil pipe in cement mortar 1:1 (1 cement : 1 fine sand) (seat cover, Jet spray & Flush Tank to be measured Including) (A) Vitreous China (I) Long pattern white as directed and approved by engineer in charge.	No
54	Providing and fixing water closet squatting pan (Indian type W.C pan) size 580 mm (earthwork, bed concrete, foot rests, Flush Cock and trap to be measured and including paid) (A) Vitreous China (I) Long pattern white as directed and approved by engineer in charge.	No.
55	Providing erecting and fixing double coated ISI water tank of required capacity each with all necessary fittings and connection etc. complete on terrace	Liter
56	Providing laying and jointing in true line and level 40mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	RMT
57	Providing laying and jointing in true line and level 25mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	Rmt
58	Providing laying and jointing in true line and level 15mm dia. U.P.V.C. Pipe (SCH- 40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	RMT
59	Providing & fixing to wall ceiling and floor 6.0 kg F/cm ² working pressure PVC pipes of the following out side dia. Special density complete with special flange compression type fitting, wall clips etc. including making good the wall ceiling and floor. (A) 160 mm dia. (B) 110 mm dia. (C) 75 mm dia.	RMT
60	Providing and fixing chromium plated brass half turn flush cock of approved quality including fixing in pipe line etc. complete..[ii] 25 mm	No.
61	Providing and fixing Ball Cock of approved quality as directed. (A) copper metal - (II) 25 mm dia.	No
62	Filling in plinth with sand under floors including watering griming, consolidating, and dressing complete (up to 10 ton)	CMT
63	Providing & filing with leveling work Sand in school all children play area	SMT

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Sr. No	Civil work Description	Unit
64	Creating decorative side wall or garden wall as per side location	RMT
65	Providing & Fixing 18 W.led Panel Light etc. comp. (Market Rate as per ssa)	Nos
66	Carrying out wall treatment for termite control including spraying with chemical solution in oil base (0.5 Lit/Sq. m) including labor and material. Using heptachlor concentration 20 Ec. As per IS. 6316_ Paret- II concentration by weight 0.50 percent is recommended i.e., one-liter chemical emulsion dilute with 39-liter of IS concentration total dilute concentration will be 40 liters inclusive of one-liter chemical emulsion application at the rate of 7.5-liter chemical / Sqm of surface is recommended as per I.S.	SMT
67	Major repair of Door/Windows/ventilators Shutters and frames including necessary fitting and fixtures. (As per Market rates)	Nos
68	Providing and fixing 35mm thick shutter and frame for doors and windows and clear story windows including apodised aluminum butt hinges with necessary screws and required fittings. (A) Indian Tick wood (B) Partly paneled and partly glazed (C) Fully glazed (D) Fully Paneled	Sqm
69	Handel for doors & windows & cupboards 15 cm	Each
70	SS Doors and Windows Hinges	Nos
71	SS Aldrop 20/25/30 cm long of ASIS 304 Grade	Nos
72	SS Stopper 20/30/60 cm long of ASIS 304 Grade	Nos
73	Providing & laying minimum 36"x36" vitrified minimum 8mm thick tiles flooring over Minimum 20mm (average) base of cement mortar 1:3(1cement:6course sand) on new surface or fixing on exiting flooring by adhesive material including dismantling of existing flooring and jointed with colour cement slurry including finish with flush pointing and cleaning the surface etc. complete.	SMT
74	Providing & laying 24"x24" vitrified 8mm thick tiles flooring over 20mm (average) base of cement mortar 1:3(1cement:6course sand) on new surface or fixing on exiting flooring by adhesivematerial including dismentalling of existing flooring and jointed with colour cement slurry including finish with flush pointing and cleaning the surface etc. complete.	SMT
75	Clearing and grubbing road including land including Porting rank vegetation grass bushes, shrubs, sapling and trees girth up to 300mm removal of stumps of trees cut earlier and disposal of unserviceable materials etc.comp	HECTARE
76	Point wiring for Light / Bell and Fen speaker wire with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length , in below type of pipe erected with 6A Modular type switch / bell push & accessories and earth	Point

