

RFP Reference No. BEPC/PMSHRI/ 2025-26/.....<sup>3244</sup>, Dated <sup>16</sup>../07/2025



**Request for Proposal (RFP)**

**For**

**Engagement of Implementation Partner for Education Quality Enhancement in  
Selected Government Schools Across Bihar under PM SHRI**

**(Through <https://eproc2.bihar.gov.in>)**

Bihar Education Project Council  
2nd/3rd Floor, Shiksha Bhawan,  
Bihar Rashtrabhasha Parishad Campus,  
Saidpur, Rajendra Nagar, Patna - 800 004 (Bihar)



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## DISCLAIMER

1. While this Request for Proposal document ("RFP") has been prepared in good faith, neither Bihar Education Project Council (BEPC), GoB nor its employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of Information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFP, even if any loss or damage is caused by any act or omission on their part.
2. This document is not transferable, and this RFP does not purport to contain all the information that each Bidder may require and accordingly is not intended to form the basis of any investment decision or any other decision to participate in the bidding process for the selection of the Successful Bidder for this Project. Each Bidder should conduct their own investigations and analysis and check the accuracy, reliability, and completeness of the information in this document and obtain independent advice from appropriate sources
3. Though adequate care has been taken while preparing this Bid Document, the Bidder shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately.
4. BEPC, GoB may modify, amend, reject or supplement this RFP document in accordance with norms and procedures and as per the requirement of the project. BEPC, GoB reserves the right to waive any irregularity in the proposal (RFP) and the BEPC, GoB makes it clear that the RFP is not an offer/ Agreement.
5. Neither the BEPC, GoB nor its employees shall be liable to any Bidder or any other person under any law including the law of Agreement, tort, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise, or be incurred, or suffered, in connection with this RFP document, or any matter that may be deemed to form part of this RFP document, or the award of the Agreement, or any other information supplied by the BEPC, GoB or their employees or consultants or otherwise arising in any way from the selection process for the award of the Agreement for the Project.
6. BEPC, GoB is not bound to accept any or all the Proposals. BEPC, GoB reserves the right to reject any or all the Proposals without assigning any reasons. No Bidder shall have any cause for action or claim against the BEPC, GoB or its officers, employees, successors, or assignees for rejection of their bid. The RFP submitted by the bidder will be the property of the BEPC, GoB.





**GLOSSARY**

Abbreviation/ Terms	Details
<b>Authorized Signatory</b>	The bidder's representative / officer vested (explicitly, implicitly, or through conduct) with the powers to commit the authorizing organization to a binding agreement. Also called signing officer/ authority having the Power of Attorney (PoA) from the competent authority of the respective Bidding firm.
<b>BEPC</b>	Bihar Education Project Council (BEPC),
<b>Bid</b>	A formal offer made in pursuance of an invitation by a procuring entity and includes any tender, proposal or quotation in electronic format
<b>Bid Security/ Earnest Money Deposit (EMD)</b>	A security provided to the procuring entity by a bidder for securing the fulfilment of any obligation in terms of the provisions of the bidding documents.
<b>Bidder</b>	Any person/ firm/ Agency/ company/ contractor/ vendor participating in the bidding process with the procurement entity
<b>Bidding Document</b>	Documents issued by the procuring entity, including any amendments thereto, that set out the terms and conditions of the given procurement and includes the invitation to bid
<b>Competent Authority</b>	An authority or officer to whom the relevant administrative or financial powers have been delegated for taking decision in a matter relating to procurement. Joint Secretary, Department of Education, GoB shall be the Competent Authority in this bidding document.
<b>Contract</b>	"Contract" means a legally enforceable agreement entered into between the Procuring entity and the selected bidder(s) with mutual obligations.
<b>LD</b>	Liquidated Damages
<b>LoA</b>	Letter of Acceptance
<b>LoI</b>	Letter of Intent
<b>PAN</b>	Permanent Account Number
<b>PQ</b>	Pre-Qualification
<b>Procurement Process</b>	The process of procurement extending from the issue of invitation to Bid till the award of the procurement contract or cancellation of the procurement process, as the case may be
<b>Purchaser/ Tendering Authority/ Procuring Entity</b>	Person or entity that is a recipient of a goods or service provided by a seller (bidder) under a purchase order or contract of sale, also called buyer. BEPC, GoB in this BID document.
<b>Services</b>	Any subject matter of procurement other than goods or works and includes physical, maintenance, professional, intellectual, consultancy and advisory services or any service classified or declared as such by a procuring entity
<b>Service Level Agreement (SLA)</b>	Service Level Agreement is a negotiated agreement between two parties wherein one is the customer and the other is the service provider. It is a service contract where the level of service is formally defined. In practice, the term SLA is sometimes used to refer to the contracted delivery time (of the service) or performance.
<b>State Government</b>	Government of Bihar (GoB)
<b>GST</b>	Goods and Service Tax
<b>WO/ PO</b>	Work Order/ Purchase Order

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## SCHEDULE OF BID PROCESS

SL	Information	Details
1	RFP Issuing Authority	State Project Director, Bihar Education Project Council (BEPC)
2	RFP No. and Date of availability	RFP Reference No. BEPC/PMSHRI/ 2025-26/..3.2.44., Dated ..1.6.../07/2025. Available for download from ..1.7.../7/ 2025, 05:00 PM onwards till ..0.7.../08/2025, 4:00 PM on e-proc-2 website
3	Last date for submission of written queries for clarifications	..2.4.../07/2025, 01:00 pm Email: <a href="mailto:etenderbepc@gmail.com">etenderbepc@gmail.com</a>
4	Date of pre-bid conference	..2.4...../07/2025, 2:30 pm at through online mode Google Meet joining info Video call link: <a href="https://meet.google.com/tnt-yoe-kzs">https://meet.google.com/tnt-yoe-kzs</a> e-mail: <a href="mailto:etenderbepc@gmail.com">etenderbepc@gmail.com</a>
5	Release of response to clarifications	..2.5...../07/2025, 5:00 PM
6	Last date of submission of bid	..07...../08/2025, 4:00 PM
7	Last date of submission of Hard copy of BG and Samples at BEPC	..07...../08/2025, 4:00 PM
8	Opening of Technical Bids	..07...../08/2025, 4:30 PM
9	Opening of Financial Bids	To be intimated
10	Contact person for queries	The Administrative Officer, Bihar Education Project Council, Shiksha Bhawan, Bihar Rashtra Bhasha Parishad Campus, Saidpur - 800 004. e-mail : <a href="mailto:etenderbepc@gmail.com">etenderbepc@gmail.com</a>

**Note:** BEPC reserves the right to amend document for RFP, schedules, and critical dates. It is sole responsibility of bidder to check <https://eproc2.bihar.gov.in> from time to time for any updated information. No communication in writing or through e-mail or any other mode will be sent by BEPC in this regard. BEPC also reserves the right to cancel the whole tender process at any time during the bid process without assigning any reason thereof.

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## 1. REQUEST FOR PROPOSAL

State Project Director, Bihar Education Project Council (BEPC), Patna invites Request for Proposal (RFP) for Engagement of Implementation Partner for Education Quality Enhancement in Selected Government Schools Across Bihar under PM SHRI from interested agencies. The bids comprising mandatory compliance along with technical bids and price bids shall be submitted on <https://eproc2.bihar.gov.in> website. The Scope of Services forming part of the assignment has been set out hereunder in this document. The Proposals would be evaluated on the basis of the evaluation criteria set out in this RFP ("Evaluation Criteria") to identify the successful Bidder for the Assignment ("Successful Bidder")

### 1.1 STRUCTURE OF THE RFP

BEPC, GoB intends to follow a 'two stage' bid process for selection of the successful Agency under LCS (Least Cost Based Selection Method)', as outlined in this RFP.

The Bidders would need to submit Pre-Qualification, Technical and Financial Proposal in the prescribed formats, within the Proposal Due Date as prescribed in this RFP. BEPC, GoB would evaluate all the Submissions in accordance with the evaluation criteria set out in the RFP to select a qualified bidder.

### 1.2 OBTAINABILITY OF RFP DOCUMENT

RFP document can be downloaded from the website [www.eproc2.bihar.gov.in](http://www.eproc2.bihar.gov.in) after paying tender fee of Rs. 5000/-and processing fee of Rs. 590 /. The fees will have to be paid online on the above-mentioned website. Proposals received without or with inadequate RFP Document fees shall be rejected.

## 2. BACKGROUND INFORMATION

The Bihar Education Project Council (BEPC), an autonomous body under the Education Department, Government of Bihar, has been entrusted with the implementation of *Samagra Shiksha & PM SHRI*—a holistic and integrated school education programme aligned with the vision of the National Education Policy (NEP) 2020.

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BEPC now aims to develop 836 schools under PM-SHRI scheme to equipped with high-quality infrastructure, modern pedagogical approaches, and technology-enabled solutions through Engaging Implementation Partner. These schools are envisioned to deliver inclusive and holistic education while fostering innovation, sustainability, and critical thinking among students. They will serve as benchmarks for educational excellence across the state.

In line with these objectives, the selected agency will be responsible for implementing the transformation of identified schools as per BEPC's directives. The agency shall focus on enhancing the physical, academic, and digital environments of the schools through modern infrastructure development, the adoption of innovative teaching-learning methodologies and the integration of appropriate technology. The execution of this mandate will require strict adherence to project timelines, compliance with statutory requirements, and transparency in all operational processes. Continuous monitoring, capacity building of school staff, and robust post-implementation support will be essential to ensure long-term sustainability and impact.

### **3. INSTRUCTIONS TO BIDDERS**

#### **3.1 SUBMISSION PROCEDURE**

- a) The bidders should submit their responses as per the format given in this RFP in the following manner: Technical Proposal and Commercial Proposal
- b) Please Note that prices should not be indicated in the Technical Proposal but should only be indicated in the Commercial Proposal.
- c) All the pages of the proposal must be sequentially numbered and must contain the list of contents with page numbers. Any deficiency in the documentation may result in the rejection of the Bid.
- d) The bids shall be uploaded through <http://eproc2.bihar.gov.in> as per the instructions available on the website.

#### **3.2 NUMBER OF PROPOSALS**

Each Bidder must submit only one (1) Proposal, in response to this RFP. Any Bidder who submits





or participates in more than one Proposal shall be disqualified.

### **3.3 PROPOSAL PREPARATION COST**

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

### **3.4 RIGHT TO ACCEPT OR REJECT**

- a) The BEPC, GoB may reject a proposal at any stage if it is found that the firm recommended for award has indulged in corrupt or fraudulent activities in competing for the contract in question, and may also declare a firm ineligible or blacklist the firm, either indefinitely or for a stated period of time, if at any time it is found that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.
- b) Notwithstanding anything contained in this RFP, the BEPC, GoB reserves the right to accept or reject any Proposal and to annul the bidding process and reject all Proposals at any time, without any liability or any obligation for such acceptance, rejection or annulment, without assigning any reasons.
- c) BEPC GoB reserves the right to reject any Proposal if, at any time, a material misrepresentation made by a Bidder at any stage of the bidding process is discovered.

### **3.5 CLARIFICATIONS**

A prospective Bidder requiring any clarification on the RFP must notify the BEPC, GoB in writing to The State Project Director, Bihar Education Project Council, GoB within such date as specified in RFP Time Schedule. At its sole discretion, BEPC, GoB will upload its response to such queries



on the website <https://www.bepcssa.in> [www.eproc2.bihar.gov.in](http://www.eproc2.bihar.gov.in). Bidders requiring specific points of clarification may communicate with the BEPC, GoB during the specific period using the following format. The queries can be submitted by email at [etenderbepc@gmail.com](mailto:etenderbepc@gmail.com) with name of assignment as the subject, in the following format:

<b>Bidders Request for Clarification</b>				
Name of Organization submitting request		Name and Position of person submitting request	Details of person and organization	
			Address: Tel: E-mail: Mobile:	
S. No	Bidding Document Reference (Number//Page)	Content of RFP requiring Clarification	Points of Clarification Required	Suggestions (If Any)
1				
2				

### 3.6 AMENDMENTS TO RFP

At any time prior to the Proposal Due Date, as indicated in the RFP Time Schedule, BEPC, GoB may, for any reason, whether at its own initiative or in response to clarifications requested by a bidder, amend the RFP by the issuance of Addenda. Such Addenda would be posted on the website <https://www.bepcssa.in> / [www.eproc2.bihar.gov.in](http://www.eproc2.bihar.gov.in) In order to afford Bidders reasonable time to take the Addendum into account, or for any other reason, BEPC, GoB may, at its discretion, extend the Proposal Due Date.

### 3.7 LANGUAGE AND CURRENCY

The Proposal and all related correspondence and documents must be written in English language. Supporting documents and printed literature furnished by the Bidder with the Proposal may be in any other language if they are accompanied by an appropriate translation in English language. Supporting materials that are not translated into English shall not be considered. For the purpose of interpretation and evaluation of the Proposal, the English language translation shall prevail. The currency for this bid is Indian Rupee. All the quotes should be in Indian Rupees only.

### 3.8 VALIDITY OF PROPOSAL

- i. The Proposal must be valid for a period not less than 120 days from the Proposal Due Date ("Proposal Validity Period"). BEPC, GoB reserves the right to reject any Proposal that does not meet this requirement.
- ii. Prior to expiry of the Proposal Validity Period, BEPC, GoB may request the Bidders to extend the period of validity for a specified additional period.
- iii. The Successful Bidder shall, where required, extend the validity of the Proposal till the date of execution of the Agreement.

### 3.9 BID SECURITY

- i. Bidders shall submit, along with their Bids, EMD of INR 7,50,00,000/- (Rupees Seven crore fifty lakh only) in the form of Bank Guarantee or Demand Draft or Online Payment issued by any Scheduled bank. EMD will be valid till 30.10.2025 (Bank Details: State Project Director - BEPC, A/c No. 245001000002776, IFSC Code - IOBA0002450)
- ii. The bid / proposal submitted without EMD, mentioned above, will be summarily rejected.
- iii. Micro, small and start up agencies registered for doing similar work are exempted from the payment of EMD, as per Government policy, subject to submission of valid registration certificate with the bid.
- iv. The Bid Security shall be returned to the unsuccessful Bidders within a period of 15 Days from the date of issue of LoA between the Department of Education, GoB and the Successful Bidder.
- v. The bid security of the successful bidder will be returned to the successful bidder on the submission of the Performance Security as specified in the RFP document.
- vi. The Bid Security shall be forfeited in the following cases:
  - a. If the Bidder withdraws its Proposal;



- b. If the Bidder withdraws its Proposal during the interval between the Proposal Due Date and expiration of the Proposal Validity Period; and
- c. If any information or document furnished by the Bidder turns out to be misleading or untrue at any stage of Project in any material respect.
- d. If the bidder, after the award of work order, fails to submit the performance security within the stipulated time.
- e. If Bidder practices unethical practices, any engagement in corrupt, fraudulent, collusive, cartelization, coercive, or obstructive practices during the project stage

### **3.10 BIDDER'S RESPONSIBILITY**

- i. The Bidder is expected to examine carefully the contents of all the documents provided. Failure to comply with the requirements of RFP shall be at the Bidder's own risk.
- ii. It shall be deemed that prior to the submission of Proposal, the Bidder has:
  - Made a complete and careful examination of terms & conditions/ requirements, and other information set forth in this RFP document.
  - Received all such relevant information as it has requested from the BEPC, GoB; and
  - Made a complete and careful examination of the various aspects of the Assignment.
- iii. BEPC, GoB shall not be liable for any mistake or error or neglect by the Bidder in respect of the above.
- iv. Bidder must understand whole RFP in line with Department requirement and providing the undertaking on execution the same unconditionally.
- v. All taxes payable to government must be paid by the service provider as per applicable norms and procedure. BEPC, GoB is nowhere liable and responsible for payment of such taxes. Only GST payment will be made by BEPC, GoB as per applicable rates on the fee quoted by the agency.



### 3.11 CORRESPONDENCE/ ENQUIRY

All correspondence/enquiries must be submitted to the following in writing by email/ fax/ registered post with **name of assignment** as the subject. The details are:

**The State Project Director,  
Bihar Education Project Council,  
Shiksha Bhawan, Bihar Rashtra Bhasha Parishad Campus,  
Saidpur - 800 004. e-mail: [etenderbepc@gmail.com](mailto:etenderbepc@gmail.com)**

### 3.12 FORMAT AND SIGNING OF PROPOSAL

- a) Bidders must provide all the information as per this RFP and in the specified format. BEPC, GoB reserves the right to reject any Proposal that is not in the specified format.
- b) The Proposal must include submissions to be made on the respective Proposal Due Date as set out in RFP Time Schedule or in Corrigendum/Addendums time to time.
- c) The person(s) signing the Proposal must initial all the alterations, omissions, additions, or any other amendments made to the Proposal.

### 3.13 MODIFICATION/SUBSTITUTION/WITHDRAWAL OF PROPOSAL

- a) The Bidder may modify, substitute, or withdraw its Proposal after submission, provided that a written notice of the modification, substitution or withdrawal is received by BEPC, GoB before the Proposal Due Date. No Proposal shall be modified, substituted, or withdrawn by the Bidder after the Proposal Due Date.
- b) The modification, substitution or withdrawal notice shall be prepared, sealed, marked and delivered in accordance with outer envelopes additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL", as appropriate.
- c) Withdrawal of a Proposal during the interval between the Proposal Due Date and expiration of the Proposal Validity Period will result in forfeiture of the Bid Security in accordance with this RFP.

