



PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)

REQUEST FOR PROPOSAL

(e-Tender)

**Selection of Bidder for Municipal e-Classrooms and School Learning
& Resource Improvement Program (SLRIP) at 123 PCMC Municipal
Schools**

Tender No. 9/2018

Office of **The Chief Executive Officer,**
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
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DISCLAIMER

Pimpri Chinchwad Smart City Limited (PCSCCL) has been selected to implement the Area Based Development (ABD) and pan-city projects by Government of India under Smart City Mission. Pimpri Chinchwad proposes smart solutions in ABD and cross pan-city providing various smart feature/infrastructure. PCSCCL has prepared this Request for Proposals for **“Selection of Bidder for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools”**. This RFP is a detailed document which specifies terms and conditions on which the bidder is expected to work. PCSCCL has taken due care in preparation of information contained herein and believes it to be accurate. However, neither PCSCCL or any of its authorities or agencies nor any of their respective officers employees, agents, or advisors give any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in connection or arising out of it. The information provided in this document is to assist the bidder(s) preparing their proposals. However, this information is not intended to be exhaustive, and interested parties are expected to make their own inquiries to supplement and verify information in this document. The information is provided on the basis that it is non-binding on PCSCCL or any of its authorities or agencies, or any of their respective officers, employees, agents, or advisors. Each bidder is advised to consider the RFP as per its understanding and capacity. The bidders are also advised to do appropriate examination, enquiry and scrutiny of all aspects mentioned in the RFP before bidding. The bidders are encouraged to take professional help of experts on financial, legal, technical, taxation, and any other matters/ sectors appearing in the document or specified work. The bidders should go through the RFP in detail and bring to notice of PCSCCL any kind of error, misprint, inaccuracy or omission.

PCSCCL reserves the right not to proceed with the project, to alter the timeline reflected in this document, or to change the process or procedure to be applied. It also reserves the right to decline to discuss the project further with any party submitting a proposal. No reimbursement of cost of any type will be paid to persons, entities, or consortiums submitting a proposal by under or pursuant under this RFP

The bidder shall bear all its costs associated with or relating to the preparation and submission of its proposal including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by PCSCCL or any other costs incurred in connection with or relating to its proposal. All such costs and expenses will remain

with the bidder and PCSCL shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a bidder in preparation or submission of the proposal, regardless of the conduct or outcome of the Selection Process.



Pimpri Chinchwad Smart City Limited (PCSCCL)

**Request for Proposal (RFP) for Selection of Bidder for
Municipal e-Classrooms and School Learning & Resource
Improvement Program (SLRIP) at 123 PCMC Municipal
Schools**



TENDER No. 9/ 2018

Pimpri Chinchwad Smart City Limited (PCSCCL) intends to appointment a bidder for implementation of Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools. The successful bidder will be selected based on Quality Cost Based Selection (QCBS) by PCSCCL after evaluating both Technical and Financial Criterion.

The bid submission procedure, applicant experience and the selection methodology are available in the Request for Proposal (RFP) document. PCSCCL thereof invites bids from firms having experience as envisaged in the Request for Proposal (RFP) document. Interested Bidders may download the RFP document from the website <https://mahatenders.gov.in> from 6/11/2018, 3.00 pm onwards.

No	Name of Work	Proposal Document Fee (Rs.)	EMD (Rs.)
1	Request for Proposal (RFP) for Selection of Bidder for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools	Rs 28,000/- (Including GST)	Rs 43,00,000/-

Rights to reject any or all tenders without assigning any reasons thereof are reserved by CEO, PCSCCL and whose decision will be final and legally binding on all the Bidders.

Sd/-
Director & CEO, PCSCCL
and
Municipal Commissioner, PCMC

PCSCCL/01/79/2018

Date: 5/11/2018

Advertisement No.365

Contents

- 1. Invitation for Proposal..... 10
 - 1.1. Key Events and Dates 11
 - 1.2. Background 13
 - 1.3. About Pimpri Chinchwad Smart City Limited..... 14
- 2. Instructions to Bidder 17
 - 2.1. Purpose..... 17
 - 2.2. Cost of Proposal Document 17
 - 2.3. Earnest Money Deposit (EMD) 17
 - 2.4. Authentication of Bid 18
 - 2.5. Consortiums and Joint Ventures 18
 - 2.6. Subcontracting 19
 - 2.7. Completeness of Response..... 19
 - 2.8. Proposal Preparation Costs..... 19
 - 2.9. Pre-bid Queries..... 20
 - 2.10. Amendment of RFP Document..... 20
 - 2.11. Supplemental Information to the RFP 20
 - 2.12. PCSCCL’s Right to Terminate the Process 20
 - 2.13. Language of Bids 20
 - 2.14. Patent Claim 20
 - 2.15. Bid Submission Format..... 21
 - 2.16. Submission of Bids..... 21
 - 2.17. Disqualification..... 22
 - 2.18. Bid Opening..... 23
 - 2.19. Evaluation Process 23
- 3. Eligibility & Scope of Work 25
 - 3.1 Pre-Qualification & Technical Qualification Criteria (Folder 1)..... 25
 - 3.2 Process of Evaluation..... 27
 - 3.3 Technical Evaluation Marking..... 28
 - 3.4 Technical Score: 32
 - 3.4.1 Relative Technical Score: (T)..... 32
 - 3.4.2 Financial Score: (C)..... 33
 - 3.4.3 Composite Score of the S 33

3.5 Signing of Contract..... 34

3.6 Scope of Work..... 35

3.6.1 Interventions 35

3.7 Technical Specifications 42

3.7.1 Bill of Material..... 42

3.7.2 Functional and Technical Specifications..... 44

3.8 Timeline, Deliverables and Payment Schedule 77

3.9 Payment and Delivery Milestones 77

3.10 Service Level Requirements/Agreements: 79

4 General Conditions of Contract 83

4.1 Governing Law..... 83

4.2 Settlement of Disputes 83

4.3 Taxes and Duties 84

4.4 Performance Guarantee 84

4.5 Confidential Information 84

4.6 Change in Laws and Regulations..... 85

4.7 Force Majeure 85

4.8 Termination 86

4.9 Payment upon Termination..... 87

4.10 Exit Management..... 88

4.11 Applicable laws 88

4.12 Assignment 89

5 Guidelines for responding to RFP 91

5.1 Clarifications..... 92

5.2 Amendment of RFP 92

Annexure I: TECHNICAL BID TEMPLATES..... 93

Form 1: Undertaking on Total Responsibility 93

Form 2: Particulars of the Bidder..... 94

Form 3: Bank Guarantee for Earnest Money Deposit 95

Form 4: Compliance sheet for Pre-Qualification Proposal..... 97

Form 5: Letter of Proposal..... 99

Form 6: Project Citation Format..... 101

Form 7: Proposed Solution 102

Form 8: Proposed Work Plan..... 103

Form 9: Team Composition 104

Form 10: Manufacturers'/Producers' Authorization Form 105

Form 11: Declaration on Source Code and Intellectual Property Rights..... 107

Form 12: Undertaking on Patent Rights 108

Form 13: Undertaking on Compliance and Sizing of Infrastructure..... 110

Form 14: Undertaking on Service Level Compliance 111

Form 15: Undertaking on Deliverables 112

Form 16: Undertaking on Support to Third Party Solution acceptance and certification
..... 113

Form 17: Declaration of activities sub-contracted 114

Form 18: Undertaking on Exit Management and Transition 115

Form 19: Declaration that the bidder has not been blacklisted..... 117

Form 20: Covering Letter 118

Form 21: Financial Proposal 119

Form 22: Performance Bank Guarantee 120

Form 23: Change Control Notice (CCN) Format 123

Glossary

Abbreviation	Description
PCMC	Pimpri Chinchwad Municipal Corporation
PCSCL	Pimpri Chinchwad Smart City Limited
CEO	Chief Executive Officer
CFO	Chief Finance Officer
SI	System Integrator/Bidder
SLA	Service Level Agreement
DTP	Directorate of Town Planning
EMD	Earnest Money Deposit
PBG	Performance Bank Guarantee
RFP	Request For Proposal
CV	Curriculum Vitae
INR, Re, Rs.	Indian Rupee(s)
LOA	Letter of Award
PPP	Public Private Partnership
STEM	Science, Technology, Engineering and Mathematics,
BALA	Building as Learning Aid
SPOC	Single Point of Contact
ALP	Adaptive Learning Platform
ELT	English Language Training
MIS	Management Information System
ICT	Information Communications and Technology
CAL	Computer Aided Learning
UAT	User Acceptance Test

Section: 1
Invitation for Proposal

1. Invitation for Proposal

- 1) Pimpri Chinchwad Smart City Limited (PCSCCL), Pimpri hereby invites Proposals for **“Selection of Bidder for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools”**. Bidders are advised to study this RFP document carefully before submitting their proposals in response to the RFP Notice. Submission of a proposal in response to this notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.
- 2) PCMC has adopted a two stage process (referred to as the "Bidding Process") for selecting Bidders for the award of the Project through the e-tendering system. The Bidding Process shall comprise of two steps, the first relating to qualification of the Bidder and the second relating to the Commercial Proposal of the Bidder. The Bidder shall pay to PCMC a sum of Rs. 27,500/- (Rupees Twenty Seven Thousand Five Hundred Only) as the cost of the RFP document through the e-tendering system of PCMC.
- 3) As part of the Bidding Process, the Bidders are being called upon to submit their Bids through the e-tendering system of PCMC in accordance with the terms specified in the Bidding Documents. Registered Bidders should submit their offer by the way of E-Tendering System only. The official will guide the interested Bidder to document the authorization process & to obtain the Registration Key.
- 4) Notes about e-tendering:
 - a. All eligible interested Bidders, who want to participate in e-tendering process should get enrolled on official website of Maha e-tenders. (<https://mahatenders.gov.in>)
 - b. Bidder shall contact, for details or any difficulties in submission of online tenders, if any, the Joint CEO of the SPV, PCSCCL
 - c. It is compulsory for all participants to submit all documents online. If any of the documents of the Technical Bids is not accepted by the e-tendering system, then the complete set of the technical bid shall be submitted to the CEO, PCSCCL by placing it in a sealed envelope on or before the Bid Due Date. However, the financial bids shall be submitted only through the online e-tendering system.
 - d. It is compulsory to submit cost of Tender Form Fee and Earnest Money deposit only in the form of Online Payment. Detailed terms and conditions are displayed on the portal.

- 5) Right to reject any or all online bids of work without assigning any reasons thereof are reserved with PCSCCL.

1.1. Key Events and Dates

Sr. No.	Information	Details
1.	RFP No. and Publication Date	9/2018 6/11/2018
2.	Last date for submission of written queries for clarifications	22/11/2018 (17:45 hrs via e-mail/hard copy)
3.	Date of pre-bid conference	26/11/2018 at 11.30 am at Commissioner Office, 4 th floor, Main Building, Pimpri Chinchwad Municipal Corporation
4.	Bid validity period	120 days from the last date for submission of proposals
5.	Last date (deadline) for submission of bids	15/ 12 /2018 before 15:00 hrs.
6.	Opening of Technical Bids	On Proposal Due Date at 15:30 hrs.
7.	Technical Presentation by the Bidders	Shall be intimated later
8.	Place, Time and Date of opening of Financial proposals received in response to the RFP notice	Shall be intimated later
9.	Contact person for queries	Joint Chief Executive Officer, Pimpri-Chinchwad Smart City (PCSCCL), Pimpri Chinchwad Municipal Corporation, Mumbai-Pune Road, Pimpri, Pune-411018, Maharashtra, INDIA Email: smartcity@pcmcindia.gov.in
10.	Earnest Money Deposit (EMD) – Online	INR 43,00,000/-
11.	Tender Fee	INR 28,000/- (including GST)

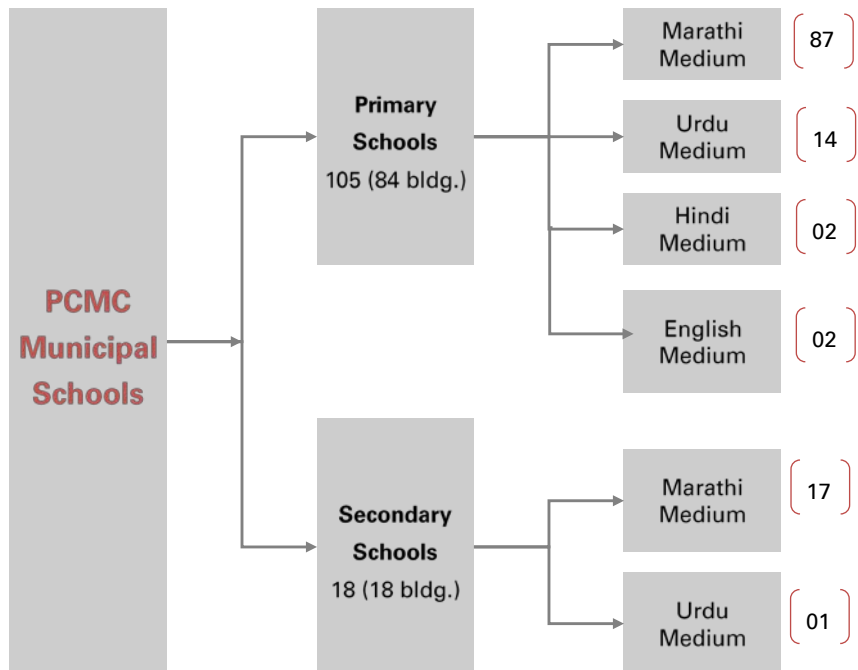
Request for Proposal

Sr. No.	Information	Details
12.	Last date for furnishing Performance Security to PCSCL, Pune (By successful bidder)	Within 15 days of Award
13.	Performance Bank Guarantee	5% of the contract value
14.	Performance Bank Guarantee (PBG) validity period	3 Months post expiry of the contract period.
15.	Last date for signing contract	Within 15 days of Award

1.2. Background

Pimpri Chinchwad is a modern twin city, situated South-East of Mumbai and in the North-West quadrant of Pune. Pimpri-Chinchwad also happens to be the fifth-most populated city of Maharashtra and has long been famous for being one of the most prominent industrial destinations outside Mumbai.

The twin city (Pimpri Chinchwad) is governed by the Pimpri Chinchwad Municipal Corporation (PCMC). Pimpri Chinchwad Council was formed on 4 March 1970 covering area of about 87 sq. km which later on was established as Municipal Corporation in 1982, which now covers an area of about 181 square kilometers. As per 2011 census population of Pimpri Chinchwad is 17, 29,000 souls growing at a rate of 6% annually, with a national average of 2.1%. The city is located on the Deccan Plateau and is surrounded by hills. It is situated 530 m above the mean sea level. Pavna River traverses the city, while the Indrayani River flows through the north-western outskirts and Mula River on south side, forms a boundary of Pune and Pimpri Chinchwad Cities. There are approximately 123 schools under PCMC and distribution of the schools is shown in the figure below:



1.3. About Pimpri Chinchwad Smart City Limited

Under Government of India (GoI) Smart Cities Project, the Pimpri-Chinchwad Smart City Limited (the “Authority”), a Special Purpose Vehicle (SPV) for Pimpri-Chinchwad Smart City Project has been established as a company under the Indian Companies Act 2013. The Authority would receive funding from Government of India (GoI) and Government of Maharashtra (GoM, state government) for the development of smart city in Pimpri-Chinchwad and proposes to use a part of this funding for the said assignment. The Authority is a government-owned company with equal shareholding from Pimpri-Chinchwad Municipal Corporation and the state government.

Pimpri Chinchwad Smart City Limited (henceforth referred to as “PCSCCL”) has been selected by Government of India under Smart City Mission to implement the Area Based Development (ABD) and pan-city projects. PCSCCL proposes smart solutions in ABD and cross pan-city providing various smart feature/infrastructure. PCSCCL has prepared this Request for Proposal for “**Selection of Bidder for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools**”.

PCSCCL intends to set up e-classrooms and other interventions in 123 schools with the objective of increasing the learning among the students. The use of technology solutions to aid classroom delivery of quality education will help in attracting more students for the affordable education provided in municipal schools. 6 schools will be taken up as pilot project (Phase I) and learning from its operation will be used during scaling up for rest of the 117 schools. The details of the 6 schools is mentioned below;

S N	School Details
PRIMARY	
1	Pimple Gurav No 54 Primary
2	Shevantabai Jagtap, Vaiduwasti, No 58
3	Pimple Saudagar No 51
4	Mehetre Vasti
HIGH SCHOOL	
5	Pimple Gurav High school
6	Pimple Saudagar High school

Request for Proposal

The details of the existing infra is as below;

S N	School Details	Medium (English/ Marathi/ Urdu)	No of Students	No of Sections	Staff Details (Principal, Teachers, any other)	Computer Lab	Smart Class
PRIMARY							
1	Pimple Gurav No 54 Primary	Marathi	1142	30	32	2	1
2	Mehetre Vasti	Marathi	675	15	16+1	1	-
3	Pimple Saudagar No 51	Marathi	486	12	12+1	1	-
4	Shevantabai Jagtap, Vaiduwasti, No 58	Marathi	436	13	1+13	-	-
SECONDARY							
5	Pimple Gurav High school	Marathi	781	14	17+1	1	-
6	Pimple Saudagar High school	Marathi	1275	24	24+1	1	-

The bidder is required to do AS-IS study of the existing interventions across the schools of PCMC before submitting their proposal. Bidder should also ensure that the existing infrastructure to be used wherever possible taking into consideration the warranty of the products/equipment.