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Sr. No	Civil work Description	Unit
	continuity of following type, erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured/metallic/white front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat. III	
77	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug and 6 a switch with 2-1.5 sq.mm Cu. Wire from nearby switchboard/mcb db board (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat. III	Point
78	Point wiring for Individual Plug with & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in below type of pipe erected complete with Modular type switch & 5 pin Plug erected on PVC / Metallic/Wooden box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories.[II] For 16A Plug and 16 amp switch with 2-2.5 sq.mm Cu. Wire from mcb db board. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete Cat. III	Point
79	Providing & erecting Switch board for Computer or electric apparatus consisting of following modular type accessories mounted with PVC / Metallic concealed/open box with single mounting base frame covered with textured/metallic /white front plate,modules erected with necessary connections as directed 1 no. 6A/16A universal plug-switch combined. 3 nos. 6A Switch 3 nos. 6A 5 pin Plug For Modular Type Accessories Cat. III	Each
80	Providing and erecting Sheet Steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, Conforms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) single phase incoming and horizontal single phase outgoing (iv)12 way (B) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) (b) sheet steel double door (iii)8 way (C) three phase incoming and single phase horizontal type outgoing Per phase isolation type (PPI) (b) sheet steel double door (i)4 way	Each
81	providing and erecting Approved make ELCBs / RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 10 KA and suitable for operation on single phase 240 V,50Hz. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed (i) 40Amps. DP Cat. III (ii) (iii) 63 Amps. FP Cat. III	Each
82	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I. Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanizing, Inner pipe dia of 25 mm having 200-250 Micron galvanizing, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy	

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Sr. No	Civil work Description	Unit
	duty cover.(approved make OEM has to submit test certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 \square / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted. (A)For Electrical installation up to 11 KV in normal soil. (B) For Electrical Installation up to 440V in normal soil Length of Pipe : 2.00 mtrs Back filling Compound :1 no. Bag of 25 Kg	
83	Providing and erecting XLPE (IS:7098) (I)-88 ISI armored cable multistrand Aluminum conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables. (b) 4 core 6 Sq. mm	RMT
84	Minimum 15-Watt LED Panel Light with Metal Body (Minimum 600 X 600 MM)	Nos
85	Providing & erecting Approved make Power Saving 50 Watt Ceiling Fan with double ball bearing ISI mark with Condenser 230 volt A.C. 50 Hz 1200 mm sweep complete having 3blades with aluminum blades with , canopy & 30 cm. down rod erected with 3 core flexible wire with earthing.(Make shall be approved by Engineer in charge)	Each
86	Minimum3MM ACP sheet board Alu decor Alu Star Plaso (ACP Sheet Carving) Minimum 3MM acrylic Sheet Pasting for making of Carving. LED module: Power Supply, Board Depth –Minimum 3”MS pipe frame of Minimum 1”x1” (4 Kg Pipe of 20 ft length) Back Side GI Sheet Pasting covering Minimum 1 Year warranty on Electricals.	Nos
87	Repair and replacement of all the sanitaryware plumbing accessories in both the male and female washroom and drinking water area etc..	Nos
88	Museum Quality Bharat Mata and Saraswati Mata Canvas Photo with UV Ray Protective Layer and with Metal Frame (Inside image Size - 724 mm x 896 mm, 3 Side white Boarder Size - 40 mm, bottom Side white Boarder Size - 55 mm with Sanskrit Slok and others, Total Image Size: 804 mm x 1081 mm)	Nos
89	Providing and Fixing MS Cupboard Shutter	Sq. m
90	Providing and fixing smart classroom in wooden box with laminated	Sq. m
91	Providing & fixing Photo Frame size 19"X13"	Nos
92	Providing & fixing 3D letter for building Names of Stainless steel 1" emboss size of letter in 6 - 10-inch height	Sq. ft.
93	Supplying, fitting, and fixing GI sheet with cost all materials, labor	SMT