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### 3.14 PROPOSAL DUE DATE

- a) Proposals must be submitted as per information provided in this RFP and advised to follow the corrigendum's / Addendum if any published time to time.
- b) BEPC, GoB at its sole discretion; accept any Proposal(s) after Proposal Due Date. Any such Proposal/s accepted shall be deemed to have been received by the Proposal Due Date.

### 3.15 TEST OF RESPONSIVENESS

Initial Bid scrutiny will be held, and incomplete details as given below will be treated as non-responsive, if Proposals:

- a) Are not submitted as specified in the RFP document.
  - b) Are found with suppression of details.
  - c) With incomplete information, undertakings, subjective, conditional offers and partial offers submitted.
  - d) Submitted without the all documents requested in the mentioned anywhere in RFP.
  - e) Have non-compliance with any of the clauses stipulated in the RFP.
  - f) With lesser validity period.
- All responsive Bids will be considered for further processing. The BEPC will prepare a list of responsive bidders, who comply with all the Terms and Conditions of the Tender. All eligible bids will be considered for further evaluation by a committee according to the Evaluation process defined in this RFP document. The decision of the Committee will be final in this regard.
  - BEPC, GoB reserves the right to seek clarification or reject any Proposal which in its opinion is non-responsive and no request for modification or withdrawal shall be entertained by Department of Education, GoB in respect of such Proposal.

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### **3.16 CONFIDENTIALITY**

Information relating to the examination, clarification, evaluation and recommendation for the Qualified Bidders shall not be disclosed to any person not officially concerned with the process. The BEPC, GoB will treat all information submitted as part of the Proposal in confidence and will ensure that all those who have access to such material treat it in confidence. BEPC shall not divulge any such information unless ordered to do so by any statutory authority that has the power under law to require its disclosure.

### **3.17 CLARIFICATIONS**

To assist in the process of evaluation of Proposals, BEPC, GoB may, at its sole discretion, ask any Bidder for clarification on its Proposal or substantiation of any of the submission made by the Bidder.

### **3.18 PROPOSAL EVALUATION**

The Qualification Submissions of the Bidders would be checked for responsiveness with the requirements of the RFP and shall be evaluated as per the Criteria set out in this RFP.

### **3.19 DECLARATION OF SUCCESSFUL BIDDER**

Upon acceptance of the Proposal of the tenderer technically qualified LCS (Least Cost Based Selection) criteria, BEPC, GoB shall declare the tenderers as the successful bidders for the Implementation of Scheme in selected schools under PM-SHRI scheme.

### **3.20 NOTIFICATIONS**

BEPC, GoB will notify the Successful Bidder by a Letter of Intent/Award (LoI/LoA) that their Proposal has been accepted.

### **3.21 BIHAR EDUCATION PROJECT COUNCIL, GOB'S RIGHT TO ACCEPT OR REJECT PROPOSAL**

- i. BEPC, GoB reserves the right to accept or reject any or all the Proposals without assigning any reason and to take any measure as it may deem fit, including annulment of the bidding

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process, without liability or any obligation for such acceptance, rejection or annulment.

- ii. BEPC, GoB reserves the right to invite revised Proposals from Bidders with or without amendment of the RFP at any stage, without liability or any obligation for such invitation and without assigning any reason.
- iii. BEPC, GoB reserves the right to reject any Proposal if at any time:
  - a. A material misrepresentation made at any stage in the bidding process is uncovered; or
  - b. The Bidder does not respond promptly and thoroughly to requests for supplemental information required for the evaluation of the Proposal.
  - c. This would lead to the disqualification of the Bidder. If such disqualification / rejection occurs after the Proposals have been opened and the Successful Bidder gets disqualified/ rejected, then BEPC, GoB reserves the right to take any such measure as may be deemed fit in the sole discretion of BEPC, GoB, including annulment of the bidding process.

### 3.22 PERFORMANCE BANK GUARANTEE (PBG)

- a. The successful bidder must furnish an unconditional and irrevocable bank guarantee / demand draft, in a format acceptable to BEPC, GoB valid for the 1 year or contract tenure or till warranty period whichever is later, of a value equivalent to 5% of the contract value within 14 working days of award of Letter of Intent (LOI).
- b. Failure to submit the PBG within the time stipulated in the LOI may lead to cancellation/ withdrawal of LOI and, in such case, BEPC, GoB reserves the right to take any such measure as may be deemed fit by Department of Education, GoB, including annulment of the bidding process.

## 4. CRITERIA FOR EVALUATION

The evaluation would consist of following:

- a) **Technical evaluation:** The Bidder shall be examined prima facie to substantiate the compliance with the Bidder's eligibility criteria as set out for this project in terms of

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organizational, financial and technical experience etc. The bid will be rejected, in case it does not meet the Eligibility criteria.

- b) Proposal may be rejected at any stage of the evaluation if it is found that the company has provided misleading information or has been black listed by a central or any state government or has indulged in any malpractice/ unethical practice or supplied poor quality items or issued show cause in any past or ongoing projects and has not honored contractual obligation elsewhere;
- c) After the technical evaluation is completed and approved, BEPC shall inform the Bidders who have submitted proposals, the detailed compliance of their Technical Proposals, and shall notify those Bidders whose Proposals did not meet the minimum technical criterion or were considered non-responsive to the RFP, that their Financial Proposals will be returned unopened after completing the evaluation process. BEPC shall simultaneously notify in writing to the Bidders that have complied with the Technical Criterion specified in the RFP the date, time and location for opening the Financial Proposals.
- d) Please note that no conditional bid will be entertained

#### 4.1 PRE-QUALIFICATION CRITERIA

#### 4.2 PRE-QUALIFICATION CRITERIA

Following table describes the pre-qualification criteria. A bidder participating in the bidding process shall possess the following minimum pre-qualification/ eligibility criteria. Any bidder failing to meet the stated criteria shall be summarily rejected and will not be considered for Technical Evaluation.

Sr. No.	Criteria	Supporting Documents
1	Bidder should be a Company registered under Indian Companies Act 1956/2013 and should be in existence from last 10 years having in business in India. The Bidder shall have following Registrations: PAN number	Certificate of Incorporation Copy of PAN Card. Copy of GST Registration.

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	GST Registration	
2	The bidder should have an average annual financial turnover of <b>Rs. 700</b> crores every year during last three financial years (i.e. FY. 21-22 ,22-23 & 23-24)	Latest Certificate (for last three years) issued by CA and audited financial statements.
3	The net worth of the bidder should be Positive and bidder should be profitable in the last three financial years i.e. 2021-22, 2022-23 and 2023-24.	Relevant supporting documents i.e. CA Certificate must be furnished.
4	The bidder should have a valid certificate: ISO 9001 -2015 Cmmi level 3 or above	Copy of Valid certificates in the name of Bidder Note : Cmmi Level 3or above certificate should be reflected on <a href="https://cmmiinstitute.com/pars/">https://cmmiinstitute.com/pars/</a> portal
6	The Bidder must not have been blacklisted for fraudulent practices by any of its clients, Central Government / State Government / UT Government / Government Undertakings/ University / Educational Institutions/ Government Bodies / PSUs in India, as on bid submission date..	Undertaking by the authorized signatory in their letterhead document.
7.	The bidder must have successfully undertaken at least the following numbers of similar nature of assignments of value specified herein: - One similar work order costing not less than the amount of 300 Crores <b>or</b> Two similar work orders costing not less than 200 Crores each <b>or</b> Three similar work orders costing not less than 100 Crores each “Similar” is defined as: Supply, Installation and Maintenance of IT / ICT / Education projects under Central/ State Government in last five (5) years as on bid submission date	Copy of Agreement /Work Order & completion certificate/ payment proof.

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8	The bidder must have successfully undertaken single assignment to execution of Single Education project in minimum of 10000 Government schools along with supply tracking portal under Central/ State Government in last five (5) years as on bid submission date.	Copy of Agreement /Work Order & completion certificate/ payment proof.
9	The bidder should have experience in supplying minimum 2 or more PM shri components/line items in single purchase order under Central/ State Government in last three (3) years as on bid submission date.	Copy of Agreement /Work Order & completion certificate/ payment proof.
10	The bidder should have successfully executed at least one student centric assignment for more than 10 Lakhs students in a single project in Government schools/institution under Central/ State Government in last five (5) years as on bid submission date.	Copy of Agreement /Work Order & completion certificate/ payment proof.
11	The bidder must have successfully undertaken at least one assignment of value not less than 50 crores under state Government of Bihar to prove the operational efficiency in last five (5) years as on bid submission date.	Copy of Agreement /Work Order & completion certificate/ payment proof.
12	Consortium of any kind is not allowed under this project	

#### 4.2 Technical Evaluation Criteria:

Only those bidders who qualify in Pre-Qualification as per above will be considered for Technical Evaluation. During the process of evaluation of the Technical Proposals, the Tender Committee may seek additional information and clarifications from any or all the bidders. This clarification will be sought through email communications/request a personal visit of the authorized representatives of the bidder. The bidder is expected to provide clarifications or additional information within the stipulated time as indicated in the communication. If the bidder fails to provide the clarification or additional information, the information provided in the technical

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proposal only will be used for evaluation. Only the bidders who score a technical score of more than 70 Marks will qualify for the evaluation in the commercial bid.

The technical bid will be evaluated on the below mentioned criteria:

Sl. No.	Description	Evaluation Criteria	Criteria wise Marks	Maximum Marks
1.	The bidder should have average annual turnover in last 3 financial years (2021-22, 2022-2023, 2023-2024 )	More than ₹700 Cr.	10	15
		More than ₹1000 Cr.	15	
2.	The bidder should have experience in implementing of PM Shri integrated project consisting of minimum of 5 different components in single purchase order under Central/State Government in last five (5) years as on bid submission date.  Copy of Agreement/Work Order and Completion certificate/Payment proof.	5 relevant components	5	15
		10 relevant components	10	
		15 relevant components	15	
3.	The bidder must have successfully undertaken an assignment to execute the Single Education project with a minimum of 10000 government schools/ Classrooms under Central/ State Government in last five (5) years as on bid submission date.  Copy of Agreement/Work Order and Completion certificate/Payment proof.	More than 10000	10	15
		More than 12500	15	
4.	The bidder must have successfully undertaken tracking and monitoring solution implementation assignment to execution of Single Education project in minimum of 10000 government schools under Central/ State Government in last five (5) years as on bid submission date.  Copy of Agreement/Work Order and Completion certificate/Payment proof.	More than 10000	10	15
		More than 12500	15	
5.	The bidder should have successfully executed at least one student centric assignment for	More than 10 lakh students	5	15

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	more than 10 Lakhs students in a single project in Government schools/institution under Central/ State Government in last five (5) years as on bid submission date.	More than 15 lakh Students	10	
	Copy of Agreement/Work Order and Completion certificate/Payment proof.	More than 20 lakh Students	15	
5.	<b>Technical Presentation and Demo</b> a) Case study and Similar Experience. b) Proposed Integrated project solution and execution plan. c) Work-plan and methodology – Proposed Mechanism of Monitoring, Ticketing & Customized report generation. d) Sample demonstration and technical compliance of each and every item with supporting document. e) Implementation, Operation & Maintenance Support plan with team structure.			25
<b>Total</b>				<b>100</b>

**Note: -**

- i. Samples (i.e. 1 Set consisting of all items) shall be sealed and separately submitted by the bidder on or before bid submission date and time. Demo logins for the proposed software need to be submitted along with the samples.
- ii. Consortium Purchase Order & Consortium will not be considered for evaluation.
- iii. Bidder should submit all samples and non-submission of any sample mentioned in Annexure- A & Annexure B will lead to rejection of Bid
- iv. Sample shall be returned after the demonstration and finalization of the tender process.

**4.3 Financial Bid Evaluation**

- i. Only the bidders who score a total technical score of 70 (Seventy) or more, will qualify for the evaluation of their commercial bids.
- ii. The Financial bids of technically qualified bidders will be opened on the prescribed

*Handwritten signatures/initials in blue ink.*



date.

- iii. The bid price will include all taxes and levies and shall be in Indian Rupees.
- iv. Any conditional bid would be rejected.
- v. Errors & Rectification: Arithmetical errors will be rectified on the following basis: "If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail".
- vi. If there is no price quoted for certain material or service, the bid shall be declared as disqualified.
- vii. The Total Bid Price, as computed by the Purchaser, shall be used for the purpose of commercial evaluation of bids.
- viii. The Lowest Cost Based Selection (L1) Method shall be used to select the bidder.
- ix. BEPC reserves the right to split the work on L1 rate among L1 & L2 or L1, L2 & L3 bidders.

#### 4.4 AWARD OF CONTRACT

- i. The Authority will award the Contract to the Bidder whose bid has been determined to be substantially responsive and has been determined as the best bid on LCS basis with Item wise lowest explored Prices.
- ii. The price is valid for the period of one year. BEPC reserve the right to extend price validity period and contract for one more year upon successful execution of project within time lines with best quality. Under these conditions, BEPC may place the workorder for additional quantity for future supplies.
- iii. BEPC will finalize the value of 5% PBG on final value equivalent to LoI/PO, and the same should be submitted by agency/firm within the period of 14 working days of the issue of





LoI.

- iv. The Authority shall however not bind itself to accept the best bid or any bid and reserves the right to accept any bid, wholly or in part.
- v. BEPC, GoB shall notify the successful bidder in writing that the proposal has been accepted.
- vi. An agreement shall be signed between BEPC, GoB and the selected bidder's laying down the conditions of work, payment etc.
- vii. The clause related to the local purchase preference policy 2024 may be included.
- viii. The EMD of unsuccessful candidate will be returned within 15 days of selection of the Agency.

#### **4.5 GENERAL EVALUATION ELABORATION**

An evaluation committee so constituted by the BEPC will evaluate the bids as per the following pattern:

- 1 Conditional bids shall be summarily rejected.
- 2 Evaluation committee will examine the bids to determine whether they are complete, whether any computational errors have been made, and whether the bids are generally in order.
- 3 Arithmetical errors will be rectified on the following basis: If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, Against the total price the base unit shall be corrected and deviation in any tax rates will lead for disqualification of bid. Incase tax varies in any line item, bidder should quote as per taxation law and failing of same will lead for disqualification of bid. If the Bidder does not accept the correction of the errors, his bid will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.
- 4 The Tenderer is expected to submit all product literatures, brochures, technology sheets



etc. documents along with General Bid for General Evaluation, in case document is not provided or provided but not a valid document, then the same parameter shall not be considered for marking for the specific Bidder. It is the Bidder's responsibility that all documents pertaining to every parameter of "General Evaluation Elaboration" need to be submitted and tagged/referenced to the evaluation parameter.

- 5 The Tenderer may conduct clarification meetings with each or any bidder to discuss any matters, technical or otherwise.
- 6 Further, the scope of the evaluation committee also covers taking of any decision with regard to the RFP, execution/ implementation of the project including management period.

## 5. Scope of Work:

The Scope of work for the agency is not limited but would include the following:

- i. The rates shall be on F.O.R at school location across Bihar, or any of the locations in accordance as per the line item in accordance of the requirement within Bihar.
- ii. BEPC shall make available the details regarding all destination point details with Nodal Officer name and contact number where selected agency shall supply the materials/services.
- iii. Timeline for the supply and execution of project is **180 Days** from the date of PO/Agreement.
- iv. The contract will be initially for a period of one year and extendable for a further period of one more year under mutual agreement at the same terms and conditions subject to satisfactory performance of the agencies without any delays and poor executions.
- v. Consolidated Price shall be quoted in BOQ chart for each kit combined together with all the items as indicated in the technical bid with specifications.
- vi. Prices shall be firm until the completion of work or supply and no enhancements of rates will be done / is permitted because of any escalation during the valid period of contract.
- vii. BEPC, GoB reserves the right to accept or reject any or part of offers without assigning any reasons.

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- viii. The supply of the all the items should be done within **180 Days** from the date of issuance of PO/Agreement and in case of any delay in delivery, penalty will be charged as per rules.
- ix. The quantity of items can be increased or decreased as per BEPC requirements in accordance with the budget sanctioned by State /central govt.
- x. Delivery time may be extended in case of any unforeseen circumstances such as natural calamities, emergency as per the mutual understanding of the department.
- xi. The supply of all the items shall be carried out strictly in accordance with the terms & conditions and specifications as stipulated in the tender, in the approved workman like manner and as per standard practice. Materials supplied shall be of high quality.
- xii. Inspection: During the supply of the material, department reserves the right to collect sample from supplier location, in the presence of the supplier for testing. The supplier shall be responsible to get the approved collected sample and submit the test reports conforming to standards from Govt./NABL accredited lab/ Any third part Agency appointed by BEPC/ GoB.

## 5.1 PROJECT DURATION

- The Contract Duration will be **for one year**.

## 5.2 Warranty:

- Consumables, Raw Materials, and Learning Aids: All consumable items, raw materials, and educational aids—such as Science Kits, Math Kits, Social Science Kits, Math Lab Kits, BALA materials, play tools, books, sports items, and similar materials etc. shall be exempted from warranty coverage.
- Electronic Equipment and Software: All electronic equipment and associated software, including Digital TVs, Smart Classroom solutions, Desktops, Android Notebooks, Servers, and related systems, shall be covered under a standard one-year warranty from the date of installation.
- The warranty shall not apply to any physical damage resulting from mishandling,

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misuse, negligence, or external factors.

## **6. PAYMENT SCHEDULE AND PENALTY:**

### **6.1 For Equipment Supply and Installation**

**Payment will be released after the satisfactory receipt of material at School Level. BEPC will provide the details of locations for supply and designated the Nodal person.**

If the selected bidder fails to perform services within the stipulated time schedule, the BEPC shall, without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of the undelivered items/value.