It is proposed to appoint "Bidders/Vendors" to improve the learning environment of PCMC Schools through Public Private Partnership (PPP) model. Under this programme the school would be equipped with a blend of teaching-learning resources, technology infrastructure, administrative support, infrastructural improvements and relevant capacity building initiatives for teachers and the school management.

Section: 2
Instructions to Bidder

2. Instructions to Bidder

2.1. Purpose

PCSCCL intends to set up e-classrooms and other interventions in 123 schools with the objective of increasing the learning among the students. The use of technology solutions to aid classroom delivery of quality education will help in attracting more students for the affordable education provided in municipal schools. Students will compete at each level like sports, education, leadership, and culture etc.

The brief scope of work is as follows;

- a. Creating EdTech grade level interventions with provisioning of Smart Digital Classroom with e-learning platform for each division for every grade in a school,
- b. Creation of Computer Lab,
- c. Creation of STEM Lab,
- d. Capacity building for teacher,
- e. BALA,
- f. Project management activities,
- g. Helpdesk etc.

The detailed scope of work is provided in the subsequent section of this RFP document.

2.2. Cost of Proposal Document

The bidders are required to deposit the Proposal Document fees online. This RFP fee is non-refundable. The receipt of the same shall have to be uploaded during the online submission of bid document. The RFP document fee is non-transferable

2.3. Earnest Money Deposit (EMD)

The bidders are required to deposit the EMD online. The bidder should ensure that the payment of the EMD is made at least 3 working days prior to submission timeline to avoid any banking transfer delays and the receipt of the same should/must be uploaded during the online submission of bid document.

- 1) The EMD shall be denominated in Indian Rupees (INR) only. No interest will be payable to the bidder on the amount of the EMD.
- 2) Bids submitted without EMD will be liable for rejection.
- 3) EMD of unsuccessful bidder shall be returned within 60 days from the date of opening of the financial bid.

- 4) EMD of successful bidder shall be returned within 60 days after award of contract.
- 5) EMD shall be non-transferable.
- 6) The EMD may be forfeited:
 - a) If a bidder withdraws his bid or increases his quoted prices during the period of bid validity or its extended period, if any.
 - b) If successful bidder fails to sign the Contract or to furnish Bank Guarantee within specified time in accordance with the format given in the RFP.
 - c) If during the bid process, bidder indulges in any such deliberate act as would jeopardise or unnecessarily delay the process of bid evaluation and finalisation. The decision of the CEO, PCSCCL or any authorized person on his behalf, regarding forfeiture of the EMD shall be final and binding upon bidder.
 - d) If during the bid process, any information is found false/fraudulent/mala fide, then the PCSCCL shall reject the bid and, if necessary, initiate appropriate action.

2.4. Authentication of Bid

- 1) Authorized person of the bidder who signs the bid shall obtain the authority letter from the bidder, which shall be submitted with the bid. All pages of the proposal and annexures, etc. shall be signed and stamped by the person or persons signing the bid.
- 2) Power of Attorney executed by the bidder in favour of the duly authorised representative, certifying him as an authorised signatory for the purpose of this bid.

2.5. Consortiums and Joint Ventures

The bidder for participation may be a single entity or a group of entities (consortium). A Consortium of up to three (3) partners is permissible i.e. lead bidder and two (2) additional partner. From here on, the term bidder will apply to both the single entity and consortium of entities.

In the event the bidder is a Consortium, it shall, comply with the following additional requirements:

- 1) The Lead bidder shall be authorized and shall be fully responsible for the accuracy and veracity of the representations and information submitted by the Consortium respectively from time to time in the response to this RFP.

- 2) The consortium must submit a MoU while responding to this RFP together with a Power of Attorney (PoA) for the lead bidder signed by the partner.
- 3) All members of the consortium are required to follow the highest level of work ethics. If any member of the consortium has a Conflict of Interest or indulges in Prohibited Practices; the whole Consortium is liable to be disqualified

2.6. Subcontracting

Subcontracting is not allowed for this RFP, except for any civil, STEM Lab & BALA works. However, the responsibility would be with the prime bidder.

- a) The STEM Lab vendor selected by the prime bidder must have experience of implementing minimum 150+ similar lab in India.
- b) The BALA works vendor selected by the prime bidder must have experience of doing 20 schools in India.

2.7. Completeness of Response

- 1) The bidders are advised to study all instructions, forms, terms, requirements and other information in the RFP documents carefully. Submission of bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications and must be unconditional.
- 2) The response to this RFP should be full and complete in all respects. Failure to furnish any/all information required by the RFP document or submission of a proposal not substantially responsive to the RFP document in every respect will be at the bidder's risk and may result in rejection of its Proposal and forfeiture of the Bid EMD.

2.8. Proposal Preparation Costs

- 1) The bidder shall submit the bid at its cost and the PCSCCL shall not be held responsible for any cost incurred by the bidder. Submission of a bid does not entitle the bidder to claim any cost and rights over the PCSCCL and the PCSCCL shall be at liberty to cancel any or all bids without giving any reason.
- 2) All materials submitted by the bidder shall be the absolute property of the PCSCCL and no copyright /patent etc. shall be entertained by the PCSCCL.

2.9. Pre-bid Queries

The bidder shall send in their queries as prescribed in section 5. The response to the queries will be published on the website ***pcmcindia.gov.in*** and ***smartcitypimprichinchwad.in***. No telephonic queries will be entertained. This response of the PCSCL shall become integral part of RFP document.

2.10. Amendment of RFP Document

- 1) All the amendments made in the document would be published at the aforementioned website and shall be part of the RFP.
- 2) The bidders are advised to visit the aforementioned website on regular basis for checking latest updates of this RFP document. The PCSCL also reserves the right to amend the dates mentioned in this RFP for successful bid process.

2.11. Supplemental Information to the RFP

If PCSCL deems it appropriate to revise any part of this RFP or to issue additional data to clarify an interpretation of provisions of this RFP, it may issue supplements to this RFP. Any such corrigendum shall be deemed to be incorporated by this reference into this RFP.

2.12. PCSCL's Right to Terminate the Process

The PCSCL may terminate the RFP process at any time and without assigning any reason and the PCSCL shall not be held responsible for any cost incurred by the bidder in bid preparation. The PCSCL reserves the right to amend/edit/add/delete any clause of this RFP. This will be informed to all and will become part of the RFP.

2.13. Language of Bids

This bid should be submitted in English language only. If any supporting documents are in any language other than English, translation of the same in English language is to be duly attested by the bidder and submitted with the bid. English translation shall be validated at the PCSCL's discretion.

2.14. Patent Claim

In the event of any claim asserted by a third party regarding infringement of copyright, patent, trademark or industrial design rights arising from the use of the goods or any part thereof, the bidder shall expeditiously extinguish such claim. If the bidder fails to comply and the PCSCL is required to pay compensation to a third

party resulting from such infringement, the bidder shall be responsible for such compensation, including all expenses, court costs and lawyer fees. The PCSCL shall give notice to the successful bidder of any such claim and recover it from the bidder, if required.

2.15. Bid Submission Format

The entire proposal shall be submitted strictly as per the format specified in this Request for Proposal. Bids with deviation from this format are liable for rejection. All the documents uploaded during the bid submission are required to be in clear and legible format. In case the documents uploaded are not legible or in very low resolution making it illegible, the PCSCL reserves the right to seek clarification from the respective bidder who shall provide the same within a specified time frame mentioned in the request by the PCSCL.

2.16. Submission of Bids

Documents comprising the Bid separately

- 1) A two-folder system shall be followed for the bid for each Part separately:
 - a) Technical Bid (Folder 1): RFP Fee, EMD Details, Pre-Qualification Documents, Technical bid (including the credentials)
 - b) Financial Bid (Folder 2): Financial bid as per the format specified,

- 2) The bid shall include the following documents:

S. N	Document Type	Document Format
RFP Fee & EMD Details, Pre-Qualification Documents and Technical Documents – Folder 1		
a)	Pre-qualification	As specified in RFP document
b)	Technical Bid	As specified in RFP document
Financial Bid – Folder 2		
c)	Financial Bid	As specified in the e-tendering portal

- 3) The bidder should ensure that all the required documents, as mentioned in this RFP / bidding document, are submitted along with the bid and in the prescribed format only. Non-submission of the any of the required documents or submission of the documents in a different format / content may lead to rejection of the bid proposal submitted by the bidder.

2.17. Disqualification

The proposal is liable to be disqualified in the following cases or in case the bidder fails to meet the bidding requirements as indicated in this RFP:

- 1) Proposal not submitted in accordance with the procedure and formats prescribed in this document or treated as a non-conforming proposal.
- 2) During validity of the proposal or its extended period, if any, the bidder increases the quoted prices.
- 3) The bidder submits a conditional proposal.
- 4) Proposal is received in incomplete form.
- 5) Proposal is not accompanied by all the requisite documents.
- 6) Proposal is not accompanied by the EMD / RFP Fee.
- 7) Non submission of valid exemption certificate, as applicable.
- 8) If the bidder provides quotation only for a part of the Project.
- 9) Information submitted in Technical Proposal is found to be misrepresented, incorrect or false, accidentally, unwittingly or otherwise, at any time during the processing of the Contract (no matter the stage) or during the tenure of the Contract including the extension period, if any.
- 10) Financial Proposal is enclosed with the Technical Proposal.
- 11) Bidder tries to influence the Proposal evaluation process by unlawful/corrupt/fraudulent means at any point of time during the bid process.
- 12) In case any bidder submits multiple proposals or if common interests are found in two or more bidders, the bidder are likely to be disqualified, unless additional proposals/bidder are withdrawn upon immediate notice .
- 13) Bidder fails to deposit the Performance Guarantee or fails to enter into a Contract within 15 Days of the date of issue of Letter of Intent or within such extended period, as may be specified by the PCSCL.
- 14) While evaluating the Proposals, if it comes to the PCSCL's knowledge expressly or implied, that some bidder may have colluded in any manner whatsoever, or otherwise joined to form an alliance resulting in delaying the processing of proposal, the bidder so involved are liable to be disqualified for this Contract as well as for a further period as may be decided by the PCSCL.
- 15) If the Bid Security, Pre-qualification Proposal, Technical Proposal contains any information about price, pricing policy, pricing mechanism or any information indicative of the commercial aspects of the bid.

2.18. Bid Opening

- 1) Bidder should note that if RFP Fee & / EMD of any tenderer is not reflecting on e-Tendering portal on RFP opening date, the bid is liable for rejection without any justification.
- 2) Folder 1 containing Technical Documents shall be opened as per RFP schedule or its amendments. The bidder/ representatives of bidder can choose to attend at the address, date and time specified in the RFP.
- 3) Folder 2 containing the Financial Proposal will remain unopened till technical evaluation is conducted.
- 4) At the end of the evaluation of Technical Proposals, the technical committee shall forward its recommendations to the CEO, PCSCCL for further evaluation.

2.19. Evaluation Process

2.19.1. Technical Committee

- 1) The Technical Committee constituted by the PCSCCL shall evaluate the bids.
- 2) The Technical Committee shall evaluate the Technical and Financial proposal of the qualified bidder. The decision of the Technical Committee shall be final and binding upon all bidder.

Section: 3
Eligibility and Scope of Work

3. Eligibility & Scope of Work

3.1 Pre-Qualification & Technical Qualification Criteria (Folder 1)

The bidder shall fulfill all of the following eligibility criteria independently on date of submission of bid:

S.No.	Description	Document to be submitted
1	The lead bidder & consortium partner/s should be a Registered Company in India under the Companies Act, 1956	<ul style="list-style-type: none"> • Certificate of Incorporation • GST Registration • Income tax registration • PF registration
2	The lead bidder should be registered and should have been in existence In India for a minimum period of 5 years	<ul style="list-style-type: none"> • Certificate of Incorporation
3	The lead bidder should have an average Annual turnover of not less than Rs. 20 Cr for the last three financial years (as of 31-03-2018)	<ul style="list-style-type: none"> • Certificate from the statutory auditor on his letter head confirming annual turnover for each of the last 3 years, net profit and average annual turnover over the past three financial years
4	The lead bidder should be profitable and have positive Net Worth as on 31-03-2018	<ul style="list-style-type: none"> • Certificate from the statutory auditor on his letter head confirming net worth as on 31-03-2018
5	The lead bidder should have experience of working in the IT/ITES/ Education sector for a min. of 5 years as on bid submission date	<ul style="list-style-type: none"> • Work Order Copies for orders sourced in the last 5 years
6	The lead bidder or the consortium partner should have executed / executing projects provisioning of involving IT hardware or educational e-learning software, Online MIS Dashboard with educational services	<ul style="list-style-type: none"> • Work Order Copies for orders sourced in the last 5 years

Request for Proposal

S.No.	Description	Document to be submitted
	like teacher training, multimedia content, project monitoring in at-least 60 Government schools in last 5 years	
7	<p>The lead bidder or the consortium partner should have experience in at least 2 of the below mentioned interventions in any Government schools in last 5 years;</p> <ul style="list-style-type: none"> a) E-Learning content development and deployment b) Digital education c) Teacher capacity building and mentoring d) English lab experience e) Robotics lab experience 	<ul style="list-style-type: none"> • Work Order Copies for orders sourced in the last 5 years.
8	<p>The lead bidder or the consortium partner should have 20 professionals (teacher training, mentoring, instructional design, developing multimedia content, technology) on its rolls</p>	<ul style="list-style-type: none"> • A self-declaration or Certificate issued by Company's HR/Company Secretary of the company mentioning name of the employee, educational qualification, and area of expertise to be submitted.
9	<p>The lead bidder must possess valid certifications on ISO 9001:2015/ISO 20000-1:2011/CMMI 3</p>	<ul style="list-style-type: none"> • Copy of valid certificates
10	<p>The lead bidder should have direct authorization from the Original Equipment Manufacturer (OEM) for selling and supporting the components/products</p>	<ul style="list-style-type: none"> • Manufacturer Authorization Form (MAF) on the letter head of OEM duly signed and stamped for all the components/products

S.No.	Description	Document to be submitted
11	The lead bidder and consortium partner/s should not have been blacklisted by any of the State/Central Government or organizations of the State/Central Government in India in the past three years.	<ul style="list-style-type: none"> Self-Declaration in this regard by the authorized signatory of the lead bidder and/or consortium partner as per the format

3.2 Process of Evaluation

- 1) Bidder shall be evaluated as per the Pre-Qualification Criteria and Technical Qualification Criteria.
- 2) Bidder who fulfil Pre-Qualification Criteria will be evaluated as per the Technical Evaluation Marking Scheme
- 3) Amongst the bidder who are considered eligible for financial evaluation, the bidder scoring the highest Composite Score (the technical evaluation marks shall be given 80% weightage and commercial evaluation marks shall be given 20% weightage to arrive at the Composite Score) will be awarded the work as successful bidder at the discretion of PCSCL.
- 4) At any time during the bid evaluation process, the Committee may seek written clarifications from the bidder. The Committee may seek inputs from their professional and technical experts in the evaluation process.
- 5) The Bid Evaluation Committee reserves the right to accept or reject any or all bids without giving any reasons thereof.
- 6) In case of Single Bid, PCSCL reserves the right to accept or reject the bid on approval of competent authority at its discretion.