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Sr. No	Civil work Description	Unit
94	Supplying, fitting, and fixing fibber sheet with cost all materials, labor	SMT
95	Providing & fixing of expansion joint system related with wall and floor	Mt
96	Labor charges for cleaning Municipal School U.G./O.H. water tank by modern science technology with six stage process as below (1) Turbidly cleaning i.e. dewatering water by submersible pump. (2) Cleaning of all the side walls & ceiling of the water tank by using rotary jet high pressure jet spray gun. (3) After that removing sludge % slurry out of water tank by sludge pump. (4) To spray anti-bacterial agent on the side wall, ceiling & flooring after the tank is cleaned. (5) Finally, to remove remaining disinfections in the water tank, ultraviolet light must be used in tank for sufficient time. Electric supply etc. shall be provided by M.S.B. without charging any extra cost. The complete tank cleaning by micro cleaning system shall be done as directed by engineer in charge. The complete tank cleaning by micro cleaning system shall be done as directed by officer in charge. It also includes carting away removed sludge up to 5km lead. (For below period)	No.
97	Repair and restoration of benches including fixing any structural damage and applying a fresh coat of color to enhance their appearance and durability. The scope of work should include surface preparation repair of any cracks or damages and recoloring in accordance with the original design or as specified by the project guidelines.	No.

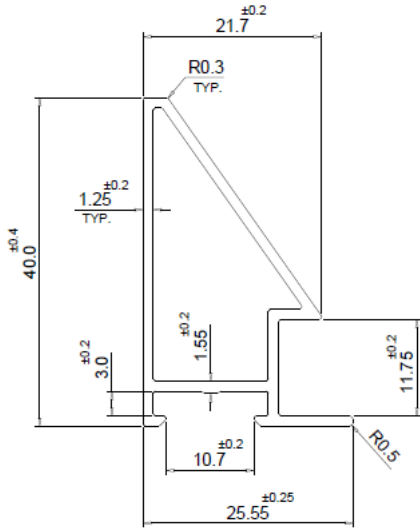
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Technical Specifications

Museum Quality Bharat Mata Canvas Photo with Metal Frame

- i. The bidder is required to supply and installation of Museum Quality Bharat Mata Canvas Metal Frame Photos with UV Ray Protective Layer in municipal schools.
 - a. Canvas Board Size: 804 mm x 1081 mm
 - b. Canvas: 350 GSM Museum Quality Cotton Canvas
 - c. Mounting Board: 6 mm High Density High Moisture Resistance 2 sided white laminated.
 - d. Canvas Mounting Type: Dry Mounting Tissue Solvent Acrylic Heat Activated Film Thickness 2 mil and Adhesive Layer 1 mil.
 - e. Canvas UV Ray Protective Layer: Matte Perforated PVC Solvent Acrylic Heat Activated Film Thickness 3 mil and Adhesive Layer 1 mil film adhesive ratio 3:1
 - f. UV Protection Factor: Film Contains UV stabilizer, which prevent film degradation and provide UV protection to the underlying image.
 - g. Printing Type: Latex 6 Color Printing with Optimizer
 - h. Printing Profile: 12p_CMYKcm_120.icc
 - i. Resolution: 600 x 600 DPI
 - j. Wall Hanging: 2 Hook System
 - k. Spring: 14 Back Side for Supporting Canvas Board
- ii. Outer Frame Size: 840 mm x 1117 mm
- iii. Metal Frame Alloy Type: Hard Virgin Aluminum AA 6063 T6 (Temper) IS: 733 - 1983
- iv. Metal Frame Body Finish: Sand Blasting Matt
- v. Frame Color: Black
- vi. The installation work shall be completed in 3 months after issuance of work order.
- vii. Supplying in Box Packaging: 5-layer Kraft Paper Box with 5 mm foam Warping or Sheeting for protect for damage in transport.
- viii. The bidder shall provide delivery challan and all supporting document for delivery of all the hardware items.
- ix. Bidder will be responsible for installation & commissioning as per the defined project timeline and should obtain a completion certificate form AMC SCHOOL BOARD.
- x. AMC SCHOOL BOARD shall appoint a team for conducting the user acceptance test & performance and audit of the installation work. The agency/officials/team appointed by the AMC SCHOOL BOARD shall conduct audit and make recommendations before commissioning.
- xi. The bidder will need to provide daily, weekly, monthly and periodic reports to AMC SCHOOL BOARD as defined by authority.
- xii. As part of its scope of work the successful bidder shall provide 1 year of Post Implementation Operational & Maintenance (O&M) Support.
- xiii. The bidder needs to deploy a competent team to execute scope of work defined in Tender. The bidder needs to depute adequate number of team members to execute the project in a timely manner, failure to execute the project within the defined time period shall attract a liquidated damage as defined in this Tender.