However, supply of at-least 20% of order value materials against the purchase order will be completed and submission of bill along with delivery challan, the payment of 75% amount against that bill amount shall be released. Rest 25% amount will be paid after completion of 100% work of that line items.

### **6.2 For Manpower**

The payments arrangements under this project are as follows:

- (a) 100% payment on monthly basis by BEPC on the satisfactory performance.
- (b) All Payments will be subject to deduction of Income Tax, GST and any other tax prevailing / applicable at the time of payment.
- (c) In bills all taxes should be shown separately.
- (d) No advance payment shall be made.
- (e) No interest would be payable on delayed payments. However, BEPC would normally make every possible effort to make payments promptly.
- (f) Liquidated Damages/Penalty

The applicable penalty which may be deducted from monthly invoice is as follows:-

Sl. No.	Parameters	Applicable Penalty
01.	Failure to provide services from the starting of lab (Vocational/ ICT/ others)	Rs 100 per day/-
02.	Failure in replacement of Manpower beyond 15 days.	Rs 100 per day/-

**Note:**

1. Payment will be as per GFR.
2. All payment to the Agency will be made in Indian Rupees.
3. GST component shall be paid as applicable and as per actuals.
4. No advance payment will be made
5. For facilitating Electronic Transfer of funds, the selected Agency will be required to indicate the name of the Bank & Branch, account no. (i.e. bank name, IFSC Code and Bank A/c No.) and forward a cheque leaf duly cancelled, to verify the details furnished. These details should also be furnished on the body of every bill submitted for payments by the selected Agency.

**7. Dispute Resolution**

- a) The bids and any contract resulting there from shall be governed by and construed according to the Indian Laws.
- b) All settlement of disputes or differences whatsoever, arising between the parties out of or in connection to the construction, meaning and operation or effect of this Offer or in the discharge of any obligation arising under this Offer (whether during the course of execution of the order or after completion and whether before or after termination, abandonment or breach of the Agreement) shall be resolved amicably between Department and the vendor's representative.
- c) In case of failure to resolve the disputes and differences amicably within 30 days of the receipt of notice by the other party, then the same shall be resolved as follows:





- I. Conciliation: - All disputes or differences whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be first settled by way of conciliation and failing which, by way of arbitration in accordance with the Rules of Arbitration of the Indian Council of Arbitration and the award made in pursuance thereof shall be binding on the parties.
  - II. The dispute shall be first referred to the Development Commissioner for conciliation who shall conduct conciliation proceedings which will be held at Patna, Bihar.
  - III. Arbitration: - In case the conciliation proceedings fail, the dispute shall be referred to the arbitration as per the Arbitration Act.
  - IV. All legal disputes will come under the sole jurisdiction of Patna, Bihar. The venue of the arbitration shall be Patna.
- d) The Arbitral award shall be final and binding on both the parties.
- e) Work under the contract shall be continued by the vendor during the arbitration proceedings unless otherwise directed in writing by Department unless the matter is such that the work cannot possibly be continued until the decision of the arbitrator is obtained. Save as those which are otherwise explicitly provided in the contract, no payment due, or payable by Department, to the vendor shall be withheld on account of the ongoing arbitration

## 8. Termination & Blacklisting

- I. The Department may terminate this Agreement and Blacklist/Debar the vendor, in case of occurrence of any of the events specified below. In the event of such an occurrence, the First Party may give not less than 15 days written notice of termination to Second Party.
  - a) If the vendor is in material breach of its obligations pursuant to this Agreement and has not remedied the same within 15 days.
  - b) If the vendor becomes insolvent or goes into compulsory liquidation

- c) If the vendor, in the judgement of Department, has engaged in corrupt or fraudulent practices in competing for or in executing the contract
- d) If the vendor submits to Department a false statement which has material effect on the rights, obligations, or interests of the Department.
- e) If the vendor places itself in position of conflict of interest or fails to disclose promptly any conflict of interest to the Department.
- f) If the vendor fails to provide Quality products and services as envisaged under this Agreement.
- g) If the vendor quoted prices are found abnormally high than market operating Prices/GeM Prices/ BEPC Previous Obtained Price references
- h) Serious discrepancy and delay in delivery of services or the performance levels agreed upon, which might have an impact on the functioning of the Department.
- i) Failure of the vendor mobilize manpower, follow local laws, clumsy execution of work, and total disregard to public safety and its own employees.
- j) Failure to abide by any lawful directions of the Department.

II. **Penalties:** - The Department may impose a suitable penalty of the vendor of the failure of such activities as mentioned above. Such penalties shall be deducted from the pending bills/bank guarantee of the vendor. However, the Department shall issue a notice given 15 days of time to the vendor before imposing such penalty.

III. **Termination Payments:** - These payments shall mean the amount of payment by either party to the other party upon termination. Upon termination of the contract, Department may encash and appropriate the performance security/bank guarantee etc. The Department may clear outstanding dues of the sub-vendors of the second party out of such encashment and/or from the pending bills of the second party. After clearing such liabilities, any valid dues of the second party may be paid thereafter

IV. **Blacklisting without termination:** - The Department may blacklist the vendor without terminating the contract for any of the failures or acts of commissions or omissions under this Agreement.

V. **Foreclosure with Mutual consent:** -





- a) Without prejudices to any provisions of this agreement, Department and the vendor may foreclose this agreement by mutual consent in circumstances which does not constitute either party's default without any liability or consequential future liability for either party.
- b) Should a Party intend to foreclose this Agreement by mutual consent, the intending Party shall issue a notice to the other Party and upon issuance of such notice, the other Party may within 15 days from receipt of such notice either agree to such foreclosure or raise objection(s) to the same by intimating either of the two possible positions to the intending Party in writing.
- c) In either case of the other Party agreeing to the proposed foreclosure or otherwise, the Parties may negotiate the proposed foreclosure and sign a Supplementary Agreement for foreclosure to the main Contract Agreement within 30 (thirty) days of the date agreeing by both Parties. Foreclosure shall not come into effect unless and otherwise Supplementary Agreement is signed.
- d) Any attempt or endeavour for foreclosure by mutual agreement shall be without prejudice to the rights and obligations of the Parties herein and the factum of such an attempt or exercise shall not stop either of the Parties from discharging their contractual obligations under this Agreement.
- e) For the avoidance of doubt, it is clarified that such foreclosure will be without prejudice to the Vendor and shall not affect the Vendor in any way if it wishes to bid in future projects of the Department.

#### VI. Transition and Exit Plan:

The vendor shall ensure that the transition is smooth in case the contract is terminated or foreclosed with mutual consent. In addition to the cancellation of contract, Department reserves the right to charge appropriate penalties and liquidated damages from the selected Agency. Further:-

- a) All risks during transition stage shall be properly documented to ensure smooth transition without any service disruption.
- b) The transition plan along with the period shall be mutually agreed between vendor and Department when the situation occurs. Vendor shall be released from the project



once successful transition is done meeting the parameters defined for the successful transition.

- c) During the exist, Vendor should provide the inventory list with Tagging of each item.

Note:- Blacklisting/Debarment of the vendor shall be natural consequence of the termination. The Blacklisting/Debarment shall be for such a period as may be specified by the Department. Provided that before placing the vendor in the blacklist, with or without the termination of the contract, the Department shall issue a notice given 15 days of time to the vendor.





**ANNEXURE 1:**

**Technical Specifications**

**Attached as separate Document**

**Annexure A**

**&**

**Annexure B**



**ANNEXURE 2: LETTER OF SUBMISSION**  
(On the letterhead of the bidder)

To,

The State Project Director,  
Bihar Education Project Council,  
Shiksha Bhawan, Bihar Rashtrabhasha Parishad Campus,  
Saidpur, Patna - 800 004.  
e-mail: etenderbepc@gmail.com

**Sub: - Letter of Submission for Engagement of Implementation Partner for Education Quality Enhancement in Selected Government Schools Across Bihar under PM SHRI.**

**Ref: - -----**

Sir,

We have read and understood the Request for Proposal (RFP) in respect of the captioned Assignment provided to us by BEPC, Department of Education.

We hereby agree and undertake as under:

- a. Notwithstanding any qualifications or conditions, whether implied or otherwise, contained in our Proposal we hereby represent and confirm that our Proposal is unqualified and unconditional in all respects.
- b. This Proposal is valid till (120 days from the Proposal Due Date). RFP can be download from the website [www.eproc2.bihar.gov.in](http://www.eproc2.bihar.gov.in) after paying tender fee of Rs. 5000/- and processing fee of Rs. 590/-. The fees will have to be paid through online on the above-mentioned website. Proposal received without or with inadequate RFP document fees shall be rejected.
- c. Bidder shall submit, along with their bids, EMD of Rs. XXXXXX crores (XXXXXXX crores only) in the form of Bank Guarantee issued by the Schedule Bank, in favor of the "State Project Director, Bihar Education Project Council (IFSC Code IOBA0002450).
- d. That as on the date of submission of this tender, there is no blacklisting order that bars us from working with any Government Agency / Department on account of deficiency in service.

Name of the Bidder

Date: -

Signature of Authorized Signatory





**ANNEXURE – 3: LIST OF SIMILAR WORK**

Sl	Name of Client	Location	Description of work	Value of Contract/Work in Rs.	Duration (Start date- Completion date)
1					
2					
3					

**NOTES:**

- Each of the listed works shall be supported with the copy of work order & other documentary evidences as per the eligibility and technical evaluation criteria.
- Non-disclosure of any information in the schedule will result in disqualification of the firm

Signature of the  
applicant/Authorized  
Representative of  
Agency with  
Seal/Stamp

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**ANNEXURE – 4: FORMAT FOR FINANCIAL PROPOSAL**  
(On the letter head of the bidder)

Date: -

To,

The State Project Director,  
Bihar Education Project Council,  
Shiksha Bhawan, Bihar Rashtrabhasha Parishad Campus,  
Saidpur, Patna - 800 004.  
e-mail: etenderbepc@gmail.com

**Sub: - Letter of Submission for Engagement of Implementation Partner for Education Quality Enhancement in Selected Government Schools across Bihar under PM SHRI.**

**Ref: - -----**

Sir,

We are pleased to quote the price as below. We have reviewed all the terms and conditions of the 'Request for Proposal' and confirm that, we would abide by all the terms and conditions. We hereby declare that there shall be no deviations from the stated terms in the RFP.

We further declare that, any State Government, Central Government or any other Government or Quasi Government Agency has not barred us from participating in any Bid.

Our Financial Quote for the **Engagement of Implementation Partner for Education Quality Enhancement in Selected Government Schools across Bihar under PM SHRI**, BEPC, GoB, Bihar, Patna is INR (in figures) XXXXXXXXXXXX (INR in Rupees). This amount includes all charges and taxes but is **exclusive of GST** which shall be payable at prevailing rates.

We abide by the above offer/quote and terms condition of the RFP, if the BEPC, Bihar selects us as the Selected Bidder/Agency. If our offer is accepted and if we fail to perform in the manner as specified in the RFP Document, the amount of Bid Security, as aforesaid, shall stand absolutely forfeited to the BEPC, Bihar without prejudicing the rights of the BEPC, Bihar to proceed further in any manner it deems fit. Until a formal Agreement is prepared and executed between us, this bid, together with your LOI, shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid that you may receive. We declare that the information stated above and enclosed is complete and absolutely correct and any error or omission therein, accidental or otherwise, as a result of which our bid is found to be nonresponsive, will be sufficient for the BEPC, Bihar to reject our bid and forfeit our bid security in full.

Name

Sincerely,

Name of the Firm/Agency

Designation and Address

Mobile and Email

**Signature of the applicant/  
Authorized Representative of Agency  
with Seal/Stamp**





### ANNEXURE – 5: Financial Bid Format

#### Selection of Agency for Implementing Integrated Educational Project for Government Schools across the State of Bihar.

Sr. No.	Activity Master Detail Name	Quantity	Rate Per School/Unit/Student/Teacher etc.	GS T in %	GST Amount of Base Rate	Total Unit Price Including GST	Total Cost
		A	B	C	$D=B*\%C$	$E= B+D$	$F=A*E$
1	BALA Feature						
2	Child Friendly Furniture						
3	Outdoor Play Material						
4	Pre-primary strengthening						
5	Student Assessment						
6	Vocational Tools & Equipment						
7	Vocational - Raw material grant for new school per course						
8	Vocational Trainers-Resource Persons						
9	Vocational Teachers (2 teachers per schools - 2 trades)						
10	Vocational - Cost of providing hands-on Skill Training to Students						

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11	Math Circles						
12	Maths Kit						
13	Science Circles						
14	Science Kit						
15	Sports Equipment						
16	Development of Play Ground and Game Facilities						
16a	Badminton Court						
16b	Volleyball Court						
16c	Table Tennis						
16d	School Cricket Kit						
17	Digital Software / Hardware						
18	Language Lab						
19	Computer Instructor						
20	Musical Instrument						
21	Outdoor Science Park						
22	Band Uniform						
23	Band set						
24	Smart board with interactive learning panel						
25	Black boards / Green boards						
26	ECCE Kit						
27	Enhancement of School Aesthetics						
28	Teacher ID card						
29	Student ID card						

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30	CCTV Cameras						
31	Olympiad for Class VI to XII						
32	Social Science Kit						
33	Financial Literacy						
34	First Aid Kit						
35	School Magazine						
36	PM SHRI Selfie Point						
37	Health Devices						
38	Developing Innovation Culture and Entrepreneurship (DICE)						
39	Gamified Learning						
40	Drone Training						
41	Mentorship Programme						
42	Science and Math Curiosity Programme						
43	Furniture for Students						
44	Lab Equipment (Biology)						
45	Lab Equipment (Chemistry)						
46	Lab Equipment (Physics)						
47	Science Lab Establishment With All Equipment's (Physics)						

*Handwritten signature and mark*

48	Science Lab Establishment With All Equipment's (Chemistry)						
49	Science Lab Establishment With All Equipment's (Biology)						
50	Dedicated furniture for library						
51	Colourful sorting dustbins painted in interesting characters for waste segregation						
52	Sanitary Pads						

Note :

-Bidder shall quote all prices inclusive of the live monitoring tool software.

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**ANNEXURE - 6:**  
**FORMAT FOR EMD**

Whereas ..... (Hereinafter called "the Bidder") has submitted its bid dated ..... for Bihar Education Project Council RFP **Reference No.** ..... **dated** ..... **for** ..... **(Project Name).**

KNOW ALL MEN by these presents that WE ..... OF ..... Having our registered office at ..... (Hereinafter called "the Bank") are bound unto The STATE PROJECT DIRECTOR-BEPC (hereinafter called "the Purchaser") in the sum of INR ..... /- (..... Only) for which payment will and truly to be made of the said Purchaser, the Bank binds itself, its successors and assigns by these present.

THE CONDITIONS of the obligation are:

1. If the Bidder withdraws his bid 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 his bid by the Purchaser during the period of bid validity
  - (a) **Fails or refuses to execute the Contract, if required; or**
  - (b) **Fails or refuses to furnish the Performance Security, in accordance with the instructions to Bidders.**

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 ..... and any demand in respect thereof should reach the Bank not later than the specified date/dates.

witness  
Address of witness

Signature of the Bank  
Authority. Name  
Signed in Capacity of Name & Signature of  
Full address of Branch  
Tel No. of Branch  
Fax No. of Branch



**ANNEXURE - 7:**  
**Performance Bank Guarantee Format**

To

**The State Project Director,**  
Bihar Education Project Council (BEPC),  
Shiksha Bhawan, Saidpur-800 004. (BIHAR)

Whereas Bid ..... (hereinafter called "the Bidder") has submitted its Bid dated ..... (date of submission of Bid) for " ..... (Name of Project) in consonance with the RFP Reference No. BEPC/..... Dated ..... (e-Tender No. ....)) issued by the BEPC, Patna, (hereinafter called "the Bid"]].

Whereas as per RFP Clause ..... of the Bid, the bidder is required to furnish a Bank Guarantee as Performance Security from a scheduled bank (Bank Guarantee).

In consideration of the fact that the Bidder is our valued customer and the fact that he has submitted the Bid, we, (name and address of the bank), (hereinafter called "the Guarantor Bank") has agreed to bind ourselves, our successors, and assigns to irrevocably issue this Bank Guarantee and guarantee as under

NOW THIS GUARANTEE WITNESSED:-

1. If the Bidder

having been notified of the acceptance of its Bid by the State Project Director, Bihar Education Project Council (BEPC), Patna

- (a) during the period of Bid Proposal validity:
- (b) fails to perform as per the contract obligations

The Guarantor Bank shall immediately on demand pay the State Project Director, Bihar Education Project Council (BEPC), Patna, without any demur and without the State Project Director, Bihar Education Project Council (BEPC), Patna having to substantiate such demand a sum of Rs. .... ( -----) only (Guaranteed Amount).