3.3 Technical Evaluation Marking

S No.	Criteria	Documents Required	Maximum Marks
1	Financial Turnover		10
	<p>The lead bidder should have an average Annual turnover of not less than Rs. 20 Cr for the last three financial years (as of 31-03-2018)</p> <p>Marks would be awarded as follows:</p> <ul style="list-style-type: none"> Rs. 20 Cr to Rs 80 Cr = 2 marks Rs. 81 Cr to Rs 320 Cr = 4 marks > Rs 320 Cr = 10 marks 	<p>Certificate from the statutory auditor on his letter head confirming annual turnover for each of the last 3 years, net profit and average annual turnover over the past three financial years</p>	10
2	Years of experience		5
	<p>The lead bidder should have experience of working in the IT/ITES/ Education sector for a min. of 5 years as on bid submission date.</p> <p>Marks would be awarded as follows:</p> <ul style="list-style-type: none"> 5 years = 1 mark 5 years to 10 years = 3 marks > 10 years = 5 marks 	<p>Work Order Copies for orders sourced in to be able to determine the years of criteria</p>	5
3	Experience in Education		10
	<p>The lead bidder or the consortium partner (any member of the consortium) should have executed / executing projects involving provisioning of IT hardware or educational e-learning software ,Online MIS Dashboard with educational services like teacher training,</p>	<p>Copy of LOI / LOA/ WO / Agreement / Client reference letter /certificate</p>	5

Request for Proposal

S No.	Criteria	Documents Required	Maximum Marks
	<p>multimedia content at-least 60 Government schools in last 5 years</p> <p>Marks would be awarded as follows:</p> <ul style="list-style-type: none"> • 60 to 240 schools = 1 mark • 240 to 960 schools = 3 marks • > 960 schools = 5 marks 		
	<p>The lead bidder or the consortium partner (any member of the consortium) should have experience in at least 2 of the below mentioned interventions in any Government schools in last 5 years;</p> <ul style="list-style-type: none"> a) E-Learning content development and deployment b) Digital education c) Teacher capacity building and mentoring d) English lab experience e) Robotics lab experience <p>Marks would be awarded as follows:</p> <ul style="list-style-type: none"> • 2 interventions = 2 marks • 4 interventions = 4 marks • 5 interventions = 5 marks 	<p>Copy of LOI / LOA/ WO / Agreement / Client reference letter /certificate</p>	5
4	English Labs Experience		10
	<p>The lead bidder or the consortium partner (any member of the consortium) should have experience in implementation of English labs.</p> <p>Marks would be awarded as follows:</p> <ul style="list-style-type: none"> • Content characteristics (of randomly sampled content during evaluation stage) <ul style="list-style-type: none"> ○ Video annotations = 1 mark 	<p>Signed undertaking by the service provider covering the points mentioned in the criteria</p>	10

Request for Proposal

S No.	Criteria	Documents Required	Maximum Marks
	<ul style="list-style-type: none"> ○ Video resolution =1 mark ○ Narration clarity =1 mark ○ Concept explanation = 2 marks ● Others <ul style="list-style-type: none"> ○ Quality of dashboards = 1 mark ○ Quality of trainer manuals = 0.5 marks ○ Ease of use and functionality of software/ application provided – pairing of students, group discussions, teacher view and controls, student audio panel, system set up, simultaneous log in, etc. = 2.5 marks ○ Nature of language learning activities provided = 1 mark 	Random sampling by evaluation committee	
5	STEM or Robotics Labs Experience		5
	<p>The lead bidder or the consortium partner (any member of the consortium) should have experience in implementation of either STEM or Robotics labs.</p> <p>Marks would be awarded as follows:</p> <ul style="list-style-type: none"> ● 2 labs = 2 marks ● 4 labs = 4 marks ● 5 labs = 5 marks 	Copy of LOI / LOA/ WO / Agreement / Client reference letter /certificate	5
6	Manpower		5
	The lead bidder or the consortium partner (any member of the consortium) should have 20 professionals (teacher training,	A self-declaration or Certificate issued by Company's	5

Request for Proposal

S No.	Criteria	Documents Required	Maximum Marks
	<p>mentoring, instructional design, developing multi-media content, technology) on its rolls</p> <p>Marks would be awarded as follows:</p> <ul style="list-style-type: none"> • 20 – 50 Manpower = 1 mark • 50 – 100 Manpower = 3 marks • > 100 Manpower = 5 marks 	<p>HR/Company Secretary of the company mentioning name of the employee, educational qualification, and area of expertise to be submitted</p>	
7	Certification		5
	<p>The lead bidder must possess valid certifications on ISO 9001:2015/ISO 20000-1:2011/CMMI 3</p> <p>Marks would be awarded as follows:</p> <ul style="list-style-type: none"> • ISO 9001:2015 = 1 mark • ISO 20000-1:2011 = 3 marks • CMMI 3 = 5 marks 	<p>Copy of valid certificates</p>	5
8	Capacity building of teachers		10
	<p>The lead bidder or the consortium partner (any member of the consortium) should have experience of capacity building of teachers</p> <p>Marks would be awarded as follows:</p> <ul style="list-style-type: none"> • 60-120 Teachers = 2 Marks • 120-240 Teacher = 5 Marks • >240 Teachers = 10 Marks 	<p>Client references, Training plan, sample certificates issue to trainees and profile of trainers</p>	10
9	Technical Compliance		20
	<p>Compliance to the requirement (functional/technical) mentioned for the particulars mentioned in the bill of material at Section 3.7.2</p> <p>Marks would be awarded as follows:</p> <ul style="list-style-type: none"> • Non Compliance = 0 Marks 		20

Request for Proposal

S No.	Criteria	Documents Required	Maximum Marks
	<ul style="list-style-type: none"> 100% Compliance = 20 Marks 		
11	Proposal Presentation cum Demo		20
	The bidder to present on understanding of the project objectives and give demo on the following points <ul style="list-style-type: none"> Project Execution Strategy E-Learning platform ease of use and innovative features for enhancing classroom pedagogy for technology-based education. Equipment's with low carbon foot print, ease of use for teachers and functionality Classroom Digital Learning data Analytics Artificial Intelligence (A.I) based Educational Analytics for classroom Any unique propositions 	Proposal presentation & Demo	20
Maximum Marks			100

Proof of concept

- The bidder shall be asked to give a demonstration for the respective area of work that they are bidding for. Sample content will be chosen randomly for evaluation by the RFP evaluation committee in case applicable

3.4 Technical Score:

The Technical Marks will be awarded as per the evaluation methodology described in the technical evaluation marking scheme.

3.4.1 Relative Technical Score: (T)

The relative technical score will be calculated as per the below formula

$$T = \text{Technical score} \times 0.8$$

3.4.2 Financial Score: (C)

The lowest evaluated financial proposal is given the maximum commercial score (C) of 100; the financial scores of the other bidders will be evaluated on a pro-rata basis as illustrated:

$$\text{'C' of the respective bidder} = \frac{\text{Lowest offer quoted amongst all bidder}}{\text{Offer quoted by the respective bidder}} \times 100$$

If there is a discrepancy between words and figures, PCSCCL Decision will be final on which amount to be considered. For any other calculation/ summation error etc. the bid may be rejected.

3.4.3 Composite Score of the S

- 1) The Relative Technical Score (T) and Relative Financial Score (C) secured by each bidder will be considered for computing the Final Composite Bid Score.
- 2) The bidder securing the highest Composite Bid Score will be adjudicated as the most responsive bidder for award of the project.
- 3) The overall score will be calculated as follows:

$$\mathbf{S = T + (C*0.2)}$$

Where,

S = Final Composite Bid Score

T = Relative Technical Score of the qualifying bidder

C = Total Relative Financial Score of the qualifying bidder

Sample Calculation:

Evaluation Parameter	Bidder A	Bidder B	Bidder C	Bidder D
Technical Score	72	80	75	89
Relative Technical Score (T)	72 * 0.8 = 57.6	80 * 0.8 = 64	75 * 0.8 = 60	89 * 0.8 = 71.2

Request for Proposal

Financial Quotation (in lacs)	16	11.5	11	15
Relative Financial Score (C)	$11/16 * 100 = 68.75$	$11 / 11.5 * 100 = 95.65$	100	$11 / 15 * 100 = 73.33$
Composite Score S = [T + C* 0.2]	$57.6 + 68.75 * 0.2 = 71.35$	$64 + 95.65 * 0.2 = 83.13$	$60 + 100 * 0.2 = 80$	$71.2 + 73.33 * 0.2 = 85.86$
NOTE: Bidder with highest Composite Score will be awarded the Work Order				

- 1) The preferred bidder shall be the one securing the highest Final Composite Score.
- 2) In the event of two or more bidder securing exactly the same Composite Score, then PCSCL reserves the right to:
 - i. Declare the bidder whose Technical Score is highest, among the bidders who have secured exactly the same Composite Score as preferred bidder, or
 - ii. Invite fresh financial proposals from these bidder having same Composite Scores and evaluating these financial proposals, or
 - iii. Adopt any other method as decided by PCSCL.
- 3) PCSCL reserves the right to confirm the preferred bidder as successful bidder subject to negotiations and approval of competent authority.

3.5 Signing of Contract

The successful bidder shall enter into contract agreement for with the Department within the time frame mentioned in the award letter. The Draft Agreement format is placed at annexures in Section 5

3.6 Scope of Work

3.6.1 Interventions

The bidder is required to work on the below mentioned interventions, summary is mentioned below and overview of the different components is mentioned in the subsequent section;

Interventions
Smart Digital Classroom with Video Recording & A.I. Capabilities
Computer Lab (Low on e-Waste and Power consumption)
STEM Lab
Robotics Lab
BALA
Capacity Building of Teachers & Head Masters
Deployment of expert facilitators
Project Management Services
Helpdesk

I. **Computer Lab:**

Technology-based learning solutions provide a simulative learning environment that makes education interactive and enriching. The IT Based Education Solution program creates an environment, where learning and assessment is fun and the opportunities to learn is equitable among the rural and urban children. The main objective of the program is to attract the children, retain them in the schools and to improve the quality of the education through animated multimedia based educational content and also to enhance the quality of learning by making “Learning Play”, “Assessment Fun” and “Equal knowledge for all”. It is proposed to gradually integrate technology classrooms in the school to improve student retention and teacher effectiveness. Under this the following aspects will be covered:

- ***Computers:*** A connected modern digital lab will be set up (in the identified schools) equipped with innovative computing device and other relevant hardware/software to impart Technology enabled learning as well as English and Computer skills and training for students and teachers
- ***Networking & Electrical Work:*** The bidder shall have to complete the electrical and networking in the room as preparatory activity for setting up of the ICT lab at each of the locations.

The bidder has to undertake electrical wiring (of ISI marked & branded) for all electrical and IT equipment like Computing devices, networking, UPS etc. in the Computer Lab. Electrical wiring would also include Earthing arrangements. The bidder is required to provide internal electric wiring and sufficient power point fittings (All equipment / appliances /fittings should be ISI/ISO certified). The necessary networking in the room connecting all devices shall be done by the bidder.

- Ensure compliance of electrical earthing
- Physical security like grills, locks, CCTV etc.
- Furniture: The bidder shall have to provide the following furniture items as a part of the setting up of computer lab:
 - Computer Tables
 - Chairs for students

II. Smart Class with Video Recording and Artificial Intelligence Analytics:

To simplify the way technology is used in the classroom, a compact, simple digital display unit along with computing device would be placed in every grade of the schools to enable smart digital classroom. Ease to use will motivate even the teachers who are not comfortable using technology in the classroom to easily embrace digital teaching and learning environment.

Artificial Intelligence (A.I) technologies is capable of imparting quality education of India's linguistically diverse population. Hence, introduction of technology-based education with A.I in education will play a major role for enhancing the quality of education in public sector schools. A.I function would cater to the following:

- 1) Student's attention: Estimation of students perceived attention in class room.
- 2) Attendance: Attendance with timestamp of entry, exit and duration of presence inside class for students.
- 3) Demography: Counting of male and female students, ratio of presence on daily basis, protecting gender specific restroom zones.
- 4) Classroom Behavior analysis: run, danger, fight, fall
- 5) Student mood & emotion analysis: Directly proportionate to the productivity and effectiveness, the system recognizes the mood and other emotional state of students inside classroom.
- 6) Teacher efficiency: Will be able to provide analytics on below:
 - Effective utilization of smart board or black/white board
 - Time spent engaging with students

- Time spent inside class premises
- Time spent idle, on phone, sitting, chatting with other staff etc.
- Attendance for teachers & Regularity to class
- Punishment and harassment analytics
- MIS of teachers
- MIS for students

7) Student & Teacher Interaction analytics

The solution should ensure that the tracking of individual student's performance is done on at least on monthly, semester, half yearly, yearly and subject wise

III. Digital learning e-Contents for Academics:

Use of Audio-visual content and animation is very engaging for a child. Young children in each grade and classroom will now learn daily in a blended environment with technology enabled digital classroom. The Learning e-Contents based on the Maharashtra State Board/NCERT syllabus to be provided in every grade wise digital classroom must follow the outline provided at Section M

IV. STEM Lab:

STEM Lab is a work space where young minds can give shape to their ideas through hands on do-it-yourself mode; and learn innovation skills. Young children will get a chance to work with tools and equipment to understand the concepts of STEM (Science, Technology, Engineering and Math). STEM labs would contain educational and learning 'do it yourself' kits and equipment on – science, electronics, robotics, open source microcontroller boards, sensors and computers. Other desirable facilities include meeting rooms and video conferencing facility.

In order to foster inventiveness among students, STEM can conduct different activities ranging from regional and national level competitions, exhibitions, workshops on problem solving, designing and fabrication of products, lecture series etc. at periodic intervals. The scope for the STEM lab has to be as per the outline at Section N

V. Computer Functional Literacy (ICT Skills) e-Contents:

The computer functional literacy is necessary for any job today. Computer Functional Literacy e-Contents will be deployed in all computer devices in the

Computer lab and in every digital classroom. The Computer Functional Literacy e-Contents must follow the outline at Section I.

VI. English Language Training e-Contents:

The computer lab will be used for English language training, and teaching Computer skills curriculum; no additional infrastructure (hardware) will be procured for English language learning. The English Language Learning e-Contents must follow the outline at Section H.

VII. Capacity Building of Teachers & Head Masters :

Capacity creation of teachers will include practical demonstrations in constructivist approaches like inquiry, activity and project-based learning. This training will build on the existing skill sets of the teachers so that any transition will be achieved sensitively, seamlessly and surely.

Teacher Capacity Building shall be conducted in **two sessions of 5 days each in two terms for all the teachers and will be supported by online sessions and handholding**. The capacity creation will focus on the following areas:

- Effective lesson plans: unlocking learning blocks, creating learning triggers and authentic resources, learning outcomes and developing tightly aligned assessments
- Pedagogical techniques: blended with domain competency, collaborative teaching, and self/peer learning, flipped classrooms, and blended learning. The teachers will be familiarized on how to improve their classroom practice with constructivist approaches using technology resources. The teachers will be made comfortable operating the technology infrastructure and resources provided under the project
- Sensitizing teachers in using assessments for and of learning and in designing variety of assessments, assessing differential learning, group/peer/ self-assessments and in classroom management skills
- Leadership training for Headmasters to be conducted along with the project induction.

VIII. Deployment of expert facilitators:

The bidder would be providing at least 3 trained expert facilitators in Maths, English, and Science who can help school teachers in bridging the gaps in students' learning. The role of the expert facilitators will be:

- Remedial teaching to improve performance in English, ICT and Science
- Hand-holding school staff in helping them with their classroom practices

- Introducing new methods of teaching like activity- and project-based learning
- Conducting classroom observation to identify areas for student improvement
- Access to all students for guided teaching and self-study to improve student performance

The expert facilitators will be provided for one year. Based on the satisfactory capacity building and performance of the teachers, the expert facilitators may be reduced. However minimum one expert facilitator per school has to be provided in the subsequent years.

IX. Building as Learning Aid (BALA):

While the infrastructure of the Schools is adequate there is need for some minor improvements:

- The environment of the school can be improved by BaLA interventions through painting/boards/installations illustrating concepts from the curriculum for a print rich environment
- Children subconsciously imbibe inputs from their surroundings and are constantly receptive to multiple sensory perceptions.
- To harness this potential, the school environment can be enriched to provide a learning opportunity at every step and turn of the building contours

The bidder has to provide the above as per the prescribed scope mentioned in the outline at Section P.

X. Online MIS Dashboard

- The Decision Support Systems/Management Dashboards are envisaged to provide user-specific information needed for day-to-day operations. The bidder has to provide an Online MIS Dashboard as per the prescribed scope mentioned in the outline at Section T.
- The Management and staff based on their role and responsibility will have unique MIS requirements, which enables them to effectively plan and deliver the responsibilities allocated to the concerned individuals.
- System will facilitate data gathering from various intervention, locations, analyze and present the information in an appropriate manner for decision-making. System will also facilitate graphical view of the MIS information in terms of presenting the location profile on GIS map. It will help to monitor the hardware and should be able to produce dynamic reports about uptime, downtime and idle time of all the systems.

- System will also facilitate generation of analytical reports based on the data collected from the schools to verify the compliance with the SLA by the bidder.
- Online MIS dashboard Application will be hosted on the PCMC datacenter, however until the hosting complete, the successful bidder is expected to host the same MIS portal at its premise.
- Each bidder is required to give a demonstration of the proposed Online MIS Dashboard during the presentation.
- Please note that, this Online MIS dashboard should be able to collect all required essential data as a live feed from the distant online hardware availability, i.e. idle time, usage time, internet speed etc. from the client-based tool, bidder is supposed to install the application on each hardware connected to the internet. Bidder should be able to provide admin access & other roles as and when required for PCMC administrator to monitor the overall progress of the project as per the SLA, compare performance and review the MIS Dashboard reports.
- Mobile App of MIS should be available to CEO, PCSCCL, Commissioner, PCMC, and School Board Authority.
- The successful bidder shall specifically generate reports on the performance of weaker students and work back with school principal and teachers to draw out a program for enhancing the learning levels of these students.

XI. Project Management Services

The bidder should deploy at least one project manager for updates on day to day activities to the department. Centralized Helpdesk should be provided for call logging and project management. Project management software with online tracking of devices and their uptime should be provided as part of the deliverables.

XII. Other Services

- PCMC is in the process of engaging various stakeholders for quality audit of schools, teachers, learning outcomes. The successful bidder shall corporate unconditionally and provide the required data and support for these audits.
- PCMC envisages several interventions for teachers' motivation and pedagogy enhancement, the successful bidder shall be required to work back with PCMC, its stakeholders for implementation of these intervention.
- Successful bidder shall work closely with PCMC and school administration for enhancing parent's involvement in the students learning programs.

- PCMC envisages putting in place a master trainer program, the successful bidder is expected to provide all the necessary support for the same

The detail technical specifications are mentioned in the subsequent sections.