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Metal Frame Design:



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Image Specification: Metal Frame Design:

Inside image Size - 724 mm x 896 mm, 3 Side white Boarder Size - 40 mm, bottom Side white Boarder Size - 55 mm with Sanskrit Slok and others, Total Image Size: 804 mm x 1081 mm



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Water Tank Cleaning

Cleaning of under Ground / Over Head Water tank having any capacity of Municipal School by scientific methods including use of modern equipment's & machinery. The whole work shall be done in such a way so that it gives minimum disturbance to water supply from tank. Contractor is bound to make arrangement to dewater remaining water in tank. After Dewatering from tank contractor must arrange for flood lighting & access to tank for inspection. There after first; inside surface of walls & ceiling shall be cleaned with high pressure rotary jet, spray gun with pressure varying 30 to 110 psi as per site condition. Then after sludge & slurry is to be removed with sludge pumps from water tank having any depth. So that turbidity in fresh water is totally removed in second phase. Tank shall be cleaned against bacteria by spraying anti-bacterial agent on all sides, ceiling & floors. Lastly to remove disinfection in water tank UV lights must be used in tank for sufficient time before refilling water in the tank. The whole work shall be done with personal care.

Municipal Corporation may check, if necessary, by laboratory test for samples of water in tank, before & after cleaning with standard test records. All debris and silt shall be removed by contractor as per instruction given by principal of school.

Power supply shall be given by M.S.B. from nearby at free of cost. Proper protection work & necessary lighting arrangement should be done by contractor at his own's risk & cost. Contractor shall do standard safety measures. Insurance of working staff & staff present & also third party shall be born & taken by contractor. M.S.B. shall not be responsible for any damage in terms of man & machineries.

- Contractor has to give full details of machinery & equipment's Bidders has to submit the own machinery details with necessary proof/Documents/Photos.
- High Pressure turbojet machine with 150 bar pressure, 700 L.P.H. & 2 kg. force auto cutoff with wet & dry 30 Liter. industrial & 50 Liter/per second Air Flow vacuum cleaner and U.V. Radiation tube.
- Contractor must give full details of all certificates of work done at various places in Gujarat.

SCOPE OF WORK / METHODOLOGY

1. **Dewatering and Turbidity Removal:** Execute dewatering operations utilizing a submersible pump to effectively remove water exhibiting turbidity.
2. **Surface Cleaning:** Perform comprehensive cleaning of all internal side walls and the ceiling of the water tank employing a rotary jet high-pressure spray gun.
3. **Sludge and Slurry Extraction:** Subsequently, employ a sludge pump to extract and remove all accumulated sludge and slurry from the water tank.
4. **Application of Anti-Bacterial Agents:** Apply an anti-bacterial agent thoroughly on the side walls, ceiling, and flooring of the water tank post-cleaning.
5. **Disinfection with Ultraviolet Light:** To ensure complete disinfection, utilize ultraviolet lights within the water tank for an adequate duration to eradicate any remaining contaminants.