- 2 The Guarantor Bank will make the payment of the Guaranteed Amount forthwith on the demand made by the State Project Director, Bihar Education Project Council (BEPC), Patna notwithstanding any objection or dispute that may exist or arise between the State Project Director, Bihar Education Project Council (BEPC), Patna, and the Bidder or any other person.
- 3 The demand of the State Project Director, Bihar Education Project Council (BEPC), Patna on the Guarantor Bank for the payment of the Guaranteed Amount, shall be deemed as the







final proof of fulfilment of the conditions stipulated in (1) above,

4. This Guarantee shall be irrevocable and shall not be discharged except by payment of the above amount by us to the State Project Director, Bihar Education Project Council (BEPC), Patna and our liability under this Guarantee shall be restricted to the Guaranteed Amount being Rs. ....( ) only.
5. If it is necessary to extend this Guarantee on account of any reason whatsoever. we undertake to extend the period of this Guarantee on the request of the Bidder under intimation to the State Project Director, Bihar Education Project Council (BEPC), Patna.
6. To give full effect to the Guarantee contained herein, the State Project Director, Bihar Education Project Council (BEPC), Patna shall be entitled to act as if the Guarantor Bank is the principal debtor in respect of claims against the Bidder and the Guarantor Bank hereby expressly waives all its rights of surety-ship and other rights, if any, which are in any way inconsistent with any of the provisions of this Guarantee.
7. Any notice by way of demand or otherwise may be sent by special courier, telex, fax, registered post or other electronic media to our address as afore-said and if sent by post, shall be deemed to have been given to us after expiry of 48 hours when the same has been posted.
8. Our liability under this Guarantee will continue to exist until a demand is made by the State Project Director, Bihar Education Project Council (BEPC), Patna in writing up to dated ....., and any demand in respect thereof should reach the Bank not later than the above date.

Dated ..... this ..... day .....

Yours faithfully,

For and on behalf of the ..... Guarantor Bank,

(Signature)

Designation

(Address and Common Seal of the bank)

Note: To be executed at the time of Signing of Contract by the Selected Vendor

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**Annexure A:**  
**Scope of Work for Implementation of Solutions in PM SHRI**  
**Schools**

(Detailed Scope with specifications will follow in Annexure B)

Sr. No.	Activity Master Detail Name
1	BALA Feature
2	Child Friendly Furniture
3	Outdoor Play Material
4	Pre-primary Strengthening
5	Student Assessment
6	Vocational Tools & Equipment
7	Vocational - Raw material
8	Vocational - Hands-on Skill Training to Students
9	Math Student Kit
10	Maths School Kit
11	Science Student Kit
12	STEM School Kit
13	Sports Equipment
14	Development of Playground Facilities
15	Digital Hardware and Software
16	Language Lab
17	Musical Instrument
18	Outdoor Science Park
19	Band Uniform
20	Band Set
21	Smart board with interactive learning panel
22	Green boards
23	ECCE Kit
24	Enhancement of School Aesthetics
25	Teacher ID card
26	Student ID card
27	CCTV Cameras
28	Olympiad for Class VI to X
29	Social Science School Kit
30	Financial Literacy
31	First Aid Kit
32	School Magazine
33	PM SHRI Selfie Point
34	Health Devices
35	Innovative Learning Tools
36	Gamified Learning
37	Drone Training
38	Mentorship Programme
39	Science and Math Curiosity Programme



40	Furniture for Students
41	Lab Equipment (Biology)
42	Lab Equipment (Chemistry)
43	Lab Equipment (Physics)
44	Lab Establishment with All Equipment's (Physics)
45	Lab Establishment with All Equipment's (Chemistry)
46	Lab Establishment with All Equipment's (Biology)
47	Dedicated furniture for library
48	Colorful Sorting dustbins
49	Sanitary Pads
50	Computer Instructor
51	Vocational trainers
52	Vocational teachers
53	Inventory Management System
54	Distribution Tracking software

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## 1. BALA Feature

**Total Schools:** 47

**Scope of Work:** Implementation of the BALA scheme by supplying and installing educational wall-mounted drawings on Sun board (approx. 300 sq. ft. per school). These thematic, child-friendly visuals will be installed in corridors, classrooms, and other visible areas to support joyful learning and curriculum integration.

Sl. No.	Item	Qty
1.	Solar system	1
2.	Human Body	1
3.	Periodic table	1
4.	Fundamental Rights	1
5.	Earth and its Motion	1
6.	Laboratory Equipment	1
7.	Bihar Map	1
8.	India Map	1
9.	World Map	1
10.	Units of Measurements	1
11.	English Phonics	1
12.	Barakhadi	1
13.	National Symbols	1
14.	National Leader	1
15.	Types of Angles	1
16.	Good Habits	1
17.	Traffic Rules / Road Safety	1
18.	States of Matter	1
19.	Layers of Earth	1
20.	Layers of Soil	1

## 2. Child Friendly Furniture

**Total Schools:** 47

**Scope of Work:** Supply and installation of colourful, ergonomically designed, child-friendly furniture aimed at enhancing the classroom environment for early-grade learners. The furniture is designed to promote safety, comfort, and an engaging learning atmosphere for children.

Sl. No.	ITEM	Qty
1	Moon/ Bean Shape Table	10
2	Low Height Chair	30
3	Storage Cabinet	2
4	Mat	12
5	Bookshelf	2



### 3. Outdoor Play Material

**Total Schools:** 47

**Scope of Work:** Supply and installation of safe and colorful outdoor play equipment for pre-primary children. These materials will help young children to play, move, and learn together. The items are designed to support their physical growth, coordination, and social skills in a fun and friendly environment.

Sl. No.	ITEM	Qty
1	Jhula	2
2	See-Saw Big	2
3	Park Slide	1
4	Wavy Slide	1
5	Soft Ball	4
6	Big Ball	4
7	Plastic Bat Ball	2
8	Weight Machine	1
9	Trampoline	1
10	STEP IN Game	1
11	Rockers	4
12	Hula Hoop	4
13	Ball Pool	1
14	Basket Ball Stand	1
15	Plastic Animal Dustbin	2

### 4. Strengthening of Pre- Primary Schools

**Total Schools:** 47

**Scope of Work:** Supply, installation, and training for **innovative and playful learning solutions** to create an engaging and stimulating environment in **pre-primary classrooms**. The setup supports early childhood development through interactive tools, basic infrastructure, and teacher-friendly resources.

S. No.	Model	Qty
1	Wall elements	5
2	Learning Corner (Bookshelf with books)	1
3	Gamified Mats	5
4	Magnetic White board with magnetic alphabets and numbers	1
5	Teaching Learning Tools	1
6	Learning Cushions	30
7	PA System with wireless mic	1
8	Smart TV	1
9	Videos Contents	1
10	Art Supplies	30

## 5. Student Assessment

**Total Schools: 836**

**Scope of work:** Supply & Installation of Student Assessment Software. This is a web-based platform designed to facilitate the creation, delivery, and evaluation of online assignments, assessments for Schools institutions. The primary goal of the portal is to provide a user-friendly and efficient solution for conducting various types of assessments, such as quizzes, exams, and skill-based tests, online course material for the students.

## 6. Vocational Tools & Equipment

**Total Schools: 789**

**Scope of work:** Supply, installation, and commissioning of **vocational tools and equipment** for any of the **2 trades in each school**, along with **comprehensive training** for teachers and students. The training will focus on the effective use of tools, safety procedures, and basic skills related to the trade. This initiative is designed to help students gain practical knowledge and prepare for real-world job roles. Hands-on training sessions will be conducted by experts to ensure that teachers and students are confident in using the equipment. Training materials and manuals will also be provided for continued learning and classroom integration.

S. No.	Trade
i.	Agriculture
ii.	Automotive
iii.	Apparel
iv.	Electronics
v.	Healthcare
vi.	Tourism
vii.	Telecom

### i. Agriculture:-

Provides hands-on training in modern farming practices through tools and equipment for soil testing, irrigation, planting, crop care, and harvesting to promote skill-based learning in sustainable agriculture.

S. No.	Tools & Equipment	Qty
1	Knapsack Sprayer	2
2	Grafting Knife	2
3	Pruning Secateur	2
4	Gardening Rake	2
5	Sickles	2
6	Pruning Saw	4
7	Gardening Kit	2
8	Spade	5
9	Hammer	1
10	Soil Testing Kit	2
11	Drip Irrigation Kit	2
12	Irrigation SPRINKLER	2
13	Transparent Grafting Tape	2
14	Gunny Bags	2



15	Flower Pot	10
16	Water Analysis Kit	2
17	Khurpi	2
18	Germination Tray	1
19	Hoe	5
20	Trowel	2
21	Watering Can	2
22	Pheromone Trap	3
23	Food Analysis Kit	2
24	Shovel Measuring Tape	2
25	Bamboo Basket	5
26	Trunk	2
27	Soil Auger	2
28	Seed Germination Cycle Chart	2
29	Insect, Pest & Diseases Chart	2
30	Pro Tray	5
31	Soil Moisture Meter	2
32	Sieves	2
33	First Aid Kit	2
34	Latex Rubber Gloves	2
35	Rotary Tiller	1
36	Compostable Mulch Sheet	1
37	Soil Testing Reagent Kit	2
38	Infographics	2
39	Kissan Suraksha Kawach	1

## ii. Automotive:-

Lab should equip students with practical skills in vehicle maintenance and repair using automotive tools, diagnostic equipment, and engine models for hands-on learning in automobile technology and servicing.

S. No.	Tools & Equipment	Qty
1	Air Compressor	1
2	Bench Vice	1
3	Bench Grinder	1
4	Oil Draining & Filling Equipment	3
5	Multi meter	3
6	Hydro Meter	2
7	White Board	1
8	AC Clamp Meter	3
9	Coolant Tester	3
10	Battery & Charging System Tester	1
11	Diagnostic tool	1
12	Hand Tools	1
13	Pneumatic Tools	1
15	Torque Wrenches	5

16	Fender covers/kits	5
17	Floor Mats	5
18	Cotton Gloves	8
19	Hard Toed Boots	3
20	Sun Glasses	2
21	Metal Peg Display Board	2
22	Spark plugs	2
23	Multi-meter	3
24	Ruler	2
25	Gloves	8
26	Ear plugs	2
27	Puncture tool Kit	2
28	Nose Plier	2
29	Bump Caps	3
30	Air Tester	1
31	Hydraulic Jacks	1
32	Vehicle safety stands	3
33	Parts washing station car	1
34	Pullar	1
35	Sliding Hammer	2
36	Oil Can	2
37	General Hand Tool	3

### iii. Apparel:-

Equips students with practical skills in garment design and stitching using industrial sewing machines, cutting tools, and tailoring accessories for hands-on learning in fashion and apparel production.

S No.	Tools & Equipment	Qty
1	Specialized industrial sewing machines	8
2	Sewing Machine Accessories and Attachments	10
3	Shears (8-10" Iron Blade for Cutting Fabric)	10
4	Paper Scissors	10
5	Seam Ripper	10
6	Tracing wheel	10
7	Tailor's Chalk	10
8	Craft Cutter	10
9	Safety Pins	10
10	Dress Maker's Pin	10
11	Scale	10
12	Measuring Tape	10
13	Bobbin and bobbin case for industrial machine	10
14	Hand needles	10
15	Machine needles	10
16	Needle Threader	10



17	Dress Form (Various Sizes of Male / Female / Kids)	2
18	Threads	3
19	Personal protective equipment (Nose Mask, Goggles, etc.)	10
20	Cutting Table	1
21	Students Sewing stools	10
22	First aid box	1
23	Dustbin	2
24	Pouches for Storing Items	10
25	Machine Oil	10
26	Documents/Charts	10
27	Pressing Table	5
28	Iron/Press - Steam Press	5
29	Fabric Yardages, surplus fabric, good quality muslin	5

#### iv. Electronics:-

- Trains students in basic electrical and electronic skills through hands-on use of meters, tools, circuits, and appliances, enabling them to work safely with wiring, repairs, and system installations.

S. No.	Tools & Equipment	Qty
1	Bench Vice 125mm	5
2	Ruler (Steel)	10
3	Measuring Tape	10
4	Micrometres	5
5	Vernier Callipers	5
6	Standard Wire Gauge	4
7	Filler Gauge	4
8	Dial Gauge	4
9	Try Square	4
10	Line Tester	10
11	Ammeter (Ac & Dc)	5
12	Voltmeter	5
13	Ohmmeter	4
14	Aluminium Wire	10
15	Frequency Meter	2
16	Digital Volt Meter And Ammeter	2
17	Tachometer	2
18	Electrician's Scissors	5
19	Hand Operated Shearing Machine	2
20	Pipe Cutter	2
21	Electric Drill Machine with Drilling Bit	2
22	Grinder	2
23	Rasp File	5
24	Hand Saw	5
25	Tennon Saw	5

26	Punch With Bit 8no& 10no	2
27	Spanner Set	2
28	Screwdriver Kit	5
29	Mallet	3
30	Ball Pein Hammer	3
31	Claw Hammer	3
32	Plier Set Of 4	3
33	Rheostat 0-10ohm	2
34	Rheostat 0-30ohm	2
35	Wire Stripper	2
36	Poker Screwdriver	5
37	Electrician Knife	5
38	Adjustable Wrench	4
39	Wire Stripper, Cutter, Crimper and Pliers	4
40	Firmer Chisel	4
41	Files	2
42	Capacitor	5
43	Dimmer Stat	2
44	Stopwatch With Battery	2
45	Solder Wire	2
46	Copper Wire	2
47	Aluminium Wire	2
48	Pvc Insulation Tape	5
49	Flexible Pipe	10
50	Soldering Iron	15
51	Modular Switches	10
52	Modular Sockets	5
53	Wiring Boards	5
54	Lead Acid Battery	2
55	Mcb's	4
56	Power Supply Voltage Switch	3
57	Desoldering Pump & Wire	5
58	Water Gauge	5
59	Cables	5
60	Water Purifier	2
61	Microwave Oven Grill, Convention Type	2
62	Mixer-Grinder	1
63	Juicer	2
64	Clamp Meter	5
65	Soldering Flux	10
66	Hand Glove	30



## v. Healthcare:-

Prepares students to support basic patient care and first aid through training with medical instruments, diagnostic tools, and hygiene equipment used in real healthcare settings.

S. No	Tool & Equipment	Qty
1	AED Trainer with Adult Pad	2
2	Air Cushion	2
3	Airway Mannequins	2
4	Ambu Mask	4
5	Artery Forceps	5
6	Bed Pan with cover	1
7	Betadin solution bottle	4
8	Blanket	5
9	Blood concentrate	4
10	Cervical collar (Medium)	1
11	Cleaning solution	4
12	Clinical examination Table	2
13	Comb	5
14	Cotton roles	4
15	Different color plastic bags with dust bins	1
16	Dissecting Forcep	3
17	Draw Sheet	2
18	Duster	2
19	Electronic B.P. Monitoring Machine	2
20	Eraser	15
21	Extension cord	2
22	Fire Extinguisher	1
23	First aid metal box	1
24	Gauze Swabs	20
25	Gloves (disposables)	5
26	Gloves (surgical)	5
27	Glucometer 30	1
28	Goggles	1
29	Hair-cap packet	1
30	Hospital bed	1
31	Kidney tray (8")	1
32	Liquid soap bottle	6
33	Marker	15
34	Mask packet	2
35	Micropore	1
36	Nebulizer / Mesh Nebulizer	1
37	Normal saline bottle	4
38	Paper	1
39	Pen	15
40	Pencil	1

41	Pillow	4
42	Pillow covers	6
43	Registers	3
44	Sample collection bottle	20
45	Dressing Scissors	3
46	Micro Surgical Scissors	2
47	Shampoo bottle	4
48	Pencil Sharpener	10
49	Splint Medium	1
50	Steel Basin	1
51	Steel bowl	1
52	Steel tray (medium)	2
53	Sterilizer (shallow dressing drum)	1
54	Stopwatch	2
55	Stretcher	2
56	Suction Apparatus	1
57	Syringe destroyer / needle burner	1
58	Talcum powder	4
59	Tooth brush	8
60	Toothpaste	4
61	Torch	1
62	Towel big	1
63	Urinal set (female)	2
64	Urinal set (male)	2
65	Uro-bag	4
66	Weighing machine (Digital)	5
67	Wheel Chair	2
68	White board	1
69	Writing pad	6
70	Bedsheet	6
71	Walker	2
72	Measuring Tape	1
73	Thermometer - Digital	4
74	Sand Bag	5
75	Measuring Glass	2
76	Syringe 50 Cc/MI	20
77	Ryle's Tube	2
78	Vacutainer	5
79	Tourniquet	5
80	Crash Cart	1
81	Full body manikin	1
82	Oxygen Cylinder with Single Trolley	1
83	Wet Wipes - Cloth	10
84	Sphygmomanometer	1
85	Wall Mounted Stadiometers	1
86	Weighing scale	1



## vi. Tourism

Trains students in travel operations, customer service, and front-office management using real-world tools like computers, booking forms, promotional materials, and simulation kits to prepare them for the hospitality and tourism industry.

S. No	Tool & Equipment	Qty
1	Desktop Computer with anti-virus	5
2	Printer	1
3	Computer Tables	5
4	Chairs	30
5	Front Office Counter	1
6	Round Clock	7
7	White Board	1
8	Passport or Visa demo dummy	4
9	Broachers	1
10	Forms	1
11	Posters	1
12	Posters on famous tourism places	2
13	Promotional Umbrella	2
14	Supply extension cable port	2
15	Books- Travel Experiences	10
16	Books- Traveler's guide	30
17	Trainers Table	1
18	Trainers Chair	1
19	Debit / Credit Card Machine	1
20	Register and Logbooks	4

## vii. Telecom

Provides students with hands-on training in fiber optics, digital networks, and IoT through industry-grade tools, simulators, and safety equipment to build skills for modern communication technologies.