3.7 Technical Specifications

3.7.1 Bill of Material

Bidder to provide the equipment's/products/service as per the details mentioned below, however bidder is free to propose any additional equipment's/products/service to meet the requirement of the project;

S N	Item	Specifications	Quantity per School	Technical Specs (Ref)
1.	Computer Lab	Computing Device	10	A
		Headphones	20 with 10 splitters	B
		3 KVA True Online UPS	1	C
		Furniture - Tables	10+1	D
		Furniture - Chairs	20+1	E
		Wi-Fi access point	1	-
		Printer	1	F
		Networking & Electrical Work	Electrification, Networking in lab with paint and vinyl flooring, earthing as per the Govt standard guidelines	-
2.	English Lab for English Language Training (ELT)	Bluetooth 30 W 2.1 Speakers	1	G
		English language training e-content in all computing devices	1 License per school covering all grade wise classrooms in computer lab	H
3.	Computer Functional Literacy Skills e-Contents	Computer Literacy e-content software in all computing devices	1 License per school covering all	I

Request for Proposal

S N	Item	Specifications	Quantity per School	Technical Specs (Ref)
			grade wise classrooms in computer lab	
4.	Smart Digital Classroom	65" LED Display	1 for each class	J
		HD Camera with video recording & AI Capabilities	2 HD Camera per classroom per school	K
5.	A.I based Education Analytics software License	A.I based Education Analytics software License	1 License	L
6.	Interactive Multimedia Content (for classes I to X, covering all the subjects, English, Math, Science and Social Science, aligned etc to the NCERT/State Board curriculum) along with Digital e-learning platform with contents for Academic education	Grade-wise Digital e-Learning platform and content in all classroom and devices in computer Lab.	1 License	M
7.	STEM Lab	Exhibits with posters and necessary furniture and fixtures robotics	48 exhibits	N
8.	Robotics Lab	Robotics Kits - Programmable kits with 10" tablets & Mechanical Kit	2	O
		Integrated Robotics Kit	5	

S N	Item	Specifications	Quantity per School	Technical Specs (Ref)
9.	BALA	Concept to be pasted on walls and floorings	30	P
10.	Capacity building of Teachers and Head masters	For all the teachers	-	Q
11.	Deployment of expert facilitators	Atleast 3 teachers to be developed for Maths, English and Science	3 per school	R
12.	Project Management and Helpdesk Services	Project management tool and helpdesk support	1 for the entire project	S
13.	Online MIS Dashboard	-	1 License per school	T

Note-

- The above proposed interventions is per school except for helpdesk which will be a single intervention for all the schools.
- The bidder needs to conduct survey before submitting their proposal.
- Minimum specification has been provided, however bidder is free to propose any additional solution to meet the project requirement

3.7.2 Functional and Technical Specifications**A) Computing Device Specification**

S.No.	Technical Details	Description
1	MAKE/MODEL	Should be specified.
2	PROCESSOR	Quad Core
3	CLOCK SPEED	1.3 GHZ or Higher
4	FLASH MEMORY (SD SLOT)	Card Reader slot for SD/MICRO SD card.
5	RAM	2 GB DDR3L in built
6	DISPLAY	18.5" HD
7	AUDIO	INPUT/OUTPUT

S.No.	Technical Details	Description
8	BLUETOOTH	Enabled 4.0
9	HARD DISK	32 GB internal with 64 GB on Class 10 SD Card.
10	WIRELESS	Enabled
11	INTERFACES	1xVGA, 1xHDMI, 1xUSB 3.0, 2xUSB2.0, 1xRj-45, 1xTF card Slot, 1xAudio out
12	KEYBOARD & MOUSE	USB Keyboard and Mouse
13	COMPLIANCE	MAF MANDATORY FROM OEM
14	POWER CONSUMPTION	12.5 Watts
15	VIDEO RESOLUTION	16/24/32 bit,Up to 1920x1024
16	OPERATING TEMPERATURE	55 Degree Centigade
17	WEIGHT	220 Grams
18	OPERATING SYSTEM (OS)	Windows 10 School Version (Education)
19	MOUNTING OPTION	Desktop/Monitor Back
20	CERTIFICATION	BIS Mandatory, 3 years on-site warranty

B) Headphones specification with splitters

Description	Specifications
Standard Features	Noise-cancelling microphone, Full stereo sound, Microphone with flexible, rotating boom, Adjustable headband
Sensitivity	-58 dBV/μBar, -38 dBV/Pa +/- 4 dB
Frequency response	Headset: 20 Hz – 20,000 Hz Microphone: 100 Hz –16,000 Hz
Cable Length	1.8m cord
Connectors	3.5 mm connectors

C) 3 KVA True Online UPS specification

- 3 KVA true online UPS
- Backup time 30 Minutes.
- Type of Battery – SMF-VRLA
- Technology – IGBT
- Rated Output – Single Phase sinewave 230v AC,50Hz
- Degree of Protection – IP20

Request for Proposal

- Switching over time – Maximum 10 mili seconds
- Protection against (over discharge) discharge per
- 12v battery (volt)-10.5
- Protection for outside input voltage range: If Input voltage goes outside the range 160 to 280 volts, the system shall switch over to battery mode.
– yes
- Protection against short circuit of UPS. – Yes
- As per Meity (Govt of India) guidelines UPS shall have valid BIS CRS certifications as applicable
- 3 years warranty
- OEM should be one of the top 5 manufacturer as per the Gartner’s report.

D) Furniture- Tables for Computer Lab

Table suitable for students from class I to X
600mm x 450mm x 725mm with Sunmica Top
3 years warranty i.e replacement of parts

E) Furniture- Chairs for Computer Lab

Chair suitable for students from class I to X
PVC/Plastic molded without arms rest
Chair for Instructor
PVC/Plastic molded with arms rest
3 years warranty i.e replacement of parts

Bidder needs to be share the various design options for approval to PCSCCL

F) Network Printer

Black & White Multifunction Laser Printer with Scanner, facility for A4 and Legal size
Printing Speed: 20 to 22 ppm
Warm up Time: Less than 30 Seconds
Manual Input Capacity: Standard Tray
RAM: 128 MB
High Yield Toner: 2000 pages, Low Toner Yield Cartridge: 1000 Pages,
Connectivity: USB 2.0 Copy Speed

Request for Proposal

Resolution: 600 x 600 dpi

Warranty for 3 years

G) Bluetooth Speakers

Sr. No.	Parameters	Minimum Specifications
1	Audio	30 Watts
2	Bluetooth	2.1
3	Connectivity	Aux and Bluetooth

H) English Language Training (ELT) e-Contents

Lesson Level	Module	Topic
ELT - Basic	Identifying Words	Nouns
		Verbs
		Adjectives
		Adverbs
		Opposites
	Making Phrases	Making Phrases
	Building Sentences	Building Sentences 1
		Building Sentences 2
	Describing Objects	Picture Talk
	Describing Movements	Present Tense
		Past Tense
		Future Tense
		Active and Passive Voice
		Animation Talk
	Action Oriented Talk	Action Oriented Talk
	Daily Routines	At Home
		Food and Cooking
		Leisure Time
		Market and Shopping

Request for Proposal

Lesson Level	Module	Topic	
		Media	
		With Friends	
		Work Place or School or Home	
		At Home Plus Travel Mode	
ETL - Intermediate	Introductions	Introducing to People	
	Seeking and Expressing	At a Restaurant	
		At a Chemist	
		At the Petrol Pump	
		Planning a Trip	
		Going Shopping	
		Discussing Seasons	
		Varying Professions	
		Tongue Twisters	
		Vocabulary	
	Listening Skills	Note Taking	
		Taking Instructions	
		Telephone Conversation	
		Develop Listening Skills Radio	
		Listening Skill - Listening to a	
		Listening Songs	
		Vocabulary - Common Idioms	
		Speaking Skills	Architecturally India
			Culturally India
	Diverse India		
	Family Tress and Relationships		
	Multi-Cuisine India - Narration		
	Traditionally India		
	Vocabulary		
	Reading Skills	Amazing Inventions	
		Amusing Stories	
		Homophones and Homonyms	
		How to Bake a Chocolate Cake	
		Reading Film Posters	
		Reading Job Advertisements	
		Samir's Diary	
		Tables and Graph	
		Vocabulary	
	Reading and Listening	Degree of Comparison	

Request for Proposal

Lesson Level	Module	Topic
		Ceremonies
		Common Errors in English
		Housing
		Movies
		Sports
		History
	Expressing Thoughts	Calendar Months
		Time
		Tracing the Years
	Enriching Vocabulary	Antonyms
		Interjections
		Odd Man Out
		Proverbs and Meanings
		Puzzles
		Synonyms
		Word Families
	Constructing Sentences	Different Types of Sentences
		Use of Gerunds
		Use of I Wish and I Wonder
		Use of If...then and If...Only
		Use of Participles
	Develop Pronunciation	Silent Letters
		Tone and Stress
		Tongue Movements

I) Computer Functional Literacy (ICT-Skills) e-Contents

Lesson	Module	Topic	
Computer Awareness	Introduction to Computer	What is a Computer?	
		History of Computer	
		Classification of Computers	
		How to Buy the best computer	
		Human brain Vs Computer	
	Basic Part of Computer	Basic Computer Block Diagram	
		Computer Hardware	
		Computer Software	
		Central Processing Unit	

Request for Proposal

Lesson	Module	Topic
		RAM
		ROM
		Input Devices
		Using your Mouse
		Using your Keyboard
		Output Devices
		Turning on/off your Computer
	Computer Memory	What is a Memory
		Storage Devices
	Types of Software	Booting Process
		System Software
		Application Software
		Operating System
		Program & Programming
		Programming Languages
		Various Application Software
		Using Paint
		Thin Client (Desktop)
	Essentials of Computer	The uses of Computer in daily
		Likes & Dislikes of Computer
		Why back up is important
		What is the Virus?
		Do's & Don'ts of Computer
		Career Opportunities in IT
What's Next?		
Email Client	Understanding Outlook	Overview of Email Client
		Piracy & Office Genuine
		Features in Email Client
		Configuring an E-mail Account
		Opening Email Client
		Exploring Email Client
		The Navigation Pane and To
	Working with contacts	Understanding Address Book
		Difference between Address
		Adding and Removing
		Importing and Exporting
		Contact Views
		Finding Contacts
		Sending e-mail using Contacts
	Working with inbox	Composing Messages

Request for Proposal

Lesson	Module	Topic	
		Formatting Messages	
		Saving Messages	
		Marking Urgent Messages	
		Using Attachment	
		Sending your Message	
		Replying to messages	
		Open and Save attachments	
		Using Instant Search	
	Manage time tasks and	Calendar basics	
		Appointments and Meetings	
		Scheduling Appointment	
		Scheduling Meetings	
		Scheduling Events	
		Group Scheduling	
		Working with Tasks	
		Working with Notes	
		Working with Journal	
	Advance message	Using Flag	
		Moving Messages to Folders	
		Coloring Messages	
		Working with Search Folder	
		Flagging Messages	
		Creating Rules	
		Finding Messages	
		Deleting Messages	
		Filtering Mails	
		Desktop Alerts	
		Email Etiquettes	
	Presentation	Understanding PowerPoint	Overview of PowerPoint
			Piracy & Office Genuine
		New features in Power Point	
		Getting to know PowerPoint	
		Creating a presentation using	
		Saving Presentation	
		Closing and Opening	
		Exiting PowerPoint	
	Working with slides	Getting started with slides	
		Inserting and Deleting Slides	
		Selecting a Layout	
		Working with Text Boxes	
		Formatting Text	
		Using Format Painter	
		Bullets and Numbering	

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Lesson	Module	Topic
		Slide Operations
		Proofing your Presentations
		PowerPoint views
	Working with objects	Working with Pictures
		Working with Chart
		Working with WordArt
		Working with Table
	Working with advance	Inserting Organization Chart
		Inserting Shapes
		Working with Clipart
		Working with Slide Master
		Inserting Header and Footer
		Inserting Action Buttons
	Customizing presentations	Using Themes in Presentation
		Changing Background Style
		Applying Slide Transitions
		Applying Animation Schemes
		Inserting Custom Animation
		Marking up Slides during
	Advance features	Reviewing Presentations
		Creating Photo Album
		Advanced PowerPoint Views
		Printing Slides
		Protecting PowerPoint
Word Processing	Introduction to Word 2010	Understanding Word
		About Office Genuine
		Getting Started with Word
		What is new in Word?
		Components of Work Area
		Using help
	Working with documents	Opening a blank and existing
		Entering and editing text
		Saving and closing a
		Using the Clipboard
		Working with Fonts
		Using the mini tool bar
		Paragraph Alignment and Line
		Paragraph Borders and
		Working with Hyperlinks
		Finding and Replacing Text
		Printing a document
	Formatting a document	Styling a Document

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Lesson	Module	Topic
		Bullets and Numbering
		Inserting Headers and Footers
		Adding Graphics to a
		Working with Tables
		Defining Document Setting
		Document Views
	Advanced formatting	Using the Font Dialog Box
		Creating New Styles
		Object Grouping and Rotation
		Creating Multilevel Lists
		Setting Tab Stops
		Applying Water Mark
		Page Colors and Borders
		Header and Footer Toolbar
	Publishing documents	Creating Table of Contents
		Setting up Notes
		Creating Citation and
		Adding Captions and Table of
		Cross References and Index
		Adding Table of Authorities
		Reviewing Documents
		Protecting Documents
	Advanced features	Creating a Blog Page
		Mail Merge
		Working with Forms
		Working with Macros
		Piracy & Office Genuine
		Opening Excel Program
		What's New in Excel
		Getting to know to the Work
		Navigating Work Area
		Auto Recover Feature
	Entering and editing data	Enter Data Manually and Using
		AutoComplete Feature
		Formatting / Working with
		Formatting / Working with
		Working with worksheets
		Save, Close, Open and Exiting
		Controlling Worksheet View
	Working with formulae and	Working with Formula
		Working with Function
		Using AutoSum Tool
		Formatting Cells Based on the

Request for Proposal

Lesson	Module	Topic
		Array Formulas and hyperlinks
		Auditing and Error Checking
		Look up Function
		Inserting Header and Footer
	Working with charts	Overview and uses of Charts
		Using the Chart Wizard
		Creating a Chart
		Creating Pie Chart
		Pivot table and Pivot Chart
		Sorting and Filtering Data
	Advanced features	Consolidating Data
		Tracking Changes
		Protecting Worksheet & Cell
		Password Encryption and IRM
		Working with XML

Lesson	Module	Topic
Safe uses of internet	Basic of internet	Introduction to Internet
		How Internet works?
		Benefits of internet
	Uses of internet	Search Engine
		Information Search
		Net Banking
		Paying Bills
		Online booking
		Email
	Hacking and internet	Introduction.
		Cyber-safety Threats
		What is hacking?
		Types of Hackers
		Misuse of internet
	Safe uses	How Virus/ hackers attacks
		Antivirus
		Firewall security
		E-mail, Bank account
Staying Safe while Browsing		

J) Smart Digital Classroom Equipment's

Component	Specifications
Type	LED TV
Category	Smart
Screen Size	65 inch
Resolution (Pixels)	3840x2160
Static contrast Ratio (Min 1000:1)	6000:1
Mounting	Wall Mounting Kit with installation
Ports	HDMI Port, USB Port, VGA Port, Ethernet Port, Built-in Wi-Fi
Inputs	Composite Input
Power Consumption	Under 200 Watt
Warranty	3 Years On site
CERTIFICATION	BIS
	OEM should be one of the top 5 manufacturer as per the Gartner's report.

The bidder to ensure that the proposed solution is compatible with the proposed device

K) Technical Specifications of HD Camera with Video recording for AI

HD Camera with Video recording for AI
<ul style="list-style-type: none"> a) Full HD 1080p at 30fps / 720p at 60fps streaming and recording b) H.264 video compression c) Background replacement (must works on Windows 7 and above) d) Full HD 1080p video calling e) Must Support Windows, Mac, Chrome OS and Android f) Stream clear video even in dim light g) Two integrated omnidirectional mics with noise reduction capture stereo audio from every angle, ensuring clear, no drop streaming and recorded video. h) Full HD glass lens

L) Functional and Technical Specifications of Artificial Intelligence based Educational Analytics system:

Artificial Intelligence base Educational system

- a) **Flexible and Dynamic architecture** - The components of A.I. should be elastic in nature and should be independent functionally singular micro services components with Each A.I. algorithms to be independent micro services that should be containerized.
- b) **Stack agnostic**- A.I. micro services components should be agnostic to language used in technology stack. It should work with any language, framework, and library of choice without any impact on the rest of the architecture.
- c) **Interoperability and portability**- Algorithms being containerized should ensure both interoperability and portability, allowing for code to be written in any programming language or any version of library and framework but then seamlessly exposes a single API to be integrated and ported with multiple modules/AI components of diverse stack. It should seamlessly integrate with other components and should be portable/ replica-table easily across the machines automatically.
- d) **Discoverability**- Central repository of hyper parameters, models, versioning and indexing should be provided to both algorithms and models. Objective and autonomous evaluation of various models obtained over time by training on the data that is coming through is must
- e) **Scalability and server less**- The algorithms or the platform should scale automatically and dynamically depending on the demand and load. It should obey the principles of server less architecture so the computes necessary are only utilized and no hard fixing of compute to use-cases takes place. The A.I. should include components that are self-optimizing for resources and cost depending on the load. Each and every A.I. supplied should support all 3 types of deployment 1. On premise 2. Central, 3. On edge
- f) **Highly parallel and distributed**- The algorithms should possess capability to operate parallel and distributed manner across cluster of machines. Both training and inference should be distributed.
- g) **Programmable infrastructure**- There has to be a platform to automatically manage and provision infrastructure through code, rather than using a manual

process. The solution should be completely handling the dependencies implicitly such as hardware, software, environment, libraries, versioning etc.

- h) **Interoperable**- The system should possess ability to call any algorithm regardless of programming language or technology stack or ecosystem of products.
- i) **Monitoring and Analytics**:- Autonomously objective metrics are evaluated and Insights into the performance of each algorithm, model and their versions are made available to key stakeholders. Visual map of composition, work flow, usage analytics, resource utilization, failure points etc. gives complete control of A.I work.

M) Text book based School e-Contents (Interactive Multimedia Content)

Educational contents should be provided with languages **Hindi, English, Urdu and Marathi**.

The solution must provide customized content in forms of digitized content of the existing syllabus known as E-learning as prescribed by the SSC board for 1st to 10th standard for all the subjects. The solution must be interactive, engaging & should cover topic wise each chapter that increases retention in the minds of the students. The solution should make the delivery process easier for the faculty. Teachers should be able to add extra content in solution in form of PPT, video (internet based or otherwise) or in word file to provide extra knowledge to students. The solution should be effective and activity based with hundreds of activities, experiments and solved examples.

The key aspect is that, the content should be designed in a way that basics of learning through watching, listening and reading is possible. Content should be designed from the perspective of experiential learning as opposed to simple knowledge transfer by speech and writing. The content should be mix of Audio Visual. It should have a well-organized index. It should have play/pause, forward and rewind tabs along with lesson progress report and questionnaires.

All the teacher should be provide with a login to access each subject. All the chapters should be mapped in terms of minutes and hours which will help teachers to finish syllabus in time.

All the revisions/ upgradation/updation to curriculum within the warranty period of 3 years should be included without any additional cost.

Following are some of important features the content should have,

1. Content should be register with Balbharati for all subject.
2. 1st to 10th standard all subjects for Hindi, English, Urdu and Marathi.
3. Each chapter should be divided into topic and subtopic exactly mapped with textbook (Covering each and every line of chapter)
4. History and Civic should have clips/real images/2D with animations. Similarly, Geography should have clips/real images/2D animations.
5. Math's subject should cover theory and solved exercises through animation.
6. Science subject should cover all practicals and activities mentioned in text book in the form of exercise.
7. Should have lesson planning facility in solution.
8. Content should have facility of being interactive.
9. Each chapter should have at least 30 no.s of question/ questions mention after each chapter with answer for each subject including languages.
10. Languages should have meaning explanation for difficult words linked to standard dictionary.
11. Content should be in animation format only, not in PPT presentation or lecture shooting or typing with voice over.
12. Teachers should have facility of uploading videos (internet based or otherwise), clips in PPT, word format in system with having user ID and password separately.
13. Solution should be able to provide web access and internet search based facility.
14. Administrator should have facility of planning, tracking and downloading reports in graphical formats for class and individual in solution.
15. Solution should have facility of accessing online content.
16. Content can work in annotation mode while using white board application.

Functional and Technical Specification for the Digital e-learning Platform

The Digital e-Learning platform should have the following Functional features:

- a) User Registration: Digital e-Learning platform must allow Teachers/Students to register to use the e-Learning contents for a particular grade.
- b) Administration: Digital e-Learning platform must allow administrator to manage user registrations and profiles, define digital content access, manage content, view reports in an offline environment.

Functional and Technical Specification for the Digital e-learning Platform

- c) **Planning & Tracking Academic Progress:** Planning and tracking of academic progress should be automatic and enabled for the following roles Students / Teachers.
- d) **Performance Tracking:** Tacking of the marks for a Class or an individual on the basis of the tests & quiz attempted using the app must be possible.
- e) **Content Upload:** Teachers must have the access to feature to upload contents as per the academics and link it to the available academic structure. The upload of contents must allow saving of uploaded contents locally or on a google drive in an organized manner as per the structure of the syllabus.
- f) **Question Bank:** Digital e-Learning platform should have interactive MCQ/Fill in the blanks etc. type questions for the available academic structure.
- g) **Teacher can create Question Bank:** Teacher should be able to add additional questions to the available academic structure and contribute towards creation of Question Bank.
- h) **Assessment:** Digital e-Learning platform must be having feature to conduct MCQ type quick assessments inline during a blended session, for topic/chapter level and for a subject level.
- i) **Google for Education:** Digital e-Learning platform must be integrated with free tools available like Google for Education. It must seamlessly integrate the Google Classroom forum for empowering teachers to create classes, distribute assignments, send feedback, and see everything in one place. It is instant. Paperless. Easy.
- j) **Google Drive:** Digital e-Learning platform must be integrated with free google drive for uploading and storing contents created by teachers.
- k) **YouTube Integration:** Digital e-Learning platform must be integrated with YouTube to allow teachers to add reference links for supplementary access to more MOOC contents. These added YouTube links must be placed as per the available academic structure and played from within the Digital e-Learning platform and stored for anytime access.
- l) **Lesson Planning:** Digital e-Learning platform should have notes feature to do Lesson Planning and execution for a specific sub topic within a topic/chapter.
- m) **Support blended learning:** Digital e-Learning platform should offer a curriculum that mixes classroom and online digital contents easily. The

Functional and Technical Specification for the Digital e-learning Platform

Digital e-Learning platform should be able to handle audio and video contents.

- n) Content integration features: Apart from supporting the vendor's own digital contents, the Digital e-Learning platform should provide native support to a wide range of third-party contents also.
- o) Reports: Digital e-Learning platform should generate graphical as well as tabular user wise reports on Session, Activities, Usage, Notes, Content Addition, Quiz etc. It should be possible to generate .pdf for these reports and even mailing these to registered email id from within the Digital e-Learning platform. The Reports must be available in Graphical as well as tabular formats.
- p) Dynamic Dashboard: Digital e-Learning platform should have a dynamic dashboard to represent the progress of the learning process and give a bird eye view for time spent, quiz available, modules available and progress.
- q) Platform Updates: Digital e-Learning platform should have facility to update Online for patches and updates.
- r) Accessibility: Digital e-Learning platform should have facility to change to font text size.
- s) Search: Digital e-Learning platform should have a facility to search educational contents within the selected grade, subject, chapter and topic.
- t) Localization: Digital e-Learning platform should have a facility to localize the User Interface.

The Digital e-Learning platform should have the following Technical features:

- a) The Digital e-Learning platform must be an App and should run on Android / Linux / Ubuntu and Windows Desktop/Server OS or higher version.
- b) The Digital e-Learning platform should be on a learning approach and thus can be learned in observe of ^[L]_[SEP] teachers by a peer group.
- c) The Digital e-Learning platform should allow the Teachers to upload or provide additional content reference in form of a document formats, media formats, notes etc. for any or all topic/sub topic during a Computer Aided Learning (CAL) session or prior to CAL session.
- d) The Digital e-Learning platform should have a Student Centric learning approach by providing Learning Objectives, Audio with Transcript/Subtitles, Course help, Course Search, Glossary, Summary, Notes etc.
- e) The Digital e-Learning platform should accommodate all types of learners i.e. visual and auditory.

Functional and Technical Specification for the Digital e-learning Platform

- f) The Digital e-Learning platform should maintain high visual standards and consistency with respect to fonts, colors, animations, designs etc. The e-Learning courseware contents must not use any material, images, animation, pictures etc. from the internet.
- g) The Digital e-Learning platform within the course should follow a logical sequence mapped to text books for easy learning. The lessons based on modular approach with at least 3 or more levels.
- h) The Digital e-Learning platform Lessons should be interactive, with proper animations and illustrations, should have more illustrated images and animations rather than scanned pictures and mere videos.
- i) The Digital e-Learning platform needs to engage learners for active learning by means of simulations, illustrations, activities like fill in the blanks, multiple choice quiz in form of In-Line questions to judge students' concentration during the CAL sessions.
- j) The Digital e-Learning platform should have narration/interaction in the same language the course is offered and must have inbuilt transcript support apart from audio in the language it is offered in this case Marathi.
- k) The Digital e-Learning platform should allow 3 Way learning approach (Audio, Visual and Hands on).
- l) The Digital e-Learning platform should be enabled with responsive design for accessibility over the Web/Desktop/Mobile/Smart Phones with all features.
- m) The Digital e-Learning platform should allow the users to navigate from one courseware to another using a single user interface to select a particular module or courseware with simple Icon based navigation
- n) The Digital e-Learning platform should be able to have ease of instructional language selection for all or particular module.
- o) The Digital e-Learning platform must be operational in a virtual/shared computing lab environment.
- p) The Digital e-Learning platform must have feature be able to stream online contents.

N) STEM LAB**Overview of STEM lab specifications**

Category	Description of the item
STEM Exhibits/Models	Table Top working exhibits based on different concepts of STEM (details in Table below)
Back Drop	Backdrops/informative charts that provide information about an exhibit/model. Each Exhibit to have a back drop.
Robotics Kits	Robotics display Models, Programmable Kits with Tab and Modular laptops with integrated robotic kits to design and develop robotics based models (details in table below)
User Manuals	Help guides and user manual should be provided
Physical infrastructure	Necessary electrical work, furniture tables for keeping all the models on display, room furnishing like a STEM LAB including theme based roof and wall painting with science concepts and layouts in the room.
Project Monitoring	Technical and academic support on a regular basis including workshops and expert visits
Impact Assessment	A pre-test and post-test to be conducted for the students and the reports to be discussed with the Principal to gauge the performance and map with desirable learning outcomes

The bidder should provide the following table top exhibits for the STEM labs.

Detailed STEM lab Exhibit requirements

S.No	Exhibit Name	Minimum Size
1	KE-PE Track	Base 7" x 26" Height 8".
2	Gyroscope	Base 20" x 7" Height 24"
3	Cone runs uphill	Height 4" Top 6" x 20"
4	Tower of Pisa	
5	Law of inertia	Base 9" x 3.5" Height 8.5"
6	Newton's Action- Reaction law	Base 5" x 20" Height 4"
7	Bumpy Track	
8	Wind Mill	Base 5" x 10" Height 7" , 3" x 3" x h5" box 2 nos

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S.No	Exhibit Name	Minimum Size
9	Mechanical advantage using Lever	Base 5" x 11" H 4" top 15 x 4" = 3 nos
10	Pulley Block	Base 20" x 6" Height 21"
11	Archimedes Screw	Base 5" x 12" Height 8" / 5"
12	Axel and Wheel	
13	Pinhole Camera	Base Open size 12" x 4" Height 4" , 4" x 6" 1 box, 3.5" x 8" 1 box
14	Zoetrope	Base 10" x 10" Height 6.5" , 9.5 x 9.5 Circle, h 5"
15	Newton's disk	Base 120m x120m Height 9" x 1.5" circle 3m x6"
16	Tangram	
17	Floating magnets	
18	Magnetic Field Tube	
19	Viscosity Tubes	Base 16" x 4" half height 4.5" full Height 9.5" , 2" x 9" Pipe 3 nos
20	Color Shadow	Base 12" x 10" Height 10" Light box 2" x 10" x 2.2"
21	Pythagoras model	Base 5.5" deep1" Height 11" w 10.5"
22	Sum of the angle of the Triangle	
23	Two Congruent right Triangles	
24	Hyperbola Model	Base 7" x 7" Height 12" top circle 6" x 6" 6mm = 2nos, 6 mm rod 11"
25	Corner mirror	Base 6" x 5.5" Height 6"
26	Infinity Tunnel	
27	Kaleidoscope	Base 8" 70mm x 2.5" Pipe + 2" x 5.5"Pipe
28	Periscope	Base 4" x 34" h4", 3" x 34" Pipe
29	Human torso with 15+ magnetically detachable parts	1.5feet*1.5feet*3 feet
30	Eye Model	1 feet * 1 feet
31	Ear Model	1 feet * 1 feet
32	Cell Structure	2 feet * 2 feet
33	Electrolysis of Water	1.5 feet * 1.5 feet
34	Acid Base and Salts	1 feet * 1 feet
35	Layer of soils	1 feet* 1.5 feet

S.No	Exhibit Name	Minimum Size
36	Bio Pesticides	1 foot * 1 foot
37	Hydro Turbine	2 feet & 3 feet
38	Solar power system	2.5 feet * 2.5 feet
39	Sound in different Medium	1.5 feet * 1.5 feet* 2.5 feet
40	Maglev	2.5 feet* .5 feet* .5 feet
41	Infinity Well	1.5 feet * 1.5 feet* 0.25feet
42	Rain Gauge	1feet * 1.5 feet
43	Electrostatic force (model)	1 foot * 1 foot * 2 feet
44	Meiotic cell division	
45	Lens explorer	1 foot * 2 feet
46	Exploration with concave and convex mirrors	1 foot * 2 feet
47	Working model of generator	1 foot * 1 foot
48	Series and Parallel Circuits	2 feet & 2 feet

O) Robotics Lab

Requirements for robotics lab for upper primary classes

Programmable and Modular Robotics Kit with following functionality as minimum per kit:

- 1) Programmable brain with inbuilt Bluetooth/Wi-Fi Capability
- 2) Inbuilt LCD display to indicate various parameters
- 3) Connection of Sensors and Motors with prefab high-quality RJ 11/RJ45 Cables
- 4) Graphical Programming Language Software with drag and drop blocks, program
- 5) Connection of Minimum 4 Sensors and 4 Actuators/Motors with one programmable brain
- 6) Provision to Connect Wired Remote Controller with Programmable Brain
- 7) High Quality Modular Metal Construction Set
- 8) Varieties of Gears
- 9) Varieties of Sensors like IR, Ultrasonic, Touch/PB, Sound, Color, Temperature
- 10)With Minimum 4 geared motors with variable speed capacity and compatible wheels.
- 11)The offered robotics kit shall have possibilities to make at least 50 different types of Robots/Systems. Few of them are listed as per the following:

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S.No	Detail	Concept
1	Fork Lift Robot	Force, Motion, Types of Motors, Switches, Concept of Torque, Lever, Gear & Pulleys and other mechanism
2	Foot Ball Playing Robot	Robot with pushing mechanism and with free ultra-high speed motion
3	Fire Detecting Robot	Microcontroller based fire detecting robot based on smoke sensor
4	Micro Controller Based - Line Tracer & Obstacle Detecting Robot	Working of sensors, types of sensors, controllers, various parts of controllers, sensors, programming, burning of program, types of cables
5	Advanced Robotic like Rope Car Robot, Multi terrain Robot, Walker Robot, Humanoid Robot, Robotic Crane etc.	Force, Motion, Types of Motors, Switches, Concept of Torque, Lever, Gear & Pulleys and other mechanism, Structures, Stability of structures, Specification of motors, Selection of gears & pulleys

Product : Modular laptop with built-in rail to embed micro-computer for Robotics	
CPU	Quad Cortex A53 @ 1.2 GHz
INSTRUCTION SET	YES
GPU	400MHZ VIDEO CORE IV
RAM	1 GB SDRAM
Storage	micro SD
Ethernet	10/100
Wireless	802.11n/Bluetooth 4.0
Video Output	HDMI/ Composite
Audio Output	HDMI/ Headphone
GPIO	40
Display	14' full HD LCD screen
Units	05 per school

Requirements for robotics lab for Secondary classes

Programmable and Modular Robotics Kit with following functionality as minimum per kit:

- 1) Programmable brain with inbuilt Bluetooth/Wi-Fi Capability
- 2) Inbuilt LCD display to indicate various parameters
- 3) Connection of Sensors and Motors with prefab high-quality RJ 11/RJ45 Cables
- 4) Graphical Programming Language Software with drag and drop blocks, program
- 5) Connection of Minimum 4 Sensors and 4 Actuators/Motors with one programmable brain
- 6) Provision to Connect Wired Remote Controller with Programmable Brain
- 7) High Quality Modular Metal Construction Set
- 8) Varieties of Gears
- 9) Varieties of Sensors like IR, Ultrasonic, Touch/PB, Sound, Color, Temperature
- 10) With Minimum 4 geared motors with variable speed capacity and compatible wheels.
- 11) The offered robotics kit shall have possibilities to make at least 50 different types of Robots/Systems. Few of them are listed as per the following:

Requirement of robotics labs for secondary classes

Programmable Robotic and Electronics System Kit:

- 1) Compatible with Upper Primary Robotic Kits
- 2) Robotic Brain with Attached Breadboard and provision to Mount and Interface Various Electronics Components.
 - a. Developing a basic code to switch ON and OFF a LED for example traffic lights
 - b. Developing a code to respond to pressing of a button for example gaming controller
 - c. IR Sensor based Projects
 - d. Temperature Sensor based projects
 - e. Sound Sensor based projects
 - f. Ultrasonic Sensor based Projects
 - g. Provision to connect with various output devices like Speaker, LED, Motors, Servos etc.
- 3) Graphical Programming Language with C code programming display

Electronics Lab Kit for Secondary classes with following items as minimum in each kit

Request for Proposal

S N	Kits	Qty
1.	Breadboard – 800 Pin	2
2.	Breadboard – 400 Pin	2
3.	Multimeter	1
4.	Arduino Uno with USB Cable and power Adapter	2
5.	Jumper Wires M-M, M-F, F-F	20
6.	9 Volt Rechargeable Battery with Compatible Charger	2
7.	16 X 2 Dot Matrix LCD Display Module	1
8.	Self-adhesive Proto shield for Arduino	1
9.	Assorted Resistor Box	1
10.	Assorted Capacitor Box	1
11.	Liner Voltage Regulator ICs 7805, 7809, 7812	2
12.	8 x 8 LED Matrix Module 7219	2
13.	LED 4 Digit Seven Segment Display Module	1
14.	GSM Module SIM800L	1
15.	GPS Module NEO6MV2	1
16.	LDR Module compatible with Arduino	1
17.	Joystick Module for Arduino	1
18.	Active Buzzer Small	5
19.	Active Buzzer Big	5
20.	Motor Driver Module L293D	1
21.	Voice recording and Playback Module	1
22.	Single Shaft BO Motor with Wheels	4
23.	DC toy Motor	5
24.	Vibrating Motor	2
25.	Multi-Color Alligator clip connectors	10
26.	9 V battery clip with DC Jack	2
27.	Hookup Wires Red & Black	10 mts each
28.	RGB LED	5
29.	5 mm LED of 5 different colors	10
30.	Assorted Diode Box	2
31.	Assorted Transistor Box	2
32.	Tactile PB switches	5
33.	555 timer IC	2
34.	Capacitive Touch MPR 121 Module	1
35.	Capacitive Touch Switch Module	1