S. No.	Tool & Equipment	Qty
1	Fiber Optic Power Meter	1
2	OTDR	1
3	Laptop	6
4	Computer system	2
5	UPS	2
6	Anti Virus software	1
7	Libra office/MS Office	2
8	Digital Multimeter	2
9	Printer	1
10	Trainer Tool Kit/TLM Kit	1
11	Connector Crimper	1
12	Fiber Optic Stripper	2

13	Internet of Things (IoT) Kit	1
14	Tweezers	5
15	Cleaver	5
16	Connectors	50
17	Power Extension Cord	1
18	Fire Extinguisher	1
19	Hand blower	1
20	Hand Brush	5
21	Cello Tape	10
22	PVC Electronics Tape	10
23	Safety Goggles	5
24	Smart IoT Based Logic Tutor	1
25	Electrical Tool Kit	5
26	Hand glove	5
27	Basic SMART AI based Training Kit	1
28	Technician Safety Helmet	5
29	Keyboards	2
30	First aid box	1
31	VGA Cable	2
32	Fiber Optic Simulator	1
33	Pen Drives	2
34	Flexo-Lite	2
35	Optic Connector	2
36	Wooden Table	1
37	Storage Cupboard	1
38	Fibre Patch Cable	2
39	Universal Tool Kit	2
40	Extractor Tool	2

## 7. Vocational - Raw material

**Total Schools:** 789

**Scope of work:** Supply of trade-specific consumables and raw materials to support practical training and classroom activities for 2 vocational trades per school. These materials are essential for regular hands-on practice, skill development, and demonstration-based learning aligned with the selected job roles.

S. No.	Job role
i.	Agriculture
ii.	Automotive
iii.	Apparel
iv.	Electronics
v.	Healthcare
vi.	Tourism
vii.	Telecom



**i. Agriculture:**

Sl. No.	Tools & Equipment	Qty
1	Latex Rubber Gloves	5
2	Gardening Kit	1
3	Flowerpot	2
4	Khurpi	2
5	Watering Can	2
6	Seed Germination Cycle Chart	2
7	Insect, Pest & Diseases Chart	2
8	Compostable Mulch Sheet	1
9	Kissan Suraksha Kawach	1
10	Soil Testing Reagen Kit	1

**ii. Automotive**

Sl. No.	Tools & Equipment	Qty
1	Bench Vice	1
2	Oil Draining & Filling Equipment	1
3	Multi meter	1
4	Hand Tools	1
5	Cotton Gloves	5
6	Sun Glasses	2
7	Spark plugs	2
8	Gloves	4
9	Puncture tool Kit	1
10	General Hand Tool	1

**iii. Apparel**

Sl. No.	Tools & equipment	Qty
1	Sewing Machine Accessories And Attachments	15
2	Shears (8-10" Iron Blade For Cutting Fabric)	15
3	Seam Ripper	15
4	Tailor's Chalk	15
5	Safety Pins	15
6	Scale	15
7	Measuring Tape	15
8	Bobbin And Bobbin Case For Industrial Machine	15
9	Hand Needles	15
10	Machine Needles	15
11	Threads	15
12	Personal Protective Equipment (Nose Mask, Goggles, Etc.)	30
13	Pouches For Storing Items	15
14	Machine Oil	15
15	Documents/Charts	10
16	Fabric Yardages, Surplus Fabric, Good Quality Muslin Mandatory )	10

**iv. Electronics**

Sl. No	Tools & Equipment	Qty
1	Ruler (Steel)	5
2	Measuring Tape	5
3	Aluminium Wire	8

4	Rasp File	5
5	Punch With Bit 8no& 10no	2
6	Screw Driver Kit	5
7	Wire Stripper	2
8	Wire Stripper, Cutter, Crimper And Pliers	4
9	Stopwatch With Battery	2
10	Solder Wire	5
11	Copper Wire	2
12	Aluminium Wire	2
13	Pvc Insulation Tape	10
14	Flexible Pipe	10
15	Desoldering Pump & Wire	5
16	Cables	2
17	Hand Glove	10
18	First Aid Box	1

**v. Healthcare**

Sl. No	Tool & Equipment	Qty
1	Air Cushion	5
2	Ambu Mask	5
3	Betadine Solution Bottle	5
4	Blanket	5
5	Cleaning Solution	5
6	Comb	5
7	Cotton Roles	5
8	Different Color Plastic Bags ( Red , Yellow, Blue, Black) With Dust Bins	5
9	Draw Sheet	5
10	Duster	2
11	Gauze Swabs	25
12	Gloves(Disposables)	20
13	Gloves(Surgical)	20
14	Goggles	20
15	Hair-Cap Packet	20
16	Liquid Soap Bottle	10
17	Marker	15
18	Normal Saline Bottle	5
19	Paper	2
20	Pen	5
21	Pencil	5
22	Pillow	6
23	Pillow Covers	6
24	Registers	5
25	Shampoo Bottle	4
26	Pencil Sharpener	10
27	Talcum Powder	5
28	Tooth Brush	8
29	Toothpaste	5
30	Towel Big	5
31	Uro-Bag	4
32	Writing Pad	6
33	Bedsheet	6
34	Sand Bag	2



35	Wet Wipes - Cloth	10
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#### vi. Tourism

S. No	Tool & Equipment	Qty
1	Round Clock	7
2	Passport Or Visa Demo Dummy	10
3	Broachers	10
4	Forms	10
5	Posters	10
6	Posters On Famous Tourism Places	10
7	Promotional Umbrella	5
8	Supply Extension Cable Port	5
9	Books- Travel Experiences	10
10	Debit / Credit Card Machine	1
11	Register And Log Books	4
12	First Aid Box	1

#### vii. Telecom

S. No	Tool & Equipment	Qty
1	Fiber Optic Power Meter	2
2	Digital Multimeter	2
3	Connector Crimper	5
4	Fiber Optic Stripper	5
5	Tweezers	10
6	Cleaver	10
7	Connectors	100
8	Power Extension Cord	5
9	Hand Brush	10
10	Cello Tape	20
11	Pvc Electronics Tape	20
12	Safety Goggles	10
13	Electrical Tool Kit	5
14	Hand Glove	10
15	Technician Safety Helmet	10
16	VGA Cable	5
17	Pen Drives	5
18	Flexo-Lite	2
19	Optic Connector	2
20	Fibre Patch Cable	2
21	Universal Tool Kit	10
22	Extractor Tool	15

## 8. Vocational - Hands-on skill training to students

**Total Schools:** 789

**Scope of Work:** The bidder shall conduct a 2-day training workshop at each school every six months, focusing on practical skill development for both students and teachers across the two selected vocational

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trades. The training ensures hands-on exposure to tools, real-life work scenarios, and adherence to safety norms.

Sr. No.	Section	Details
1	Training Duration & Structure	4-day workshop per school; 4+ hours/day; includes theory and hands-on practice.
2	Training Coverage	Covers equipment use, trade skills, safety protocols, real-world tasks, and live demos.
3	Training Materials & Resources	a. Printed guides for each trade b. Video manuals (equipment + safety) via school system.

## 9. Math Student Kit

**Total Schools:** 836

**Scope of Work:** Supply of Math kits for students along with training. (Ten (10) kits each for classes 6 to 10 respectively) are to be provided in 836 schools. Each of the 836 schools should be provided with Math kits along with training support.

Sr. No.	Name	Quantity per School
1	Math Kit for Class 6	10 kits
2	Math Kit for Class 7	10 kits
3	Math Kit for Class 8	10 kits
4	Math Kit for Class 9	10 kits
5	Math Kit for Class 10	10 kits

## 10. Math School Kit

**Total Schools:** 836

**Scope of work:** Maths Lab should be established in each of the 836 schools with the following specifications.

1. Supply of tools for hands on learning.
2. Activity based Video tutorials.

Sr. No.	Description	Qty
1	9" Geoboard	5
2	8" Fraction Geoboard	5
3	X-Y Coordinate Board	5
4	Linking Cube Graph Board with linking cubes set of 100	1
5	2D3D Geometric Set	2
6	2D3D Flip Chart	5
7	Volume Relation between Cube and Sphere	5
8	Geometric Volume Set	2
9	Hollow Cylinder	5
10	Hollow Sphere	5
11	Teacher Geometry Box	1
12	Trigonometry Board	5
13	Arithmetic Progression Kit	5
14	Ruler Set	5



15	Algebra Tiles	5
16	Clinometer Compass	5
17	Plane Erase Board (Set of 30 Boards)	1
18	X-Y Dry Erase Board (Set of 30 Boards)	1
19	Graph Erase Board (Set of 30 Boards)	1
20	Fraction Circles	5
21	Symmetry Kit	5
22	Base Ten Blocks	2
23	Storage Cabinet	2

## 11. Science Student Kit

**Total Schools:** 836

**Scope of Work:** Science kits should be supplied to students along with training, with ten (10) kits each for Classes 6 to 10 to be provided in 836 schools.

Sr. No.	Name	Quantity per School
1	Science Kit for Class 6	10 kits
2	Science Kit for Class 7	10 kits
3	Science Kit for Class 8	10 kits
4	Science Kit for Class 9	10 kits
5	Science Kit for Class 10	10 kits

## 12. STEM School Kit

**Total Schools:** 836

**Scope of work:** Science (STEM) Labs/Kits should be established in 836 schools as per the following specifications.

1. Supply of tools for hands on learning.
2. Delivery of activity based video tutorials.

Name of Kit	Qty
Strawbot/ Straw Robot	4
Electronics Starter Kit	4
STEM Electronics	4
Science-Bot	4

## 13. Sports Equipment

**Total Schools:** 836

**Scope of Work:** Supply of sports equipment with a focus on cricket kits to promote physical education and team sports in schools. The initiative aims to encourage student participation in outdoor games, improve fitness, and foster team spirit through structured sports activities.

Sr. No.	Items	Quantity
i.	Sports Kit for Primary School	1
ii.	Sports Kit for Elementary School	1
iii.	Sports Kit for Secondary/Senior Secondary Schools	1

**List of Equipment:****i. Primary School:**

Sl. No.	Item	Qty
1	Football 3 No Rubber Synthetic	1
2	Plastic Bat 2 No.	2
3	Plastic Stumps (Set of 6) with bails and base	2
4	Plastic Ball	4
5	Hurdles 6 inches	4
6	Ludo	1
7	Carrom Board	1
8	Skipping Rope	2
9	Marking Cones 6 inches	4
10	Marking Cones 9 inches	4
11	Marking Cones 12 inches	4
12	Flying Disc/Frisbee	2
13	Tennikoit	2
14	Soccer Cone	10
15	Kit Bag	1

**ii. Upper Primary:**

Sl. No.	Item	Qty
1	Football 4 No.	1
2	Volleyball	1
3	Foot pump	1
4	Wooden Stump (Set of 6) with bails (4 No.)	2
5	Wooden Bat 4 No.	2
6	Wooden Bat 6 No.	2
7	Tennis Ball	2
8	Badminton Racket	2
9	Shuttle Cock	6
10	Skipping Rope	2
11	Relay Baton	1
12	Wooden Chess 16"	1
13	Carrom Board	1
14	Hurdle's 9 Inches	4
15	Marking Cones 6 inches	4
16	Marking Cones 9 inches	4
17	Marking Cones 12 inches	4
18	Soccer Cone	1
19	Frisbee	1
20	Tennikoit	1
21	Kit Bag	1

**iii. Secondary /Sr Secondary:**

Sl. No.	Item	Qty
1	Football No 5	2
2	Volley ball No. 4	2
3	Throw ball No. 5	2



4	Foot pump	1
5	Cricket Bat Full Size	2
6	Cricket Bat No. 6	2
7	Tennis ball	6
8	Wooden Stump (Set of 6) with bails (4 No.)	2
9	Badminton Racket	4
10	Shuttle Cock	8
11	Marking Cones 6 inches	4
12	Marking Cones 9 inches	4
13	Marking Cones 12 inches	4
14	Hurdels 12 Inches	4
15	Wooden Chess 16"	1
16	Frisbee/Flying Disk	5
17	Skipping Rope	5
18	Stop Watch	2
19	Volley Ball Net	1
20	Relay Baton set of 6 Pcs	1
21	Carrom Board	1
22	Soccer Cone	10
23	Tennikoit	2
24	Kit Bag	1

#### 14. Development of Playground Facilities

**Total Schools:** 836

**Scope of Work:** Development of playground facilities to promote physical fitness and sports participation among students. This includes the installation of court flooring and fixed poles for badminton and volleyball, creating safe and standard-compliant play areas.

Sl. No.	Playground	Quantity
<b>Outdoor</b>		
1	Badminton Court Flooring & Fixed Type Poles	1
2	Volleyball Court Flooring & Fixed Type Poles	1
<b>Indoor</b>		
1	Table Tennis Set up (2 TT Rackets, 6 Balls, 1 Table Cover & Clamp Net)	2
2	School Cricket Kit (Primary, Upper Primary and Secondary /Sr Secondary schools)	6 Kits Per School each

#### 15. Digital Software / Hardware

**Total Schools:** 836

**Scope of work:** Digital hardware and software solutions should be supplied, installed, and accompanied by training to establish ICT enabled Learning labs in 836 schools. The setup should include State of Art Configured i-5 Desktops, Printer, Headset, Webcams, Network equipment, Chairs, Tables, Device management Systems, Microsoft Tools for AI programing, Hackathons and administrative tasks.

Sl. No.	Item Details	Qty
1	Desktop	06
2	Headset	06
3	Web Camera	06
4	UPS	06
5	Software Bundle	06
6	Server	01
7	Network Printer	01
8	Electrification	01
9	Table	8
10	Chair	30

## 16. Language Lab

**Total Schools:** 836

**Scope of Work:** Supply, installation, commissioning, and training of **Language Labs** to enhance English language learning in schools. The lab setup will include the required hardware and software to facilitate interactive and immersive language instruction focused on listening, speaking, reading, and writing (LSRW) skills.

S. No.	Description	Qty. Per Lab
1	English Language Lab Software	1
2	Wired Headphones	15
3	Android Notebooks	15
4	Networking Device for Wi-Fi Connection	1

## 17. Musical Instrument

**Total Schools:** 836

**Scope of Work:** Provision of **functional and age-appropriate musical instruments** to promote music education and creative expression among students. Each school will receive one set of instruments for **Upper Primary** and one set for **Secondary/Senior Secondary** levels. The instruments are selected to support both traditional and modern music learning within the school curriculum and co-curricular activities.

Sr. No.	Description	Quantity
i.	Musical Instrument for Upper Primary School	01
ii.	Musical Instrument for Secondary/ Sr. Secondary School	01

### i. Musical Instrument for Upper Primary School

Sl. No.	Item	Quantity
1	Tabla Set	1
2	Dafli (Tambourine)	2
3	Dholak/ Naal	1
4	Virgin Plastic Zheeka Big 10 jingles	2
5	Virgin Plastic Zheeka Small 6 jingles	2



6	Brass Manjira	1
7	Keyboard 61 keys	1
8	Bansuri (Flute)	2
9	Ghungroo anklet (25 pc per anklet)	1
10	PA System -Speaker and Mic	1

**ii. Musical Instrument for Secondary/ Sr. Secondary School**

Sl. NO.	Items	Quantity
1	Harmonium	1
2	Dafli (Tambourine)	2
3	Dholak/ Naal	1
4	Tabla set	1
5	Virgin Plastic Zheeka Big 10 jingles	2
6	Virgin Plastic Zheeka Small 6 jingles	2
7	Brass Manjira	2
8	Keyboard 61 keys	1
9	Bansuri (Flute)	2
10	Speaker and Mic	1
11	Gungroo anklet (25 pc per anklet)	2

## 18. Outdoor Science Park

**Total Schools:** 38

**Scope of Work:** Supply and installation of Outdoor Science Parks in selected schools to promote experiential, interactive, and play-based learning through life-size science models. These open-air Teaching-Learning Material (TLM) parks are designed to make scientific concepts more accessible and engaging for students through practical demonstration and self-exploration. Bidder should provide fencing and sand filling the area for smoother soil.

**List of Equipment:**

Sr. No.	Models	Qty
1	Newton's Cradle	1
2	Play with Mirrors	1
3	Time Indicator Globe	1
4	Periodic Table	1
5	Cartesian Plane	1
6	Gear Belt Chain Drive	1
7	Pythagoras Theorem	1
8	DNA Model	1
9	Newton's Color wheel model	1
10	Wave motion model	1

## 19. Band Uniform

**Total Schools:** 836

**Scope of Work:** Supply of 25 complete band uniform sets in each school to support school-level ceremonial and parade activities. Each set includes coordinated clothing and accessories made of standard materials suitable for marching and performance, ensuring both durability and uniform appearance.

Sr. No.	Item name
1	Band coat/jacket
2	Trousers/skirt (trouser for boys )
3	Headgear/ P Cap
4	Lanyard
5	Belt
6	Gloves (white)
7	Sashes or cummerbund
8	Anklelets
9	Shoes
10	Socks

## 20. Band set

**Total Schools:** 836

**Scope of Work:** Supply of band instruments to equip schools with a complete marching and musical band set. The instruments are selected to support school parades, ceremonial functions, and cultural activities, fostering rhythm, coordination, and musical discipline among students.