Request for Proposal

S N	Kits	Qty
36.	IR Sensor Module	1
37.	Humidity and Temperature Sensor Module	1
38.	Triple Axis Magnetometer Module	1
39.	MQ Series Sensors MQ 2, MQ 3, MQ 4, MQ 5, MQ 7, MQ 135	1
40.	Ultrasonic sensor Module HC SR	4
41.	Triple Axis Accelerometer Module	1
42.	PIR motion detection Module	1
43.	2 Channel Relay Module	1
44.	1 Channel relay Module	1
45.	Soil Moisture sensor module	1
46.	Rain Drop Sensor Module	1
47.	Flex Sensor	1
48.	Force Pressure Sensor	1
49.	Color Recognition Sensor Module	1
50.	Water flow Sensor Module	1
51.	RFID Reader with tags	1
52.	RF Transmitter and Receiver Module	1
53.	Stepper Motor with driver board	1
54.	DC gear motor metal body	2
55.	Servo Motor 360 Deg, 180 Deg	1

Product: Modular laptop with built-in rail to embed micro-computer for Robotics	
CPU	Quad Cortex A53 @ 1.2 GHz
INSTRUCTION SET	YES
GPU	400MHZ VIDEO CORE IV
RAM	1 GB SDRAM
Storage	micro SD
Ethernet	10/100
Wireless	802.11n/Bluetooth 4.0
Video Output	HDMI/ Composite
Audio Output	HDMI/ Headphone
GPIO	40

Request for Proposal

Display	14' full HD LCD screen
Units	05 per secondary school

P) BALA

The environment of the school can be improved and made print-rich by BALA (Building as Learning Aid) paintings, installations, boards in the classrooms and the corridors which illustrate concepts from the curriculum and provide a vibrant learning environment in the school. Children subconsciously imbibe inputs from their surroundings and are constantly receptive to multiple sensory perceptions. To harness this potential, the school environment can be enriched to provide a learning opportunity at every step and turn of the building contours. BALA interventions would allow children to engage actively with the concept. The bidder will be required to Install/paint etc. illustrating concepts from the curriculum in Math, Language, and Sciences, social and environmental sciences, sanitation and hygiene. Moreover, BALA concepts should cover topics requiring problem solving, logical thinking, observation and analysis.

Building as Learning Aids to be painted on the walls/ ceiling/doors and windows using Oil or high-quality paint for long term usage. The bidder to provide the following 30 BALA concepts.

Details of BALA

Sr. No.	Category	Name of the Activity
1	Classroom Map and Outdoor Map	Let's know our State and India
2	Me and My World	"Me and My World" painted on the School Walls.
3	Simple Planetary Orbits	Rotating along the Axis and Around the sun
4		Earth's orbit around the sun
5	Color Teasers	Fan Color Wheels
6	Visual Illusions	Exploring and discovering Visual Illusions
7	Symmetry Around Us	Symmetry in Objects
8		Symmetry in Leaves
9		Symmetry with Mirrors
10	Calendars on Walls	Recording and Charting Temperature
11	Cycles Around Us	Food Chains

Request for Proposal

Sr. No.	Category	Name of the Activity
12		Crop Life Cycle
13	Rules Line Boards for Languages	Practice Neat Handwriting
14	Play with words	Word Wall
15	Measures Around Us	Measurement of Length with Non-Standard Tools
16		Estimation of Weights
17	Vertical Scales and Horizontal Scales	Measuring Accurately
18		Estimating Lengths – 1
19		Comparing Scales
20	Highlighting Angles in Buildings	Recognition of Angles
21	Fraction Aids	Vocabulary of Fractions
22		Fractions in a Wall Clock
23	Magic Squares on Floor and Walls	3 X 3 Magic Squares
24	Activity Boards and Surfaces on Walls	Alphabet Shapes
25		Using Geometrical Board
26	Dot Boards on Floor and Walls	Drawing Repetitive Patterns
27		Conversion Graphs
28	Grid Boards	Number Patterns
29	Healthy Habits	Washing Hands before eating
30		Eating habits

Q) Capacity building of Teachers and Head Masters

- Teacher Capacity Building shall be conducted in two sessions of 5 days each in two terms for all the teachers and will be supported by online sessions and handholding.
- The selected bidder must provide 1 day leadership training to all the headmasters/principals of the schools at a single venue provided by PCSCCL
- The induction training to be for a duration of 4 days per school for all teachers for subjects of Math, Science, English, Social Science teachers/ICT coordinator

- Refresher training of minimum two days in every 3 months per year to be provided to the stakeholders mentioned above by the selected bidder till the duration of the contract.
- Teachers to be trained so that they are able to use the STEM lab infrastructure for day to day teaching. An academic support program (activity sheet) to be provided to teach STEM in most interesting way
- In addition to the above modules, teachers must be trained in technology driven pedagogy, Effective lesson plans for unlocking learning blocks, Use of Innovative learning methodologies & improved classroom management skills leading to better retention, student learning outcomes and higher order thinking skills in students, and sensitizing teachers in using assessments
- Selected bidder to provide minimum one day Induction training to all key stakeholders at corporation level at a central school location (approx. 25 people)
- Post trainings, an initial assessment of the teachers to assess readiness; the selected bidder may be required to conduct further training for teachers which score poorly in the assessment test
- All the trainings (induction and fresher) should have greater emphasis on practical component with examples to conduct adaptive learning sessions, analyze student learning data and plan remediation classes
- Provision of Teacher manual with best practices on remediation for teachers in Marathi and English.
- Training logistics like Venue, refreshments, infrastructure and ensuring teacher's availability will be the responsibility of PCMC. All other arrangements and costing such as availability of trainers, travel and lodging of trainers will be the responsibility of the selected bidder.
- All the bidders to share a comprehensive training plan for both induction and refresher training of teachers and other stakeholders during Technical Evaluation stage of the RFP
- All the bidder should provide one sample lesson plan for teachers during Technical Evaluation stage of the RFP. The objective of the lesson plan is to understand the integration of the digital content to demonstrate pedagogy and expected Learning Outcome within classroom lecture.

R) Deployment of expert facilitators

- The bidder will supply expert facilitators for each of the subjects Math, Science and English per school i.e. 3 teachers per school
- The expert facilitators deployed by the bidder for the work shall be employees of the contractor for all intends and purposes
- The bidder shall have autonomy in all internal operational decisions including teacher selection, salaries, and transparent declarations of teacher's minimum qualifications
- The bidder shall be responsible for fulfilling all obligations towards teachers deployed under law, namely minimum wages act, PF act, ESI act bonus act, maternity benefit act, etc. if applicable at his own level and maintenance of such records as per rules.
- For IT cum Computer Teacher, the provided manpower must be an MCA or MSC-IT or PGDCA or BCA or B.Tech – IT/ CS
- For English Teachers, the provided manpower must be a graduate or equivalent examination recognized by UGC with concerned subject as optional subject, and, Degree or Diploma in Education (General) recognized by National Council of Teacher Education will be given preference
- For Science Teacher, the provided manpower must be a graduate or equivalent examination recognized by UGC with at least two subjects as optional subject out of the following subjects: Physics, Chemistry, Zoology, Botany, Micro-biology, Bio-technology and Bio-Chemistry, and Degree or Diploma in Education (General) recognized by National Council of Teacher Education will be given preference

S) Project Management and Helpdesk

Project Management – The bidder will be responsible for the overall project management and should ensure coordination with all the stakeholders of the project, various activities to be taken by the bidder are as follows;

- The bidder would be required to coordinate with all the stakeholders and support PCSCCL while interacting with various agencies (internal and external) during the course of the project. Bidder shall build mechanisms to ensure coordination and consultation between all key stakeholders on a continued basis to facilitate the execution of the project.
- Review / Preparation of the monitoring templates for project progress monitoring
- Use of project management tools to send periodic updates to all the stakeholders

- Submission of Weekly, Fortnightly, Monthly progress reports to the departmental

Helpdesk - The bidder will provide help desk services which will serve as a Single Point of Contact (SPOC) for all ICT related incidents and service requests. Online MIS Dashboard must be used by these help desk services for reporting all issues wr.t. the different technology solutions installed; the scope includes

- Help Desk facility for reporting issues / problems with the IT infrastructure
- Help Desk facility for reporting issues / problems with related to software and content
- The bidder shall set up all necessary channels for reporting issues to help desk. The incident reporting channels will be the following:
 - Online MIS Dashboard Help Desk system.
 - Specific E-Mail for raising a service request.
 - Dedicated toll-free Phone Number (freely reachable from landline as well as all major mobile service providers)
 - Remote assistance for quick resolution
- The helpdesk shall undertake the following activities:
 - Log issues / complaints related to IT and facility management at the school under the scope of work on the Online MIS Dashboard and issue an ID number against the issue / complaint.
 - Assign severity level to each issue / complaint.
 - Track each issue / complaint to resolution using the Online MIS Dashboard.
 - Escalate the issues / complaints, to department if necessary as per the escalation matrix to be defined in discussion with PCMC
 - Provide feedback to PCMC.
 - Analyse the issue / complaint statistics.
 - Creation of knowledge base on frequently asked questions (FAQs) to aid the users.

On department request provide detailed reports of all incidents raised by users and resolution time using Online MIS Dashboard.

The bidder shall ensure adequate manpower (at least 2 per 50 classrooms) is provided at school levels to support in raising the tickets, hardware issues, software issues and labs etc for the entire duration of the project.

T) Online MIS Dashboard

The bidder has to provide an Online MIS Dashboard for monitoring, controlling and reporting of all activities. There will be different levels of reporting, namely, Teachers, principal, PCMC. The Dashboard System will help to monitor the computers, monthly health check and should be able to produce different reports about uptime, downtime and idle time of all the systems. System will also facilitate generation of analytical reports to verify compliance with the SLA by the bidder.

Sr. No.	Functional specifications for Online MIS Dashboard
	<ol style="list-style-type: none"> 1. School information 2. Academic Year Configuration 3. Student information <ol style="list-style-type: none"> i) Student name and personal details ii) Roll No. iii) Student schooling history iv) Student Performance v) Student Marks vi) Course or Training module enrolled vii) Lab Attendance viii) Student Health 4. Staff (Teacher/Faculty/Lab Assistant) information <ol style="list-style-type: none"> i) Staff personal information ii) Faculty/ Teacher / lab Assistant Attendance iii) Faculty/ Teacher / lab Assistant Leave Records iv) Faculty/ Teacher Training Details v) Details of lectures delivered (Date, Subject of Training, Class Attended, etc.) 5. Training module feedback <ol style="list-style-type: none"> i) Training module details ii) Students Feedbacks iii) Teachers Feedback 6. Lab Infrastructure module

Sr. No.	Functional specifications for Online MIS Dashboard
	<p>i) Computer Lab Infrastructure and Smart classroom details (Computers Hardware, Printers, Software, Networking Hardware, LED Television, Back Up Devices, UPS, Web Camera, batteries etc.)</p> <p>ii) (Information should cover make, model, storage capacity, memory, warranty details, date of installation etc.)</p> <p>iii) Uptime and Downtime tracking for the lab IT Infrastructure (Computer, networking, internet, projector, UPS, UPS, etc.)</p> <p>iv) Acceptance test record of the Lab</p> <p>7. Help Desk Fault Logging module</p> <p>i) Fault logging (School Name, Date, Category of Issue, Issue details, Fault Logged by, Level of Issue, etc.)</p> <p>ii) Complaint Redressal details</p> <p>8. Reports to be Generated: Following reports must be generated from the collected data through the system:</p> <p>a. Student Demographics report</p> <ul style="list-style-type: none"> ✓ Class wise ✓ Religion wise ✓ Boy Girls Ratio ✓ RTE reporting <p>b. Teacher Demographics report</p> <ul style="list-style-type: none"> ✓ Teacher Qualification wise ✓ Subject wise ✓ Grade wise ✓ Department wise ✓ Salary Group wise <p>c. Cumulative Attendance report for Staff and Students</p> <ul style="list-style-type: none"> ✓ Student Attendance ✓ Teacher Attendance ✓ Instructor Attendance ✓ Visiting Faculty <p>d. Students examination report</p> <ul style="list-style-type: none"> ✓ Class wise

Sr. No.	Functional specifications for Online MIS Dashboard
	<ul style="list-style-type: none"> ✓ Grade wise ✓ Boy Girls Ratio ✓ Subject Wise ✓ Generate Online Marks sheet <p>e. Student Academic report – Class section and Class section capacity details</p> <ul style="list-style-type: none"> ✓ Subject wise ✓ Class Section wise <p>f. Lab Assets report</p> <ul style="list-style-type: none"> ✓ Lab Detail report ✓ SLA adherence report ✓ UP time / Down time report ✓ Item tracking report Breakdown/ Damage/Stolen/Replacement) ✓ Internet speed ✓ Uptime report <p>g. Help Desk</p> <ul style="list-style-type: none"> ✓ Open Tickets ✓ Closed Tickets ✓ Escalated Tickets ✓ Category wise Tickets <p>9. User Management: Should allow multi-level users Role based with access rights.</p> <p>10. Communication Management:</p> <p>11. Bulk Upload School Details: Should allow bulk upload of school details.</p> <p>12. Bulk Upload Student Details: Should allow bulk upload of student details.</p> <p>13. Academic Planner: Should allow to submit the curriculum to be taken in the Computer lab & Govt. should be able to track the progress of the classes being taken in the class.</p>

Sr. No.	Functional specifications for Online MIS Dashboard
	<p>14. Activation & Usage Report: Should allow Administrator to track the activation of the content and the usage of the content online</p> <p>15. Time table & Tracking: Should allow the schools to create the timetable and the track the timetable</p> <p>16. Role Management: Should allow the administrators to create the access roles for the users</p>

3.8 Timeline, Deliverables and Payment Schedule

This is a time bound and high priority project. It must be understood that the successful bidder has made the proposal after fully considering all such factors, which may have any bearing on the time schedule. The bidder will be responsible for timely completion of all the activities, deliverables mentioned in this RFP.

3.9 Payment and Delivery Milestones

The selected bidder would provide all relevant delivery within time from issuing work order, i.e., T = Date of Issue of Work Order

#	Milestone	Deliverable	Timeline	Payment Terms
Implementation Phase				
1	Commissioning & Sign Off	<ul style="list-style-type: none"> • Submission of delivery, installation and commissioning reports • Acceptance of UAT reports by end users 	T + 6 weeks	80% of the total fee
2.	Quarterly fee	<ul style="list-style-type: none"> • Teacher training reports • Reports on students 	T + 7th week onwards	5% of the total fee

<p>3</p>	<p>Success Fee</p>	<p>Quantitative:</p> <ul style="list-style-type: none"> • Average Attendance of students has increased by 5% after 1 year of the start of the program • Enrolment has increased by 5% over previous year • Dropouts have reduced by 5% over the previous year • At least 50% of the students in each class have shown 10% improved academic achievement over previous year's final assessment scores • 90% of the trained teachers in each school are using the technology as per the periods assigned to them <p>Qualitative:</p> <ul style="list-style-type: none"> • Students show improved spoken English Skills • Students show improved creative thinking and problem solving skills • Students show improved cooperative and team work skills 	<p>T + 18 months</p> <p>T+36 months</p>	<p>1.5% of the total fees</p> <p>3.5% of the total fees</p>
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A	Total fees for 3 years
B	Quarterly payment to be made <i>(A-X-Y-Z)* (36/3)</i>
X	80% of total fee @ installation, commissioning in 6 weeks
Y	1.5 % of total at 18 month based on the learning outcomes
Z	3.5 % of total at 36 month based on the learning outcomes

Terms & Conditions:

- a) Adherence to timelines is critical for the success of the project.
- b) PCSCCL will release the payment within 45 days of submission of valid invoice subject to the condition that invoice and all supporting documents produced are in order and work is performed as per the scope of the project, deliverables mentioned in the table above and meet the SLA Criteria. PCSCCL shall be entitled to delay or withhold the payment of a disputed invoice or part of it delivered by bidder.
- c) Payment for the pilot will be made by the PCSCCL. O and M & other by School Department, PCMC.

PCSCCL at its own discretion may decide to release partial payment for specific milestones, acceptance of which got delayed for reasons not attributable to the bidder.

3.10 Service Level Requirements/Agreements:

For delay in Go-live

In case of failure to successfully develop/install and commission the hardware, software, content, and teachers as per the timelines mentioned, a penalty of 1% of the contract value per week for each calendar week delay or part thereof shall be levied subject to a maximum of 10% of the total project cost. However, cumulative delay beyond 10 weeks will be sufficient to cause for termination of the contract. In which case the Performance Bank Guarantee of the bidder may be forfeited.