Sl. No	Item	Qty
1	Brass Trumpet	3
2	Stainless Steel Side Drum with sticks	8
3	Stainless Steel Bass drum/ PT DRUM with beater	2
4	PT Drum Stand	1
5	Stainless Steel Cymbals 8"	3
6	Stainless Steel Cymbals 10"	3
7	Major Stick/ Leading Sticks	1
8	Brass Bigul	3
9	Brass Cornet	3
10	Bansuri-Steel (Flutes)	6
11	Maracas Small	5
12	Maracas Big	3
13	Virgin Plastic Zheeka/ Jhaal 10 jingles	6
14	Hat	1



## 21. Smart Board With Interactive Learning Panel

**Total Schools:** 836

**Scope of Work:** Supply and installation of Smart Boards with Interactive Learning Panels to enhance digital teaching and learning in classrooms. The system includes large-format interactive panels integrated with computing units and essential peripherals to support multimedia instruction, digital content delivery, and classroom interactivity

Sl. No.	Item Details	Qty
1	Interactive Flat Panel 75"	02
2	OPS	02
3	Protective casing for panel	02
4	Web Camera	02
5	1 KVA UPS	02

## 22. Green Boards

**Total Schools:** 836

**Scope of Work:** Supply and installation of standard-sized green boards (8 ft × 4 ft) in classrooms across schools to support traditional blackboard-based teaching. These boards are designed for high visibility, durability, and ease of use with chalk, and are to be installed in multiple classrooms within each school.

Sr. No.	Description	Quantity
1	Greenboard	8

## 23. ECCE Kit

**Total Schools:** 47

**Scope of Work:** Supply of ECCE to support play-based, activity-driven learning for early childhood education. The kits include age-appropriate toys, learning aids, and manipulatives designed to nurture foundational cognitive, language, motor, and social skills in young children.

Sl. No.	Name of the Items	QTY
1	Tambourine	2
2	Big Ball	2
3	Rope Ladder	2
4	Building Blocks	2
5	Bowling Set	2
6	Beads with holes and string	2
7	Spinning Top (Chakri)	2
8	Hammering toy Material	2
9	Lacing Board with 4 strings	2
10	My Feely Bag with Solid Shapes	2
11	Cloth Dolls	2
12	Puzzles of multi piece.	2
13	Nesting/Stacking Rings	2

14	Large Shape Sorter Board with String	2
15	Junior Abacus: Frame	2
16	Farm Animals (medium Size)	2
17	Ball	2
18	Car	2
19	Kitchen Set	2
20	Rolling Board and Rolling Pin (Chakla-Belan)	2
21	Flute Material: Bamboo	2
22	Puppets	2
23	Damru	2
24	Alphabet Tracing Board	2
25	FOLDING BAG	2
26	Solid Shapes	2
27	Tiles of five types and a tray	2
28	Doctor Set	2
29	Fruit & Vegetable Set	2
30	Wooden Number Tracing Board	2
31	Fruits & Vegetables Pegboard	2
32	Body Parts Pegboard	2
33	Self-Corrective Relationship Puzzles	2
34	Place Value Card	2
35	Alphabet Flashcard- English	1
36	Alphabet Flashcard- Hindi	1
37	Classification Card	1
38	Number Tracing Card	1
39	Story sequence Card	1
40	Color Domino Card	1
41	Memory Card	1
42	Sequential Thinking Cards	1
43	Color Seriation Card	1
44	Joker Card	1
45	Pre- Number Concept Card	1
46	What is Missing Card?	1
47	Picture Reading Posters- Set of 6	1
48	Hindi Sound Dominos	1
49	English Sound Dominos	1
50	Number Dominos	1
51	Charts of different topics	10
52	32 pages Hindi story/ rhymes books	5
53	32 pages English story/ rhymes books	5
54	Activity Book for Balvatika (for drawing & coloring)	30
55	Workbooks (32 pages)	30
56	User Manual	1



## 24. Enhancement of School Aesthetics

**Total Schools:** 836

**Scope of work:** Digital Signage systems with Content Management Software (CMS) should be supplied and installed in 836 schools to enhance visual communication and overall school aesthetics. These digital displays should be used for showcasing school announcements, educational content, student achievements, event updates, and government messages in a dynamic and visually engaging format. In Addition to this, bidder should do necessary electrification and room paintings and paste curiosity enabled wall posters.

Sr. No.	Description	Quantity
1	Supply & Installation of Digital Signage with CMS	836 schools

## 25. Teacher ID card

**Total Teachers:** 12,365

**Scope of Work:** Provision of standardized ID cards for all teachers to support identity verification, professional recognition, and ease of access during institutional and administrative activities. Each card will include teacher details, photo, school name, and necessary authentication elements such as QR code or barcode (if applicable).

Sr. No.	Description	Quantity
1	ID Cards for Teachers	12365

## 26. Student ID card

**Total Students:** 6,56,635

**Scope of Work:** Provision of standard student ID cards for all enrolled students to support identification, school record management, and campus safety. Each ID card will include the student's name, photograph, school name, class, and other relevant details in a durable and school-branded format.

Sr. No.	Description	Quantity
1	ID Cards for Students	656635

## 27. CCTV Camera

**Total Schools:** 836

**Scope of Work: Provision and installation** of a CCTV surveillance system in schools to enhance safety, monitoring, and administrative oversight. The system includes essential components for effective indoor and outdoor coverage, ensuring secure data storage and real-time monitoring capability.

Sr. No.	Item	Quantity
1	IP/Bullet Cameras	5
2	NVR	1
2	POE Giga Switch	1
3	Hard Disk Drive (HDD)	1
4	CAT 6 Cable	----
5	LED Monitor (Optional)	1

6	Rack 6U	1
7	Conduit/Accessories	1

## 28. Olympiad for Class VI to X

**Total Schools:** 836

**Scope of Work:** Organization of Olympiad examinations in Mathematics and Science for students of Classes VI to X. The exams will be conducted offline at the school level, encouraging academic excellence, competitive spirit, and analytical thinking among students. The activity includes preparatory material, participation certificates, and recognition for top performers.

Sr. No.	Product/Item	Qty
1	Provision of conducting Olympiad Exam in classes VI to X for a maximum of 250 children. (Including provision of practice book, medals for rankers and certificate for all participants)	1

## 29. Social Science Kit

**Total Schools:** 836

**Scope of Work:** Supply, installation, and training for Social Science Kits in schools to promote hands-on, activity-based learning. The kits consist of educational models, instruments, and teaching aids to help students understand key concepts through interactive demonstrations. Basic training shall be provided to teachers to ensure effective classroom use and integration into lesson plans.

Sr. No.	Product/Item	Qty
1	Binoculars	1
2	Solar System (8 Planets), Motorized Model	2
3	Compass	2
4	Solar and Lunar eclipse	1
5	Day & Night Apparatus, Electrical Model	1
6	Layer of Sun Model	1
7	Earth layer model	1
8	Volcano	1
9	Seismograph Model	1
10	4 seasons models, Electrical Model	2
11	Phases Of the Moon, Electrical Model	1
12	Wind vane	1
13	Anemometer simple	1
14	Rain Gauge	1
15	Set of Metals (15)	2
16	Sun dial	1
17	Earthquake Model	1
18	Set of Rocks (15)	2
19	Set of Minerals (15)	2
20	DAM Working Model	1
21	Windmill	1



22	Rainwater Harvesting	1
23	Layers of Soil	2
24	Charts on various topics	20

### 30. Financial Literacy

**Total Schools:** 836

**Scope of Work:** Provision of a Financial Literacy Course for students of Classes VI to XII to build foundational awareness of personal finance, savings, digital payments, budgeting, and responsible money management. The course will include modular video lessons, designed for self-paced learning, and will be uploaded on the school's LMS or digital platform for easy access by students and teachers.

Sr. No.	Product/Item	Qty
1	Provision of Financial Literacy Course for classes VI to XII – Modular Video lessons; to be uploaded on school LMS	1

### 31. First Aid Kit

**Total Schools:** 836

**Scope of Work:** Supply and delivery of fully equipped **First Aid Kits** to ensure immediate medical response capability in schools. Each kit includes basic medications, wound care supplies, instruments, and emergency response items, aligned with school safety standards. Medications are to be used **under the supervision of qualified personnel** only.

Sl. No.	List of Item	Qty
1	Medications (to be administered under qualified supervision)	Paracetamol tablets (500 mg) – pack of 10
		ORS (Oral Rehydration Salts) packets
		Antiseptic ointment (e.g., Betadine)
		Antacid tablets (e.g., Digene) – pack of 10
		Anti-vomiting medication (e.g., Ondansetron) – pack of 10
		Pain relief gel/ spray (e.g., Diclofenac)
		Glucose Chewable Tablet
2	Wound Care Supplies	Gauze Swab
		Dressing Bandages 5 cm
		Dressing Bandages 10 cm
		Dressing Bandages 15 cm
		Crepe Bandage 10 cm
		Adhesive Tape 2.5 cm
		Cotton Roll (20 gm)
		Tinture Iodine Solution
		Antiseptic wipes
		Disposable gloves
3	Instruments	Scissors (blunt ended)
		Tweezers
		Digital thermometer
		Measuring spoon or cup
		Tongue Depressor

		Safety pins	1
		Pen Torch	1
4	Additional Items	CPR face shield or mask	1
		Eye wash solution	1
		Burn relief dressing	1
		Instant cold packs	1
		First aid manual	1
5	All the material above to be packed in a sturdy plastic box		

## 32. School Magazine

**Total Schools:** 836

**Scope of Work:** Provision of age-appropriate monthly magazines for students from Classes I to XII to promote reading habits, creativity, general awareness, and language skills. The magazines will be delivered on a monthly basis and tailored to the comprehension levels of different class groups, supporting curricular and co-curricular engagement.

Sr. No.	Description	Quantity
1	Monthly Magazine for Classes I to V	15
2	Monthly Magazine for Classes VI to VIII	15
3	Monthly Magazine for Classes IX to XII	15

## 33. PM SHRI Selfie Point

**Total Schools:** 836

**Scope of Work:** Provision of a dedicated Selfie Point in each school under the PM SHRI initiative to serve as a visual landmark for students, teachers, and visitors. The selfie point is designed to promote school identity, encourage student pride, and create an engaging environment that celebrates achievements and school spirit.

Sr. No.	Product/Item	Qty
1	A dedicated space for students, teachers, and visitors to capture memorable moments, fostering a sense of pride and belonging within the school community.	1

## 34. Health Devices

**Total Schools:** 836

**Scope of Work:** Supply of essential health monitoring devices to support basic health check-ups and wellness monitoring for students and staff. The equipment facilitates regular measurement of vital parameters, promoting a healthier school environment.

Sl. No.	Item Details	Qty
1	Blood Pressure Monitoring Machine	01
2	Oximeter	01
3	Nebulizer	01
4	BMI Calculator Machine	02
5	Health Monitoring Software	01



### 35. Innovative Learning Tools

**Total Schools:** 789

**Scope of Work:** Provision of a Humanoid Robot along with training workshops for teachers and students to facilitate hands-on learning in robotics, including mechanical structure, motion design, coding, and sensor integration.

Sr. No.	Product/Item	Qty
1	Provision of Humanoid Robot	3

### 36. Gamified Learning

**Total Schools:** 789

**Scope of Work:** Provision of a Gamified Learning along with training workshops for teachers and students to facilitate hands-on learning.

S.No		Feature	Description
1	Gamified Learning Tool-Qty 1 per school	Chemistry Resource Pack	Explore elements, compounds, and chemical reactions. Conduct virtual experiments using a periodic table and lab tools.
		Custom Blocks for Educators	Special blocks to: Restrict movement, Preserve structures, Designate build zones.
		Lesson Library	Access to 600+ ready-to-teach lessons across subjects: STEM, History, Language Arts, Math, Climate Science, and more.
		AI and Cyber Safety Modules	Lessons on AI literacy, digital citizenship, and cybersecurity.
		3D Exporting	Export student creations for use in Remix 3D or other 3D modeling tools.

### 37. Drone Training

**Total Schools:** 789

**Scope of Work:** Supply of drones and conduct of training workshops to introduce students to drone technology, programming, and applications. The training aims to build practical skills in drone operation, coding, and problem-solving through hands-on learning.

Sr. No.	Drone Type	Quantity per School
1	Nano Programmable Drone (Without Camera)	10 kits
2	Drone	10 kits

### 38. Mentorship Programme

**Total Schools:** 789

**Scope of Work:** Provision of a structured Mentorship Programme designed to support student development through regular interaction, skill-building, and guidance. The program includes quarterly lectures, group activities, workshops, and ongoing progress evaluation to foster holistic growth.

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Sr. No.	Topics to be covered	Qty
1	Webinar( 5 topics every quarter)	20
2	Mentorship program handbooks	20
3	Quarterly group activities and workshops	4
4	Quarterly and annual progress logs and evaluation reports	1

### 39. Science and math Curiosity Program

**Total Schools:** 836

**Scope of Work:** Establishment of a Science and Math Curiosity Lab to stimulate student interest and inquiry in foundational scientific principles and mathematical concepts through interactive activities and hands-on experiments.

Sr. No.	Section / Item	Quantity
1	<b>Light &amp; Optics (Dark Room)</b>	
	Dark Room Infrastructure	1
	Light and Optics kit	2
	Laser optical Tank	1
	Colour Shadow	1
2	<b>Illusion &amp; Visual Perception Zone</b>	
	Funny Mirror	2
	Persistence of Vision	1
	Parrot-in-Cage Illusion	1
	Infinity Tunnel	2
	Kaleidoscope	2
	Corner Mirror	1
3	<b>Mathematics Tools</b>	
	Tower of Brahma	2
	Parking Puzzle	2
	Pegboard Puzzle	2
	Activity Worksheets for theorems	1

### 40. Furniture for Students

**Total Schools:** 836

**Scope of Work:** Supply of student furniture, primarily dual desks, to improve classroom seating arrangements and create a comfortable learning environment. The furniture is designed to be durable and ergonomically suitable for school students.

S. No.	Description	Qty
1	Dual Desk	100

### 41. Lab Equipment (Biology)

**Total Schools:** 179

**Scope of Work:** Supply, installation, and training for comprehensive Biology lab equipment and teaching aids to support hands-on learning and experimentation. The equipment includes

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microscopes, anatomical models, specimens, reagents, and charts covering diverse biological topics. Installation will ensure functional lab setup, and training sessions will equip teachers with the knowledge to effectively use the equipment and integrate practical experiments into the curriculum.

Sl. No.	Name of Item	Qty
1	Kit Box	2
2	Compound Microscope	1
3	Glass micro slides	2
4	Pasteur Pipette (Dropper)	2
5	Washing Brush	2
6	Razor Blade	2
7	Micro Test Tubes	2
8	Test tube holder	2
9	Beaker 50 mL.	2
10	Beaker 10 mL.	2
11	Magnifying Lens	2
12	Watch glass	2
13	Needles	2
14	Forceps	2
15	Blotting paper	2
16	Test tube rack	2
17	Wash Bottle	2
18	Surgical Scissor	2
19	Glass rod	2
20	Filter paper	2
21	Measuring Cylinder (10 mL)	2
22	Cotton	2
23	Muslin cloth	2
24	Painting brush	2
25	Spring balance	2
26	Measuring Pan with Holder	2
27	Laboratory Stand Assembly	2
28	Steel rod Clamp Boss Head	2
29	Assembly Boiling tube with cork fitted glass tube	2
30	Tripod	2
31	SPIRIT LAMP	2
32	Test tube 20mL	2
33	W- Tube	2
34	Thread	2
35	Petridish	2
36	Cover glasses	2
37	Thermometer (F0)	4
38	pH Paper (Acid & Base Both) (2 to 11)	4
39	Sieve Set	2
40	Reagent Stand	2
41	Light Binocular Microscope	2
42	T.S. Blastula Mammalian	4
43	Leech	4
44	Prawn	4
45	Octopus	4
46	T.S. Testes of Grasshoppers	4

47	T.S. Testes of Mice	4
48	T.S. Ovary of Grasshoppers	4
49	T.S. Ovary of Mice	4
50	T.S. Blastula Mammalian	4
51	Different Stages of Mitosis & Meiosis Slide	4
52	Blood Corpuscles	4
53	Skeleton	2
54	Symbiotic association	2
55	Flash card modles	2
56	Brain	2
57	Heart	2
58	Excretory system	2
59	Human Nervous System	2
60	Plants & animal kingdom	2
61	Eye model	2
62	Ear model	2
63	Mendelian chart	2

## 42. Lab Equipment (Chemistry)

**Total Schools:** 185

**Scope of Work:** Supply, installation, and training for comprehensive Chemistry lab equipment and consumables to support practical experiments and concept understanding in chemistry. The lab setup includes molecular models, glassware, reagents, instruments, and educational charts. Proper installation and setup will ensure functional lab spaces, and training sessions will prepare teachers for effective usage and student experimentation.