For delay in updation/ rectification of issues

Request for Proposal

Severity level	Description	Indicative list of issues	Rectification period	No. of non-functional data post rectification period	Penalty amount per ticket
R1	System issues that have the greatest business impact wherein application users are not able to perform his/her regular work at a time.	Non-working of software, server, projector.	1 working day	1-2 days 2-5 days 6-15 days >15 days Delay beyond 15 days may result in revocation of PBG and/or annulment of contract based on discretion of customer	INR 2000 per day per ticket
R2	System issues that have medium business impact wherein the user is partially able to perform his/her regular work.	Non-working of UPS, laptop, robotics kits	2 working days	1-2 days 2-5 days 6-15 days >15 days Delay beyond 15 days may result in revocation of PBG and/or annulment of contract based on	INR 1000 per day per ticket

Severity level	Description	Indicative list of issues	Rectification period	No. of non-functional data post rectification period	Penalty amount per ticket
				discretion of customer	
R3	Updation	Content updation to reflect new curriculum changes/additions , change of profile settings, screen resolution issues,	3 months for content development & 15 days for rollout to end users	1-15 days >15 days Delay beyond 15 days may result in revocation of PBG and/or annulment of contract based on discretion of customer	INR 1000 INR 2000

For delay in trainings

If the bidder fails to conduct the refresher training program of teachers as per the schedule, Penalty of INR 5,000/-per day training as per schedule will be imposed till the bidder conducts the training of teachers

For delay in Go-live

In case of failure to successfully develop/install and commission the content as per the timelines mentioned, a penalty of 1% of the contract value per week for each calendar week delay or part thereof shall be levied subject to a maximum of 10% of the total project cost. However, cumulative delay beyond 10 weeks will be sufficient to cause for termination of the contract. In which case the Performance Bank Guarantee of the bidder may be forfeited.

Section: 4
General Conditions of Contract

4 General Conditions of Contract

4.1 Governing Law

The Contract shall be governed by and interpreted in accordance with the laws of India.

4.2 Settlement of Disputes

- a) Performance of the Contract is governed by the terms and conditions of the contract. In case disputes arise between the Parties regarding any matter under the contract, either Party of the contract may send a written Notice of Dispute to the other party. The Party receiving the Notice of Dispute will consider the Notice and respond to it in writing within 30 days after receipt. If that Party fails to respond within 30 days, or the Dispute cannot be amicably settled within 60 days following the response of that Party, the clauses as mentioned in this RFP shall become applicable.
- b) Arbitration:
 - i. In the case of Dispute arising upon or in relation to, or in connection with the contract between the Department and the Successful SI, which has not been settled amicably, any Party can refer the Dispute for Arbitration under (Indian) Arbitration and Conciliation Act, 1996. Such disputes shall be referred to an Arbitral Tribunal consisting of three arbitrators, one each to be appointed by the Department and the successful SI, the third arbitrator shall be chosen by the two arbitrators so appointed by the Parties and shall act as Presiding Arbitrator. In case of failure of the two arbitrators appointed by the Parties to reach a consensus regarding the appointment of the third arbitrator within a period of 30 days from the date of appointment of the two arbitrators, the Presiding arbitrator shall be appointed by the Department. The Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment thereof, shall apply to these arbitration proceedings.
 - ii. Arbitration proceedings shall be held in **Pune**, India and the language of the arbitration proceedings and that of all documents and communications between the Parties shall be English.
 - iii. The decision of the majority of arbitrators shall be final and binding upon both Parties. The expenses of the arbitrators as determined by the arbitrators shall be shared equally by the Department and the successful SI. However, the expenses incurred by each Party in connection to the preparation and presentation shall be borne by the Party itself. All arbitration awards shall be in writing and shall state the reasons for the award.

4.3 Taxes and Duties

The successful SI shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies as applicable separately.

4.4 Performance Guarantee

- a) The successful SI shall at his own expense, deposit with the Department, within fifteen (15) working days of the date of notice of Award of the Contract or prior to signing of the contract, whichever is earlier, an unconditional and irrevocable Bank Guarantee (BG) from a Nationalised bank acceptable to the Department, payable on demand (In Pune), for the due performance and fulfilment of the contract by the successful SI (Please Refer Annexure III). The performance guarantee can be in the form of BG / FD / DD.
- b) This Bank Guarantee will be for an amount equivalent to 5 percent of the complete contract value. All charges whatsoever such as premium, commission, etc., with respect to the Performance Guarantee shall be borne by the successful SI.
- c) The Performance Guarantee may be discharged/returned by the Department upon being satisfied that there has been due performance of the obligations of the successful SI under the contract. However, no interest shall be payable on the Bank Guarantee.
- d) The Department shall also be entitled to make recoveries from the SI's bills, Performance 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.
- e) The Performance Guarantee shall be returned to the successful SI after receiving an indemnity bond from the SI, in case there is no penalty applicable. The SI needs to submit the No-Objection Certificate from the respective locations in order to get back the Performance Guarantee amount.
- f) In case of applicable penalty, the successful SI needs to pay-out the penalty amount to get back the Performance Guarantee or the same would be deducted from the Performance Guarantee.

4.5 Confidential Information

The Department and the successful SI shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any

documents, data, or other information furnished directly or indirectly by the other Party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. The Department shall not use such documents, data, and other information received from the successful SI for any purposes unrelated to the Contract. Similarly, the successful SI shall not use such documents, data, and other information received from the Department for any purpose other than the design, procurement, or other work and services required for the performance of the Contract.

4.6 Change in Laws and Regulations

Unless otherwise specified in the Contract, if after the date of the Invitation for Bids, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the successful SI has thereby been affected in the performance of any of its obligations under the Contract.

4.7 Force Majeure

If, at any time, during the continuance of this contract the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restriction, strikes, lock-outs or acts of God (hereinafter referred to as "events"), provided notice of happening of any such eventuality is given by either Party to the other within 21 days from the date of occurrence thereof, neither Party shall by reason of such event, be entitled to terminate this Contract nor shall either Party have any claim for damages against the other in respect of such non- performance or delay in performance; and deliveries under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of the Purchasing Officer as to whether the deliveries have been so resumed or not, shall be final and conclusive, provided further that if the performance in whole or part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, either party may at its option terminate the contract provided also that if the contract is terminated under this clause, the purchaser shall be at liberty take over from the contract at a price to be fixed by the

Purchasing Officer which shall be final, all unused, undamaged and acceptable materials, bought out components and stores in course of manufacture in the possession of the contractor at the time of such termination or such portion thereof as the purchaser may deem fit accepting such material, bought out components and stores as the contractor may with the concurrence of the purchaser elect to retain.

4.8 Termination

4.8.1 Termination by the Department

- a) The Department may, without prejudice to any other remedy for breach of Contract, terminate this Contract in case of the occurrence of any of the events specified in this RFP document. In such an occurrence, the Department shall give not less than 30 days' written notice of termination to the successful SI.
- b) If the successful SI does not remedy a failure in the performance of their obligations under the Contract, within thirty (30) days after being notified or within any further period as the department may have subsequently approved in writing.
- c) If the successful SI becomes insolvent or goes into liquidation, or receivership whether compulsory or voluntary.
- d) If the successful SI, in the judgment of the Department has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- e) If the successful SI submits to the Department a false statement which has a material effect on the rights, obligations or interests of the Department.
- f) If the successful SI places itself in a position of conflict of interest or fails to disclose promptly any conflict of interest to the Department.
- g) If the successful SI fails to provide the quality services as envisaged under this Contract, the Department may make judgment regarding the poor quality of services, the reasons for which shall be recorded in writing. The Department may decide to give one chance to the successful SI to improve the quality of the services.
- h) If the successful SI fails to comply with any final decision reached as a result of arbitration proceedings.
- i) If, as the result of Force Majeure, the successful SI is unable to perform a material portion of the Services for a period of not less than 60 days
- j) If the Department, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

- k) In the event the Department terminates the Contract in whole or in part, the Department may procure, upon such terms and in such manner as it deems appropriate, services similar to those undelivered or not performed, and the successful SI shall be liable to the Department for any additional costs for such similar services. However, the successful SI shall continue performance of the Contract to the extent not terminated.

4.8.2 Termination by SI

The successful SI may terminate this Contract, by not less than 30 days' written notice to the department, such notice to be given after the occurrence of any of the events specified in this RFP document:

- a) If the Department fails to pay any money due to the successful SI pursuant to this Contract and not subject to dispute pursuant to relevant clauses hereof, within 45 days after receiving written notice from the successful SI that such payment is overdue.
- b) If, as the result of Force Majeure, the successful SI is unable to perform a material portion of the services for a period of not less than 60 days.
- c) If the Department fails to comply with any final decision reached as a result of arbitration pursuant this RFP document hereof.
- d) If the Department is in material breach of its obligations pursuant to this Contract and has not remedied the same within 45 days (or such longer period as the successful SI may have subsequently approved in writing) following the receipt by the Department of the successful SI's notice specifying such breach.

4.9 Payment upon Termination

Upon termination of this Contract pursuant to this RFP document, the Department shall make the following payments to the successful SI:

- a) If the Contract is terminated pursuant to this RFP document, remuneration for services satisfactorily performed prior to the effective date of termination.
- b) If the agreement is terminated pursuant of this RFP document, the successful SI shall not be entitled to receive any agreed payments upon termination of the Contract. However, the Department may consider making a payment for the part satisfactorily performed on the basis of Quantum Merit as assessed by it, if such part is of economic utility to the Department. Applicable under such circumstances, upon termination, the Department may also impose liquidated damages. The successful SI will be required to pay any such liquidated damages to the Department within 30 days of termination date.

4.10 Exit Management

Exit management shall involve the complete handover of the project to the team identified by PCSCL, which would take care of the project operations after the tenure of the bidder ends after three years. Exit Plan has to be submitted by the bidder and approved by the concerned stakeholders.

Exit procedure needs to be carried out as per approved Exit Plan. Exit Plan would include transfer of Intellectual property, transfer of assets, knowledge transfer and smooth transition from bidder operation and maintenance team to new team selected and managed by PCSCL.

The bidder shall provide exit management plan ("Exit Management Plan") which shall deal with at least the following aspects of exit management in relation to the Agreement as a whole and in relation to the Project Implementation, and the Operation and Management SLA.

4.11 Applicable laws

- a) The Contract shall be interpreted in accordance with the laws prevalent in India.
- b) Compliance with all applicable laws: The SI shall undertake to observe, adhere to, abide by, comply with and notify the Department about all laws in force or as are or as made applicable in future, pertaining to or applicable to them, their business, their employees or their obligations towards them and all purposes of this RFP and shall indemnify, keep indemnified, hold harmless, defend and protect the Department and its employees/ officers/ staff/ personnel/representatives/ agents from any failure or omission on its part to do so and against all claims or demands of liability and all consequences that may occur or arise for any default or failure on its part to conform or comply with the above and all other statutory obligations arising there from.
- c) Compliance in obtaining approvals/ permissions/ licenses: The SI shall promptly and timely obtain all such consents, permissions, approvals, licenses, etc., as may be necessary or required for any of the purposes of this project or for the conduct of their own business under any applicable Law, Government Regulation/Guidelines and shall keep the same valid and in force during the term of the project, and in the event of any failure or omission to do so, shall indemnify, keep indemnified, hold harmless, defend, protect and fully compensate the Department and its employees/ officers/ staff/ personnel/ representatives/agents from and against all claims or demands of liability and all consequences that may occur or arise for any default or failure on its part to

conform or comply with the above and all other statutory obligations arising there from and the Department will give notice of any such claim or demand of liability within reasonable time to the SI.

d) All legal disputes are subject to the jurisdiction of Civil Courts Pune only.

4.12 Assignment

Neither the Department nor the successful SI shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other Party.

Section: 5
Guidelines for responding to RFP

5 Guidelines for responding to RFP

The bidders are expected to respond to the RFP using the forms given in this section and all documents supporting Technical Evaluation Criteria.

Forms to be used in Proposal

Form 1: Undertaking on Total Responsibility

Form 2: Particulars of the Bidder

Form 3: Bank Guarantee for Earnest Money Deposit

Form 4: Compliance Sheet for Technical Proposal

Form 5: Letter of Proposal

Form 6: Project Citation Format

Form 7: Proposed Solution

Form 8: Proposed Work Plan

Form 9: Team Composition

Form 10: Manufacturers Authorization Form

Form 11: Declaration on Source Code and Intellectual Property Rights

Form 12: Undertaking on Patent Rights

Form 13: Undertaking on Compliance and Sizing of Infrastructure

Form 14: Undertaking on Service Level Compliance

Form 15: Undertaking on Deliverables

Form 16: Undertaking on Support to Third Party Solution acceptance and certification

Form 17: Declaration of Activities sub-contracted

Form 18: Undertaking on Exit Management and Transition

Form 19: Declaration that the bidder has not been blacklisted

Form 20: Covering Letter

Form 21: Financial Proposal

Form 22: Performance Bank Guarantee

Form 23: Change Control Notice (CCN) Format

5.1 Clarifications

Bidders requiring any clarification on the RFP may send their queries to the Authority in writing by speed post/ courier/ special messenger or by e-mail so as to reach before the date mentioned in the key events and date. The envelopes shall clearly bear the following identification:

“Queries concerning RFP for **“Selection of Bidder for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools”**”.

1. The authority shall endeavor to respond to the queries within the period specified therein but no later than 7 (seven) days prior to the PDD. The authority’s responses will be sent by e-mail. The authority will post the reply to all such queries on the official website and copies thereof will also be circulated to all bidders who have purchased the RFP document without identifying the source of queries.
2. The authority reserves the right not to respond to any queries or provide any clarifications, in its sole discretion, and nothing shall be construed as obliging the authority to respond to any question or to provide any clarification.

5.2 Amendment of RFP

1. At any time prior to the deadline for submission of proposal, the authority may, for any reason, whether at its own initiative or in response to clarifications requested by an bidder, modify the RFP document by the issuance of Addendum/ Amendment and posting it on the official website and by conveying the same to the prospective bidders (who have purchased the RFP document) by fax or e-mail.
2. All such amendments will be notified in writing through fax or e-mail to all bidders who have purchased the RFP document. The amendments will also be posted on the official website along with the revised RFP containing the amendments and will be binding on all bidders.
3. In order to afford the bidders a reasonable time for taking an amendment into account, or for any other reason, the bidder may, in its sole discretion, extend the tender date.

Annexure I: TECHNICAL BID TEMPLATES

Form 1: Undertaking on Total Responsibility

On the letterhead of Lead Bidder

Date:

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Sub: Undertaking regarding Total Responsibility

Respected Sir,

This is to certify that we undertake total responsibility for the successful and defect free operation of the proposed Project solution, as per the requirements of the RFP for **“Selection of Bidder for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools”**.

Thanking you,
Yours faithfully

(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

Form 2: Particulars of the Bidder

SI No.	Information sought	Details of Furnished
1	Name and address of the bidding company	
2	Incorporation status of the firm (public limited / private limited, etc.)	
3	Year of Establishment	
4	Date of registration	
5	ROC Reference No	
6	Details of company registration	
7	Details of registration with appropriate authorities for service tax and GST Certificate	
8	Name, Address, email, Phone nos. and Mobile Number of Contact Person	

Form 3: Bank Guarantee for Earnest Money Deposit

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Whereas <Name of the bidder> (hereinafter called 'the Bidder') has submitted the bid for Submission of RFP # <RFP Number> dated <Date> for **“Selection of Bidder for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools”** (hereinafter called "the Bid") to Pimpri-Chinchwad Smart City Ltd. Know all Men by these presents that we are having our office at <Address> (hereinafter called "the PCSCCL") are bound unto the <<SDA>> (hereinafter called "the Purchaser") in the sum of Rs. <Amount in figures> (Rupees <Amount in words> only) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this <Date>

The conditions of this obligation are:

1. If the Bidder having its bid withdrawn during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of validity of bid
 - (a) Withdraws his participation from the bid during the period of validity of bid document; or
 - (b) Fails or refuses to participate in the subsequent Tender process after having been short listed;

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to <insert date> and including <extra time over and above mandated in the RFP> from the last date of submission and any demand in respect thereof should reach the Bank not later than the above date.

NOTWITHSTANDING ANYTHING CONTAINED HEREIN:

I. Our liability under this Bank Guarantee shall not exceed Rs. <Amount in figures> (Rupees <Amount in words> only)

II. This Bank Guarantee shall be valid upto <insert date>

III. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this Bank Guarantee that we receive a valid written claim or demand for payment under this Bank Guarantee on or before <insert date>) failing which our liability under the guarantee will automatically cease.