Sl. No.	Name of Item	Qty
1	Micro Test Tube	2
2	Test Tube Holder	2
3	Test Tube Stand	2
4	Dropper with Rubber Bulb	2
5	Glass Rod and Stirring	2
6	Spatula	2
7	Beaker (10 mL)	2
8	Funnel	2
9	Dry Cell Holder	2
10	Torch Bulb with Holder	2
11	Beaker (50 mL)	2
12	Measuring Cylinder (10 mL)	2
13	W- Tube	2
14	Tripod	2
15	Spirit Lamp	2
16	Laboratory Stand	2
17	Litmus Paper	2
18	Watch Glass	2
19	China Dish	2
20	Magnet	2
21	Thermometer (Laboratory)	2
22	pH Paper	2
23	Metals (Zn, Cu, Fe,	2
24	Emery Paper and Sand paper	2
25	Iron Nails	2
26	Fe- Filings and Zn dust	2



27	Filter paper	2
28	Micro Test Tube Brush	2
29	Dispensing Bottle	2
30	Vials	2
31	Double mouthed flask	2
32	Measuring Cylinder	2
33	PIPETTE 25ML (BOROSILICATE)	2
34	MEASURING CYLINDER 200ML	20
35	REAGENT BOTTLE 500ML	20
36	CHROMATOGRAPHY PAPER	2
37	CHROMATOGRAPHY CHAMBER	10
38	MORTAR & PESTLE	4
39	BUNSON BURNER/SPRITE LAMP	10
40	SPRITE	1LTR
41	TEST TUBE (BOROSILICATE)	200
42	TOUNGE	20
43	CHEMICAL BALANCE (ELECTRONIC)	2
44	CONICAL FLASK 250ML	2
45	IGNITION TUBE	2
46	PH CHART	2
47	BURRETE 100ML (BOROSILICATE) WITH GLASS STOPPER	10
48	THERMOSTATE	4
49	DROPPER	20
50	dil- Hydrochloric acid	500ML
51	conc- Hydrochloric acid	500ML
52	dil- Sulphuric acid	500ML
53	conc- Sulphuric acid	500ML
54	dil- Nitric acid	500ML
55	conc- Nitric acid	500ML
56	Acetic acid	500ML
57	Oxalic acid	500 G
58	Sodium hydroxide	500 G
59	Ammonium hydroxide	500ML
60	Potassium hydroxide	500 G
61	Ammonium acetate	500 G
62	Ammonium chloride	500 G
63	Ammonium carbonate	500 G
64	Ammonium molybdate	25G
65	Ammonium oxalate	500G
66	Ammonium sulphate	500G
67	Barium chloride	500G
68	Bromine water	500ML
69	Chlorine water	500ML
70	Copper sulphate	250GM
71	Dimethyl glyoxime	50GM
72	Disodium hydrogen phosphate	500GM
73	Ferric chloride	500GM
74	Iodine solution	125ML
75	Lead acetate	250GM
76	Lime water	500ML
77	Litmus solution (blue)	125ML
78	Litmus solution(red)	125ML
79	Methyl orange	500ML
80	Potassium chromate	250ML
81	Potassium dichromate	500ML
82	Potassium ferrocyanide	250GM
83	Potassium iodide	100ML
84	Potassium permanganate	250GM

85	Potassium thiocyanate	125ML
86	Phenolphthalein	125ML
87	Silver nitrate	125ML
88	Starch solution	125ML
89	Sodium carbonate	500GM
90	Sodium bicarbonate	500GM
91	Sodium nitropruside	50GM
92	Zinc dust	100GM
93	Copper turning	100GM
94	Ferrous sulphate	500GM
95	Nessler's reagent	100ML
96	Potassium nitrate	500GM
97	Calcium carbide	100GM
98	Ethanol	250ML
99	Ferric chloride	500GM
100	Sodium hydrogen carbonate	500GM
101	Sodium nitrate	120GM
102	$\beta$ - Naphthol	50GM
10	Ceric ammonium nitrate	50GM
104	2,4-DNP reagent	50GM
105	Fehling's solution A	500ML
106	Fehling's solution B	250ML
107	Schiff's reagent	125ML
108	Acetone	500ML
109	Tollen's reagent	75ML
110	Molisch's reagent	125ML
111	Iodine solution	250ML
112	Glucose	250ML
113	$\alpha$ - Naphthol	50GM
114	Benedict's solution	500ML
115	Starch solution	125ML

### 43. Lab Equipment (Physics)

**Total Schools:** 190

**Scope of Work:** Supply, installation, and training for comprehensive Physics lab equipment designed to facilitate hands-on experimentation and conceptual understanding of physical phenomena. The equipment includes models, apparatus, measuring instruments, and teaching aids covering various physics topics such as mechanics, optics, electricity, magnetism, and thermodynamics. Installation ensures a functional lab setup, and training prepares teachers for effective lab utilization.

Sl. No.	Physics Tools	QTY
1	Cone Run Uphill	2
2	Wave Dynamic Model	1
3	Reflection Physics Kit	1
4	Play with colour shadow	1
5	Newton Cradle	1
6	Fleming Left Hand Rule	1
7	Fleming Right Hand Rule	1
8	Hydro Dynamics	2
9	Newton's 2nd Law	1



10	Induced Current	1
11	Demagnetizing and Magnetizing Coil	1
12	Electric Bell	1
13	Visual Illusion	1
14	Electric Motor	1
15	Ampere Law	1
16	Battery eliminator	1
17	Ohm's law apparatus	1
18	PN Junction Apparatus	1
19	Newton's coloured disc	1
20	Parallelogram apparatus	1
21	Resonance Apparatus	1
22	Spring Constant	2
23	Resistance box 500 ohm	2
24	Rheostat 12"	2
25	Vernier Callipers	2
26	Screw Gauge	2
27	Spheres set of 6	2
28	Prism	2
29	Half meter scales	5
30	Meter scales	5
31	Galvanometer	2
32	Voltmeter	2
33	Ammeter	2
34	Plug keys 1 Way	2
35	Plug keys 2 way	2
36	Concave lens	5
37	Convex lens	5
38	Concave mirror	5
39	Convex mirror	5
40	Plane mirror	5
41	Glass slab	2
42	Magnet kit	1
43	Commutators	1
44	Drawing board	1
45	Slotted weight	2
46	V - stand (lens holder)	2
47	Plano convex lens	1
48	Semi-circular glass slab	2
49	Lens holder	4
50	Periscope	1
51	Kaleidoscope	2
52	Clamps	5
53	Electric Generator Model	1
54	Magnetic compass big	2
55	Copper wire 24 gauge	10m
56	Iron fillings powder	1

57	Series combination of resistors (set)	1
58	Parallel combination of resistors (set)	1
59	Multimeters	1
60	Copper plate (electroplating)	1
61	Calorimeter	2
62	Clinical thermometer	2
63	Celsius thermometer	1
64	Helical Spring (Slinky)	2
65	Tuning Fork (Box)	1
66	Gold leaf electroscope	1
67	AC DC Dynamo	1
68	Inclined plane	2
69	Battery holders	2
70	Overflow jar	10
71	Electric switches	250g
72	Spring balance	1
73	Optical Fibre Model	1
74	Electronic weighing machine	1
75	Spirit lamp	1
76	Lactometer	1
77	Pascals law apparatus	4
78	Cells 1.5 v	4
79	Cells 9V	6
80	Rechargeable Cells	1
81	Human eye model	1
82	Lattice crystal structure of NaCl	2
83	Rectangular glass plates	2
84	Cylinders (for vernier callipers)	1
85	Weighing box (physical balance)	4
86	Split cork	1
87	Cotton thread	2
88	Stop watches	5
89	Quill tubes	1
90	Strong Thread (nylon)	4
91	Thin mirror strip (Concurrent forces)	1
92	Specific gravity bottle (50ML)	2
93	Capillary Tubes (surface tension)	1
94	Spirit level	4
95	Cork to hold capillary tube	1
96	Drawing pins (boxes)	2
97	Rubber Hammers	1
98	Connecting Wires	1
99	High Resistance	1
100	Meter Bridge Set	2
101	Transistor Set	1
103	Right-Hand and Left-Hand Rules	1
104	Electromagnetic Spectrum	1



105	Friction: Types and Examples	1
106	Circular Motion	1
107	Calendar of scientist	1
108	Dispersion of Light (Prism)	1
109	Human Eye and Defects of Vision	1
110	Vector and Scalar Quantities	1
111	Magnetic Field Lines Around Bar Magnet Bar Magnet	1

#### 44. Science Lab establishment with all equipment's (Physics)

**Total Schools:** 599 schools,

**Scope of Work: Supply, installation, and training** for fully equipped Physics labs to facilitate hands-on practical learning and experimentation. The lab will be furnished models, apparatus, measuring instruments, and teaching aids covering various physics topics such as mechanics, optics, electricity, magnetism, and thermodynamics aligned with the curriculum.

SI	Item Name	Qty	Unit
1	Modular Island Workbench	2	SET
2	Laboratory Stool	15	Pcs
3	Equipment as per Section 43	1	

#### 45. Science Lab establishment with all equipment's (Chemistry)

**Total Schools:** 604

**Scope of Work: Supply, installation, and training** for fully equipped Chemistry labs to facilitate hands-on practical learning and experimentation. The lab will be furnished with molecular models, glassware, reagents, teaching charts, furniture, and scientific instruments, ensuring a comprehensive learning environment aligned with the curriculum.

SI	Item Name	Qty	Unit
1	Modular Island Workbench	2	SET
2	Supply and installation of wash basin	2	SET
3	Laboratory Stool	10	Pcs
4	Equipment as per section 42	1	

#### 46. Science Lab establishment with all equipment (Biology)

**Total Schools:** 610

**Scope of Work: Supply, installation, and training** for fully equipped Biology labs to facilitate practical learning and experimentation aligned with the curriculum. The lab includes microscopes,

anatomical models, biological specimens, reagents, charts, scientific instruments, furniture, and other teaching aids, providing a comprehensive hands-on biology learning environment.

Sl	Item Name	Qty	Unit
1	Modular Island Workbench	2	SET
2	Laboratory Stool	15	Pcs
3	Equipment as per section 41	1	

#### 47. Dedicated furniture for library

**Total Schools:** 511

**Scope of Work:** Supply of library furniture to create a functional and comfortable reading and study environment. The furniture includes computer tables and chairs with adequate charging points to support digital access and enhance the utility of library spaces.

Sr. No.	ITEM	Qty
1	Computer table	10
2	Chair	20
3	Book Shelves	1
4	Storage Unit	2
5	News paper Table	2

#### 48. Colorful sorting dustbins

**Total Schools:** 836

**Scope of Work:** Supply of **colourful sorting dustbins painted with engaging characters** to promote effective waste segregation and environmental awareness among students. The dustbins are designed to encourage proper disposal habits through visually appealing and educational designs.

Sr. No.	Item	Quantity per School
1	Colorful Sorting Dustbins (painted in interesting characters for waste segregation)	10

#### 49. Sanitary Pads

**Total no of Girl child:** 325758.

**Scope of Work:** Provision of **sanitary pads** to support menstrual hygiene management among schoolgirls. Each eligible student will receive a supply of sanitary pads to promote health, hygiene, and continued attendance during menstruation.

Sr. No.	Item	Quantity per Student
1	Sanitary Pads	Total 12 packs in a year. Each pack of 5 pads.

#### 50. Computer Instructor

- The Bidder/Agency will have to deploy 1 Computer instructor per schools deployed in 836 schools.



### **51. Vocational trainers**

- The Bidder/Agency will have to deploy Vocational trainer in the ratio of 1:5, one vocational trainer shall monitor 5 schools.
- Total no of 158 Vocational trainers are to be deployed.
- Vocational trainer should cover the allotted schools minimum 2 times in the week.

### **52. Vocational Teachers**

- The Bidder/Agency will have to deploy 2 Vocational teacher per school for the respective trades deployed in 789 schools.

### **53. Inventory Management System**

**Total Schools: 836**

**Scope of work:** Supply & Installation of inventory management software in 836 schools.

### **54. Distribution tracking software**

**Total Schools: 836**

**Scope of work:** This scope of work is for design & development of an application for tracking and tracing the path of batches of shipment from the headquarters/State Level to the various districts and across the complete value chain up until the school level.

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**Annexure B**

**Detailed Specifications**

**INDEX**

Sr. No.	Activity Master Detail Name
1	BALA Feature
2	Child Friendly Furniture
3	Outdoor Play Material
4	Pre-primary Strengthening
5	Student Assessment
6	Vocational Tools & Equipment
7	Vocational - Raw material
8	Vocational - Hands-on Skill Training to Students
9	Math Student Kit
10	Maths School Kit
11	Science Student Kit
12	STEM School Kit
13	Sports Equipment
14	Development of Playground Facilities
15	Digital Hardware and Software
16	Language Lab
17	Musical Instrument
18	Outdoor Science Park
19	Band Uniform
20	Band Set
21	Smart board with interactive learning panel
22	Green boards
23	ECCE Kit
24	Enhancement of School Aesthetics
25	Teacher ID card
26	Student ID card
27	CCTV Cameras
28	Olympiad for Class VI to X
29	Social Science School Kit
30	Financial Literacy
31	First Aid Kit
32	School Magazine
33	PM SHRI Selfie Point
34	Health Devices
35	Innovative Learning Tools



36	Gamified Learning
37	Drone Training
38	Mentorship Programme
39	Science and Math Curiosity Programme
40	Furniture for Students
41	Lab Equipment (Biology)
42	Lab Equipment (Chemistry)
43	Lab Equipment (Physics)
44	Lab Establishment with All Equipment's (Physics)
45	Lab Establishment with All Equipment's (Chemistry)
46	Lab Establishment with All Equipment's (Biology)
47	Dedicated furniture for library
48	Colourful Sorting dustbins
49	Sanitary Pads
50	Computer Instructor
51	Vocational trainers
52	Vocational teachers
53	Inventory Management System
54	Distribution Tracking software

## 1. BALA Feature

### Scope of Work

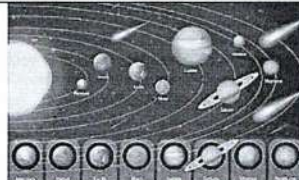

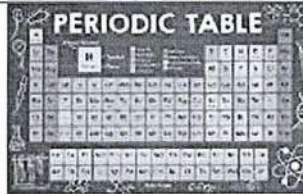

Implementation of BaLA Scheme as per below mentioned specifications in 47 schools.

The BaLA (Building as Learning Aid) work in schools should focus on transforming school infrastructure into an engaging and effective learning environment using visual aids, interactive elements, and innovative uses of space to support teaching and learning.

### Detailed Specifications:

- Educational drawings on UV Coated, Water and Dust Proof Sun board to be provided. Every Detail should be visible and pixelization should not be happen.
- Approx Area to be covered: 300 sq.ft

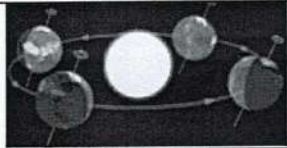




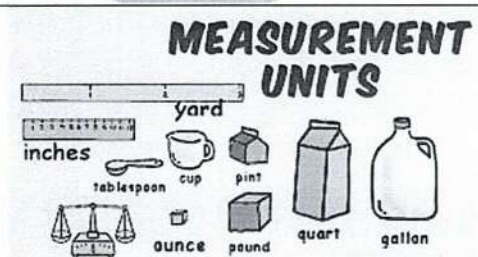
### Tentative Topics list to be covered: 20

S.NO	ITEM	QTY	IMAGE
1	Solar system	1	
2	Human Body	1	
3	Periodic table	1	
4	Fundamental Rights	1	

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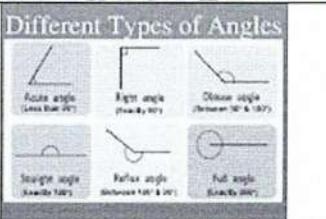

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5	Earth and its Motion	1	
6	Laboratory Equipment	1	
7	Bihar Map	1	
8	India Map	1	
9	World Map	1	
10	Units of Measurements	1	

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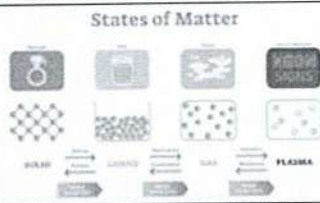
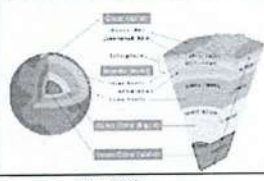

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11	English Phonics	1	
12	Barahkhadi	1	
13	National Symbols	1	
14	National Leader	1	
15	Types of Angles	1	
16	Good Habits	1	

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17	Traffic Rules / Road Safety	1	
18	States of Matter	1	
19	Layers of Earth	1	
20	Layers of Soil	1	



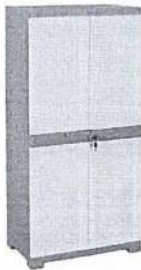


*Images are indicative. BEPC shall finalize content/images with the selected agency.*

Note - Bidder shall need to submit the samples on minimum Five topics on the sun board or before tender submission. Picture should be free from any sort of license and trade marks. Softcopy images of all the concepts to be submitted.

## 2. Child Friendly Furniture

**Scope of work:** Supply and installation of colourful, ergonomically designed, child-friendly furniture in 47 schools aimed at enhancing the classroom environment for early-grade learners. The furniture should be designed to promote safety, comfort, and an engaging learning atmosphere for children.

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S. No	ITEM	Specifications	Qty	Image
1	Moon/Bean Shape Table	<ul style="list-style-type: none"> <li>Dimension: 54"x29"x20"</li> <li>Material: Top: 25mm MDF top/ Polypropylene (virgin) with Powder Coated and Chromed MS frame</li> <li>Seating capacity: 4-6 chairs</li> <li>Weight 8-10 Kg Approx</li> </ul>	10	
2	Low Height Chair	<ul style="list-style-type: none"> <li>Material - Polypropylene (Virgin)</li> <li>Dimensions - H x L x W 16.5"X11"X9.5"</li> <li>Weight- 1 to 1.5 kg Approx.</li> </ul>	30	
3	Storage Cabinet	<ul style="list-style-type: none"> <li>Material: Polypropylene (Virgin)</li> <li>Size: 35 D x 55 W x 115 H cm</li> <li>Shelves: 4</li> <li>Multicolor</li> <li>Weight 10 to 12 Kg Approx.</li> </ul>	2	
4	Mat	Eva Foam interlocking Mat 15 mm thickness (One set of 4 mats of size 24 by 24 inch)	12	
5	Bookshelf	<ul style="list-style-type: none"> <li>6 Tier Bookshelf</li> <li>Material: Polypropylene (Virgin)/ Wooden</li> </ul>	2	

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.