(Authorized Signatory of the Bank)

Seal:

Date:

Form 4: Compliance sheet for Pre-Qualification Proposal

S.No.	Description	Document to be submitted
1	The lead bidder & consortium partner/s should be a Registered Company in India under the Companies Act, 1956	<ul style="list-style-type: none"> • Certificate of Incorporation • GST Registration • Income tax registration • PF registration
2	The lead bidder should be registered and should have been in existence In India for a minimum period of 5 years	<ul style="list-style-type: none"> • Certificate of Incorporation
3	The lead bidder should have an average Annual turnover of not less than Rs. 20 Cr for the last three financial years (as of 31-03-2018)	<ul style="list-style-type: none"> • Certificate from the statutory auditor on his letter head confirming annual turnover for each of the last 3 years, net profit and average annual turnover over the past three financial years
4	The lead bidder should be profitable and have positive Net Worth as on 31-03-2018	<ul style="list-style-type: none"> • Certificate from the statutory auditor on his letter head confirming net worth as on 31-03-2018
5	The lead bidder should have experience of working in the IT/ITES/ Education sector for a min. of 5 years as on bid submission date	<ul style="list-style-type: none"> • Work Order Copies for orders sourced in the last 5 years
6	The lead bidder or the consortium partner should have executed / executing projects provisioning of involving IT hardware or educational e-learning software, Online MIS Dashboard with educational services like teacher training, multimedia content, project monitoring in at-least 60 Government schools in last 5 years	<ul style="list-style-type: none"> • Work Order Copies for orders sourced in the last 5 years

Request for Proposal

S.No.	Description	Document to be submitted
7	<p>The lead bidder or the consortium partner should have experience in at least 2 of the below mentioned interventions in any Government schools in last 5 years;</p> <ul style="list-style-type: none"> f) E-Learning content development and deployment g) Digital education h) Teacher capacity building and mentoring i) English lab experience j) Robotics lab experience 	<ul style="list-style-type: none"> • Work Order Copies for orders sourced in the last 5 years.
8	<p>The lead bidder or the consortium partner should have 20 professionals (teacher training, mentoring, instructional design, developing multi-media content, technology) on its rolls</p>	<ul style="list-style-type: none"> • A self-declaration or Certificate issued by Company's HR/Company Secretary of the company mentioning name of the employee, educational qualification, and area of expertise to be submitted.
9	<p>The lead bidder must possess valid certifications on ISO 9001:2015/ISO 20000-1:2011/CMMI 3</p>	<ul style="list-style-type: none"> • Copy of valid certificates
10	<p>The lead bidder should have direct authorization from the Original Equipment Manufacturer (OEM) for selling and supporting the components/products</p>	<ul style="list-style-type: none"> • Manufacturer Authorization Form (MAF) on the letter head of OEM duly signed and stamped for all the components/products
11	<p>The lead bidder and consortium partner/s should not have been blacklisted by any of the State/Central Government or organizations of the State/Central Government in India in the past three years.</p>	<ul style="list-style-type: none"> • Self-Declaration in this regard by the authorized signatory of the lead bidder and/or consortium partner as per the format

Form 5: Letter of Proposal

On the letter head of Lead Bidder

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Subject: Submission of the Technical bid for “**Selection of SI (System Integrator) for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools**”

Respected Sir

We, the undersigned, offer to provide services to the PCSCCL on “**Selection of SI (System Integrator) for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools**” with your Request for Proposal dated <insert date> and our Proposal. We are hereby submitting our Proposal, which includes this Technical bid and the Financial Bid sealed in a separate envelope.

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

We undertake, if our Proposal is accepted, to initiate the Implementation services related to the assignment not later than the date indicated in Fact Sheet.

We agree to abide by all the terms and conditions of the RFP document. We would hold the terms of our bid valid for <120> days as stipulated in the RFP document.

We hereby declare that we are not insolvent, in receivership, bankrupt or being wound up, our affairs are not being administered by a court or a judicial

Request for Proposal

officer, our business activities have not been suspended and we are not the subject of legal proceedings for any of the foregoing.

Yours sincerely,

Authorized Signature [In full and initials]:

Name and Title of Signatory:

Name of Firm:

Address:

Location: _____ Date: _____

Form 6: Project Citation Format

Project Name :		Country :
Project Location within Country :	Professional Staff Provided by the firm:	
Name and Address of the Client : Contact Details:		
Start Date (M/Y) : Completion Date (M/Y) :	Approx. Value of Services:	
Name of Associated Firm(s) if any :		
Name of Senior Staff (Project Director/Co-ordinator, Team Leader) involved and functions performed :		
Narrative Description of Actual Services provided :		
Description of actual services provided by your staff within the assignment:		

Form 7: Proposed Solution

The bidder to present on understanding of the project objectives and give demo on the following points

- Project Execution Strategy.
- E-Learning platform ease of use and innovative features for enhancing classroom pedagogy for technology-based education.
- Equipment's with Low carbon foot print, ease of use for teachers and functionality.
- Classroom Digital Learning Data Analytics
- AI Educational Analytics for class
- Any unique proposition

Form 8: Proposed Work Plan

No	Activity	Calendar Months											
		1	2	3	4	5	6	7	8	9	10	11	12
1													
2													

- 1) Indicate all main activities of the assignment, including delivery of reports (e.g.: as-is, interim, and final reports).
- 2) Duration of activities shall be indicated in the form of a bar chart.
- 3) All activities should meet the 8/80 criteria i.e should at least take 8 hours and a maximum of 80 hours

Form 9: Team Composition

Name of Staff with qualification and experience	Area of Expertise	Position Assigned	Task Assigned	Time committed for the engagement

Form 10: Manufacturers'/Producers' Authorization Form

(This form has to be provided by the OEMs of the products proposed)

On the letter head of Lead Bidder

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Sub: OEM Authorization Letter

Ref: Your RFP Ref: [*] dated [*]

Dear Sir,

Whereas [name of the Producer] who are established and reputable producers of [name/or description of the products] having production facilities at [address of factory] do hereby authorize [name and address of the Supplier] to submit a Tender, and subsequently negotiate and sign the Contract with you against RFP No.....dated..... for the above products produced by us.

We, M/s_____warrant all the equipment to be supplied by us against RFP No. Hereunder shall be brand new, free from all encumbrances, defects and faults in material. Workmanship and manufacturing shall be of the highest grade and quality and consistent with the established and generally accepted standards. Materials of the type ordered shall be in full conformity with the specifications, drawings or samples, if any, and shall operate properly. The items quoted by us for this tender are not obsolete and are still in production.

We, M/s.....also undertake that the spares of every equipment to be supplied by us hereunder shall be made available to PCSCCL for a period of minimum 3 years from the date of final acceptance.

Request for Proposal

We hereby extend full guarantee for the products offered for supply by our firm against the said RFP and duly authorize said firm in fulfilling all installation, technical support and maintenance obligations required by PCSCL.

[Signature for and on behalf of Producer]

Note: This letter of authority must be on the letterhead of the Producer, must be signed by a competent person.

Signature of the party with office stamp
(In token of acceptance of terms & condition)

Date:

Form 11: Declaration on Source Code and Intellectual Property Rights

On the letter head of Lead Bidder

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Sub: Self-certificate regarding the source code and Intellectual property rights under this Project

Respected Sir,

I, authorized representative of _____, hereby solemnly affirm to the IPR and Source Code rights as defined in Clause _____ of this RFP document.

In the event of any deviation from the factual information/ declaration, PCSCCL reserves the right to terminate the Contract without any compensation to the System Integrator.

Thanking you,
Yours faithfully
(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

Form 12: Undertaking on Patent Rights

On the letter head of Lead Bidder

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Sub: Undertaking on Patent Rights

Respected Sir,

I/We do hereby undertake that none of the deliverables being provided by us is infringing on any patent or intellectual and industrial property rights as per the applicable laws of relevant jurisdictions having requisite competence.

I/We also confirm that there shall be no infringement of any patent or intellectual and industrial property rights as per the applicable laws of relevant jurisdictions having requisite competence, in respect of the equipment's, systems or any part thereof to be supplied by us. We shall indemnify PCSCCL against all cost/claims/legal claims/liabilities arising from third party claim in this regard at any time on account of the infringement or unauthorized use of patent or intellectual and industrial property rights of any such parties, whether such claims arise in respect of manufacture or use. Without prejudice to the aforesaid indemnity, I/We shall be responsible for the completion of the supplies including spares and uninterrupted use of the equipment and/or system or any part thereof to PCSCCL and persons authorized by PCSCCL, irrespective of the fact of claims of infringement of any or all the rights mentioned above.

If it is found that it does infringe on patent rights, I/We absolve PCSCCL of any legal action.

Yours faithfully,
(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

Form 13: Undertaking on Compliance and Sizing of Infrastructure

On the letter head of Lead Bidder

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Sub: Undertaking on Compliance and Sizing of Infrastructure

I/We do hereby undertake that we have proposed and sized the hardware and all software (including perennial and enterprise wide licenses, unless stated otherwise) based on information provided by PCSCCL in its RFP document and in accordance with the service level requirements and minimum specifications provided and assure PCSCCL that the sizing is for all the functionality envisaged in the RFP document.

Any augmentation of the proposed solution or sizing of any of the proposed solutions (including software and hardware) in order to meet the minimum RFP requirements and/or the requisite service level requirements given by PCSCCL will be carried out at no additional cost to PCSCCL during the entire period of Contract.

Yours faithfully,
(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

Form 14: Undertaking on Service Level Compliance

On the letter head of Lead Bidder

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Sub: Undertaking on Service Level Compliance

Respected Sir,

I/We do hereby undertake that we shall monitor, maintain, and comply with the service levels stated in the RFP to provide quality service to PCSCCL.

However, if the proposed resources and infrastructure are found to be insufficient in meeting the RFP and/or the service level requirements given by PCSCCL, then we will augment the same without any additional cost to PCSCCL.

Yours faithfully,
(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

Form 15: Undertaking on Deliverables

On the letter head of Lead Bidder

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Sub: Undertaking on Deliverables

Respected Sir,

I/We as Bidder do hereby undertake that processes, deliverables/artifacts submitted to PCSCCL will adhere to the quality and standards specified in this RFP.

We also recognize and undertake that the deliverables/artifacts shall be presented and explained to PCSCCL and other key stakeholders (identified by PCSCCL, and also take the responsibility to provide clarifications as requested by PCSCCL.

We agree to abide by the procedures laid down for acceptance and review of deliverables / artifacts by the PCSCCL as stated in this RFP or as communicated to us from time-to-time.

We also understand that the acceptance, approval and sign-off of the deliverables by PCSCCL will be done on the advice of PCSCCL and any other agency appointed by the PCSCCL for the same. We understand that while all efforts shall be made to accept and convey the acceptance of each deliverable in accordance with the Project schedule, no deliverable will be considered accepted until a specific written communication to that effect is made by PCSCCL.

Yours faithfully,

(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

Form 16: Undertaking on Support to Third Party Solution acceptance and certification

On the letter head of Lead Bidder

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Sub: Undertaking on Support to Third Party Solution Acceptance and Certification

Respected Sir,

I/We understand that the System (including the application and the associated IT systems) may be assessed and certified by a 3rd party agency (to be identified by PCSCCL before the system is commissioned.

I/We understand that while the certification expenses will be borne by PCSCCL, the responsibility to ensure successful acceptance and certification lies with the Bidder.

I/We hereby undertake that we shall do all that is required of the Bidder to ensure that system will meet all the conditions required for successful acceptance and certification.

Yours faithfully,
(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

Form 17: Declaration of activities sub-contracted

On the letter head of Lead Bidder

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Sub: Declaration on Sub-contracting

Respected Sir,

I/ We hereby declare the following list of activities which we would be sub-contracted.

Sr No	Activity

I/ We would be responsible for ensuring that the sub-contracted work meets the requirements of the PCSCCL.

Thanking you,

Yours faithfully

(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

Form 18: Undertaking on Exit Management and Transition

On the letter head of Lead Bidder

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Sub: Undertaking on Exit Management and Transition

Respected Sir,

I/We hereby undertake that at the time of completion of our engagement with the PCSCCL, either at the End of Contract or termination of Contract before planned Contract Period for any reason, we shall successfully carry out the exit management and transition of this Project to the PCSCCL or to an agency identified by PCSCCL to the satisfaction of the PCSCCL.

I/We further undertake to complete the following as part of the Exit management and transition:

- a) We undertake to complete the updation of all Project documents and other artefacts and handover the same to PCSCCL before transition.
- b) We undertake to design standard operating procedures to manage system (including application and IT systems), document the same and train PCSCCL personnel on the same.
- c) If PCSCCL decides to take over the operations and maintenance of the Project on its own or identifies or selects any other agency for providing operations & maintenance services on this Project, then we shall provide necessary handholding and transition support, which shall include but not be limited to, conducting detailed walkthrough and demonstrations for the IT Infrastructure, handing over all relevant documentation, addressing the queries/clarifications of the new agency with respect to the working / performance levels of the infrastructure, conducting Training sessions etc.

I/We also understand that the Exit management and transition will be considered complete on the basis of approval from PCSCCL.

Yours faithfully,

(Signature of the Authorized signatory of the Bidding Organization)

Name:

Designation:

Date:

Time:

Seal:

Business Address:

Form 19: Declaration that the bidder has not been blacklisted

(To be submitted on the Letterhead of the responding agency)

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Ref: RFP Notification no <xxxx> dated <dd/mm/yy>

Subject: Self-Declaration of not been blacklisted in response to the RFP **“Selection of Bidder for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools”**

Respected Sir,

We confirm that our company, _____, is not blacklisted in any manner whatsoever by any of the State/UT and/or central government in India on any ground including but not limited to indulgence in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.

Place:

Date:

Bidder’s Company Seal:

Authorized Signatory’s Signature:

Authorized Signatory’s Name and Designation:

Note: The Bidder shall necessarily provide a copy of ‘Power of Attorney’ authorizing the signatory for signing the Bid on behalf of the Bidder in its Pre-Qualification Bid.

ANNEXURE II: FINANCIAL PROPOSAL TEMPLATE

Form 20: Covering Letter

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

Subject: Submission of the Financial bid for “**Selection of Bidder for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools**”

Respected Sir,

We, the undersigned, offer to provide the Implementation services for “**Selection of Bidder for Municipal e-Classrooms and School Learning & Resource Improvement Program (SLRIP) at 123 PCMC Municipal Schools**” in accordance with your Request for Proposal dated <Date> and our Proposal Technical and Financial Proposals). Our attached Financial Proposal is for the sum of <Amount in words and figures>. This amount is inclusive of the local taxes.

Form 21: Financial Proposal

Rate per School to be quoted as per the BOQ uploaded on tendering website

Note –

- The Bidder needs to provide the item wise unit rate as per the bill of material. PCSCCL may procure all or any components at its discretion.
- schools will be taken up as pilot project (Phase I) and learning from its operation will be used during scaling up for rest of the 117 schools

ANNEXURE III: TEMPLATE FOR PBG & CCN

Form 22: Performance Bank Guarantee

To,
The Chief Executive Officer,
PIMPRI CHINCHWAD SMART CITY LIMITED (PCSCCL)
Mumbai-Pune Road,
Pimpri, Pune-411018

Date

In consideration of PIMPRI CHINCHWAD SMART CITY LIMITED acting on behalf of the CEO & Director, PCSCCL (hereinafter referred as the "Authority", which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators and assigns) having awarded to M/s, having its office at (hereinafter referred as the "Bidder" which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns), vide the Authority's Agreement no. dated valued at Rs. (Rupees), (hereinafter referred to as the "Agreement") project implementation agency for [****], and the bidder having agreed to furnish a Bank Guarantee amounting to Rs..... (Rupees) to the Authority for performance of the said Agreement.

1. We, (hereinafter referred to as the "Bank") at the request of the bidder do hereby undertake to pay to the Authority an amount not exceeding Rs. (Rupees) against any loss or damage caused to or suffered or would be caused to or suffered by the Authority by reason of any breach by the said bidder of any of the terms or conditions contained in the said Agreement.

2. We, (indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Authority stating that the amount/claimed is due by way of loss or damage caused to or would be caused to or suffered by the Authority by reason of breach by the said bidder of any of the terms or conditions contained in the said Agreement or by reason of the bidder's failure to perform the said Agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability

under this Guarantee shall be restricted to an amount not exceeding Rs. (Rupees).

3. We, (indicate the name of Bank) undertake to pay to the Authority any money so demanded notwithstanding any dispute or disputes raised by the bidder in any suit or proceeding pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the bidder shall have no claim against us for making such payment.

4. We, (indicate the name of Bank) further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Authority under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till the Authority certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said bidder and accordingly discharges this Guarantee. Unless a demand or claim under this Guarantee is made on us in writing on or before a period of one year from the date of this Guarantee, we shall be discharged from all liability under this Guarantee thereafter.

5. We, (indicate the name of Bank) further agree with the Authority that the Authority shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said bidder from time to time or to postpone for any time or from time to time any of the powers exercisable by the Authority against the said bidder and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said bidder or for any forbearance, act or omission on the part of the Authority or any indulgence by the Authority to the said bidder or any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of so relieving us.

6. This Guarantee will not be discharged due to the change in the constitution of the Bank or the bidder(s).

7. We, (indicate the name of Bank) lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the Authority in writing.

8. For the avoidance of doubt, the Bank's liability under this Guarantee shall be restricted to Rs. *** crore (Rupees ***** crore) only. The Bank shall be liable to pay

Request for Proposal

the said amount or any part thereof only if the Authority serves a written claim on the Bank in accordance with paragraph 2 hereof, on or before [*** (indicate date falling 180 days after the Bid Due Date specified in the RFQ/RFP for the Project)].

Dated, the day of 20

For

(Name of Bank)

(Signature, name and designation of the authorized signatory)

Seal of the Bank:

Form 23: Change Control Notice (CCN) Format

Change Control Note	CCN Number:
Part A: Initiation	
Title:	
Originator:	
Sponsor:	
Date of Initiation:	
Details of Proposed Change	
(To include reason for change and appropriate details/specifications. Identify any attachments as A1, A2, and A3 etc.)	
Authorized by :	Date
Name:	
Signature:	Date
Received by the IP	
Name	
Signature	
Change Control Note	CCN Number
Part B: Evaluation	
(Identify any attachments as B1, B2, and B3 etc.)	
Changes to Services, charging structure, payment profile, documentation, training, service levels and component working arrangements and any other contractual issue.	
Brief Description of Solution:	
Impact:	
Deliverables:	
Timetable:	
Charges for Implementation:	
(including a schedule of payments)	
Other Relevant Information:	
(including value-added and acceptance criteria)	
Authorized by the Implementation Partner	Date:
Name:	
Signature:	