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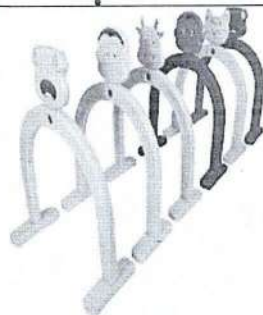

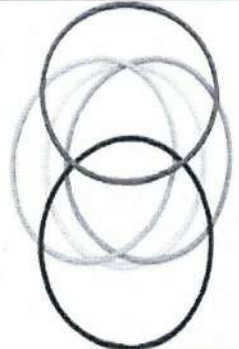
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### 3. Outdoor Play Material

**Scope of work:** Supply and installation of safe and colorful outdoor play equipment for pre-primary children in 47 schools. These materials should help young children to play, move, and learn together. The items should be designed to support their physical growth, coordination, and social skills in a fun and friendly environment.

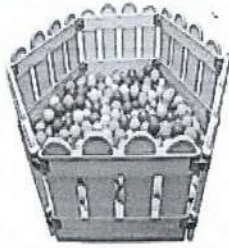


S. No.	ITEM	Specifications	Qty	Image
1	Jhula	Swing for younger kids. It should be made of durable and non-toxic HDPE material, with a large capacity of up to 20 KG. It should be a multi-color design. Size: L X W X H: 35"X30"X42"	2	
2	See-Saw Big	Colourful kids seesaw to balance skills and strengthening muscles and for the effective physical development. Should be made of safe plastic and harmless to kids. It can be used by two kids with Metal back support with colourful seat on Top of seating area. Size: L X W: 35"X22"	2	
3	Park Slide	Colorful slide comes with 4 steps with ground clearance provision for safe landing of kids, slide ladder made of virgin grade non-toxic polypropylene plastic. Size: L X W X H: 50"x16"x34"	1	
4	Wavy Slide	Colorful wavy slide with 4 steps with ground clearance provision for safe landing of kids, slide ladder made of virgin grade non-toxic polypropylene plastic. Size: L X W X H: 60"x17"x40"	1	
5	Soft Ball	Soft Ball made of soft fabric Balls with multicolor size 160 mm dia, made of nontoxic material.	4	
6	Big Ball	Plastic/ Rubber/Foam balls with multicolor with a size 8-10 cm with smooth edges made of nontoxic material.	4	

7	Plastic Bat Ball	Length- 28 Inches, Width 3 Inches, Weight 300-350 Gram	2	
8	Weight Machine	Machine should weigh large objects up to 90Kg	1	
9	Trampoline	Frame material should be mild steel Size – 40 inches or above	1	
10	STEP IN Game	Colorful stem in game should be made of virgin grade non-toxic polypropylene plastic with 5 steps	1	
11	Rockers	Animal shape colorful rocker should be made of virgin grade non-toxic polypropylene plastic with 5 steps Size: L X W X H: 28"x11"x20"	4	
12	Hula Hoops	Multicolor interlocking hula hoops, should have minimum 50 cm diameter	4	

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13	Ball Pool	1 Ball Pool, Plastic Balls. Pool should be made of high-quality material and sturdy poles make the pool safe for children. Lightweight and portable Size: L X W X H: 60"x30"x20"	1	
14	Basket Ball Stand	It should be made up of virgin plastic, colorful, animal theme, adjustable height. Size: Height: 22"	1	
15	Plastic Animal Dustbin	Dustbin made up of Virgin plastic, should resemble animal body holding on to a bin	2	

Images are indicative. Actual product image may change.

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.

#### 4. Pre-primary Strengthening

**Scope of Work:** Supply, installation, and training for innovative and playful learning solutions through video tutorials to create an engaging and stimulating environment in 47 pre-primary classrooms. The setup should support early childhood development through interactive tools, basic infrastructure, and teacher-friendly resources.

The following components should be included:

##### List of items

S.No.	Model	Qty
1	Wall elements	5
2	Learning Corner (Bookshelf with books)	1
3	Gamified Mats	5
4	Magnetic White board with magnetic alphabets and numbers	1
5	Teaching Learning Tools	1
6	Learning Cushions	30
7	PA System with wireless mic	1
8	Smart TV	1
9	Video Contents	1



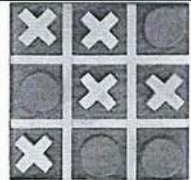

10	Art Supplies	30
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## Detailed Specification

### I. Wall Elements-

Creative and educational decorative wall solutions for primary school classrooms that do more than enhance aesthetics.

Decorative walls should include:

S. No.	Items	Specification	Qty	Image
1	Color match and Ball drop	2 x 2 ft	1	
2	Big base plate for blocks	2 x 2 ft	1	
3	Giant wooden tic tac toe	2 x 2 ft	1	
4	Big Maze chase	2 x 2 ft	1	

### II. Learning corner (Shelf with Books)- (4 Tier Shelf made of Virgin plastic)

Setup of a complete **Learning Corner** designed specifically for primary school students. This should include a safe, accessible bookshelf unit and a curated collection of educational and age-appropriate books.

Total no of books – 100

S. No.	Topics Covered	Qty
1	Storybooks (fiction and folk tales – English and Hindi)	20
2	Alphabet and phonics books (English and Hindi)	16
3	Basic science and environmental awareness	16
4	General knowledge and picture encyclopaedias	16
5	Moral and value-based stories	16
6	Multilingual titles (local language and English)	16


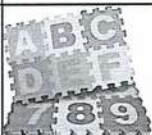




7	Bookshelf	1
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Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.

### III. Gamified mats

**Gamified Mats** designed to create an interactive and sensory-rich learning environment for young learners. Bidder should provide mats minimum (4 X 6) ft with built-in **learning games and activities** of below concepts:

S.No.	Items	Qty	Specification	Image
1	Hopscotch patterns	1	4 x 6 ft It should be non-toxic, anti-slip EVA foam or PVC	
2	Alphabet paths (A-Z)	1	4 x 6 ft It should be non-toxic, anti-slip EVA foam or PVC	
3	Color and shape matching areas	1	4 x 6 ft It should be non-toxic, anti-slip EVA foam or PVC	
4	Directional games (e.g., "Jump to the red circle," "Find the triangle")	2	4 x 6 ft It should be non-toxic, anti-slip EVA foam or PVC	


Images are indicative. Actual product can be different as per the content.

Note: Bidder shall need to submit the samples of each one mat on or before tender submission

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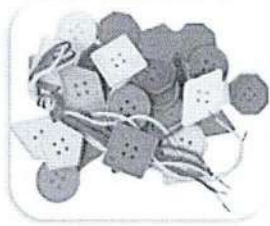
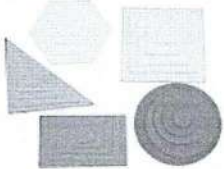
#### IV. Magnetic White Board with magnetic alphabets and numbers

S.NO	Items	Qty	Image
1	Magnetic White Board (size 2 by 3 ft) with magnetic alphabets and numbers	1	

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission

#### V. Teaching Learning Tools

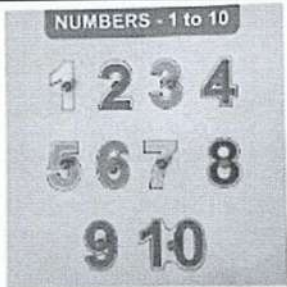

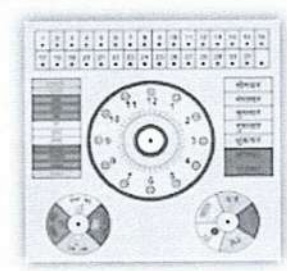


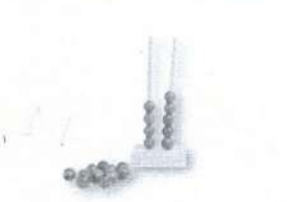
Bidder shall provide high-quality, age-appropriate educational and recreational tools for children enrolled in pre-primary school. All toys offered should be safe, durable, and designed to enhance the teaching-learning environment in schools.




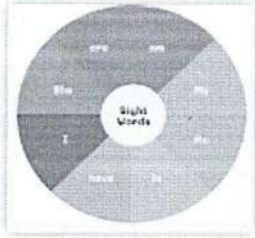

S.No	Items	Specifications	Qty	Picture
1	Lacing Buttons	This kit should contain 180 buttons in 6 colors. These buttons include different shapes. These shapes are circle, triangle, rhombus, square, pentagon, and octagon with 6 colorful laces.	1	
2	Aakar Parivar	The set should contain 25 pieces of 2D shapes in 5 different sizes and colours. Should be made up of durable, non-toxic material.	1	

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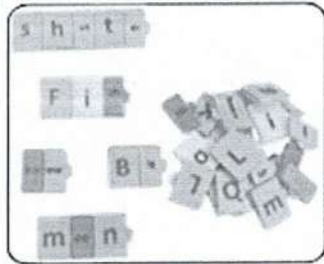
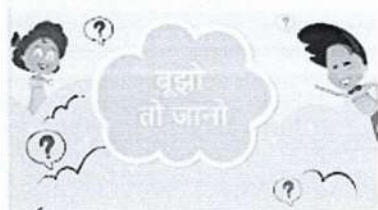



3	Wooden Numbers	MDF tray of size 11x11 inches with 10 cut outs of different numbers. The cutouts should be lifted easily by the help of plastic knobs attached to it & put back on same slots.	2	
4	Links	The kit should include 200 links in 4 different colours. The links should be made of non-toxic plastic.	1	
5	Wooden Calendar	This wooden calendar should be square shape of size 30 X 30 cm. Number of days, months, seasons, weather, and clock should be mentioned on the board with three pins.	1	
6	Pattern blocks	Plastic Pattern blocks should have set of 100 plastic pcs of 1cm height, containing shapes of Hexagon, Trapezium, Triangle, Square and two type of Rhombus	1	
7	Fruit & Vegetable Set	Set should contain different fruits and vegetables joint with velcro along with the chopping board and knife	2	
8	2 Rod Abacus	The set should include 1 base, 2 rods, and 20 beads in 2 different colors. It should be made up of durable & non-toxic material.	4	

9	Events of the day Wheel with suction spinner	The kit should contain 1 wheel of size 9 x 9 inches, printed on sunboard/ cardboard. Along with a spinner to point out events.	1	
10	Math Balance	One Number Balance of Plastic should be with one base stand, rod, scale, 20 hanging weights, and 2 pointers, Scale has a length of 33 cm with numbers printed on both sides.	4	
11	Teacher Clock	Clock should have 2 hands along with a clock stand	1	
12	Sight Words Wheel with suction spinner	The kit should contain 1 wheel of size 9 x 9 inches, printed on sun board/ cardboard. Along with a spinner to point out words.	1	
13	Word Maker plastic - Hindi	अलग-अलग रंगों की 200 कनेक्टिंग टाइलें	1	

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14	Word Maker plastic- English	200 connecting tiles should be in different colors	2	
15	Warm up Games	Set of 25 cards of size 5 x 9 inches, should be printed on 300 GSM laminated card with Triple fold	1	
16	Currency with money concept cards	The kit should contain paper currency- 3 notes each of ₹ 1, 2, 5, 10, 20, 50, 100, and 1 note each of ₹ 200 and 500. Also, the kit should have non-toxic plastic made coins [ 3 coins each of ₹ 1, 2, 5, 10, 20] respectively.  Set of 40 cards of size 2 x 2 inches.	1	
17	Community Helpers	MDF tray with 10 cut outs of different helpers of size 11x11 inches. The cutouts should be lifted easily by the help of plastic knobs attached to it & put back on same slots.	2	
18	Emotion Puzzle (set of 7)	Set should contain 7 different emotions, each of size 4x4 inches.	4	

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Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission

#### VI. Learning Cushions-

S.NO	Items	Specification	Qty	Image
1	Learning Cushion to create interactive, organized and child-friendly learning spaces.	It should be made of falalen material or equivalent Size - 40 x 30 cm	30	

The learning cushion shall include a curated set covering the following themes:

1. **Alphabet & Phonics**  
Introduction to letters, sounds, and basic word formation.
2. **Numbers & Counting**  
Basic numeracy, counting games, and number recognition.
3. **Colors & Shapes**  
Visual learning of primary colors and basic shapes.
4. **Animals & Nature**  
Farm animals, wild animals, marine life, and plants.
5. **Daily Routines & Good Habits**  
Hygiene, getting ready for school, manners, etc.
6. **Seasons & Weather**  
Understanding changes in weather and the four seasons.
7. **Storytelling and Reading Time**  
Create a cozy reading zone with cushions to promote engagement and focus.
8. **Five Senses Activities**  
Explore texture, sound, and movement through sensory cushions.
9. **Weather and Seasons**  
Sit on weather-symbol cushions during weather chart discussions.
10. **Music and Rhythm**  
Drum on cushions, sit in rhythm circles, or use for movement and dance.

#### VII. PA System (Mic and speaker)-

PA System (Speaker and Mic) - Output Power (RMS): 50W or more  
BT v5.0 or latest | HDMI | Optical IN | USB | AUX  
Driver Size: 5.5 x 9.5 cm (x2) or more  
Impedance: 8Ω

*VZ*

*MV*



Frequency Response: 50Hz–20kHz

S/N Ratio:  $\geq 66$ dB

Separation:  $\geq 40$ dB

File Format Support (USB): MP3

Line Input: 3.5mm, Optical IN, HDMI (ARC)

Speaker should come under Bar Technology with Cordless handheld Mic

Note: Bidder shall need to submit the samples for above line items (1 unit each) on or before tender submission

**VIII. Smart TV**

- 55", UHD TV, Smart TV without OTT Applications, Wi-Fi, speakers 10wx2 or better, HDMI-3, USB-1 or above, LAN-1, Audio Out.

**IX. Video contents in a Pen Drive**

**List of Videos contents:**

S. No.	Topics
1	शरीर के अंग
2	Sounds of English alphabets and words (Monosyllabic)
3	पशु पक्षियों की बोलियाँ
4	Numerals (English, Hindi)
5	स्वर और व्यंजन की पहचान
6	मात्राओं का ज्ञान - बारहखड़ी
7	आकृतियाँ और उनकी आकृतिक समझ
8	दिनचर्या
9	मेरा परिवार
10	संयुक्त अक्षर
11	कविता संवाद
12	क्रम में लगाना
13	तुलना करना
14	चित्र/चित्रकथा पर मौखिक बातचीत
15	Letter picture Association (A for Apple..)
16	Name of Fruits
17	Good Habits and Bad Habits
18	Names of Vegetables
19	Animals and their young ones
20	Self-Introduction

## **X. Art Supplies**

Bidder shall supply 30 sets of high-quality art and craft kit per school that should comply with child safety standards and are intended to promote artistic expression in a creative and engaging classroom setting. Each set must contain below line items -

- One workbook of minimum 32 pages
- Set of 12 crayons (80 mm length, 8 mm dia)
- Multicolour Modelling clay with roller in a tub (100 gm)
- Shape Stencil
- Green Slate and a pack of 10 chalks

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission

## **5. Student Assessment**

**Scope of work:** Supply , Installation and Maintain Student Assessment Software should be done in 836 schools as per following specifications.

### **Detailed Specifications:**

Admin/School Portal  
Configure/Manage Masters  
View Dashboard for Schools Analytics  
Teacher Portal  
Create Assignments  
Assign Assignments to Students  
Assessment Creation  
Preview Assessment  
Online Course Material Upload  
Profile Management  
View Student Activity Reports  
Individual Student Portal  
Profile Management  
View Assignments  
Access to online course materials  
Attempt Assessment/Assignments  
View Scorecard  
View Subjects Content/Videos  
School Management  
Teachers Management  
Teachers Import  
Transfer  
Teacher Subject Mapping  
Student Management  
Students Import



Subject Mapping  
Add Class/Section/Subjects to school.  
Add Chapters/Topics in Subject  
Assessment/Assignments Creation  
Questions Creation Subject/Chapter/Topic wise

**Details:**

Overview: A web-based and Android based platform should be designed to facilitate the creation, delivery, and evaluation of online assignments, assessments for Schools institutions. The primary goal of the portal should be to provide a user-friendly and efficient solution for conducting various types of assessments, such as quizzes, exams, and skill-based tests, online course material for the students. Proposed solution should have following key Features.

Key Features and Functionality:

**User Management:**

a. Admin Panel:

Create an intuitive and feature-rich admin dashboard for managing user accounts, roles, and permissions.  
Configure and manage master's to be used in the school.  
Enable administrators to view and export user data, assessment results, and reports.

b. Teacher Portal:

Create and manage assessment content, assessment evaluation, view results, and generate reports.  
Provide Teacher's with a user-friendly dashboard to manage assessments.  
Allow teachers to create, edit, and delete assessment content, including various question types.  
Enable the uploading of multimedia elements for questions and answers.  
Implement options for randomizing questions and answer choices to minimize cheating.

c. Student Portal:

Students can access assessments, view their scores, and track their progress.  
Enable students to create accounts or sign in securely.  
Students can have access to online course material uploaded by the teachers.  
Allow students to view available assessments.  
Include progress tracking for students to monitor their performance.

**Assessment Creation:**

Question Bank: A repository to store and organize various types of questions (multiple-choice, short answer, essay, etc.).

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Implement support for different assessment types (multiple-choice, true/false, short answer, essay, etc.).

Media Support: Allow the inclusion of multimedia elements (images, videos, audio) in questions.

Include options for setting time limits, pass marks, etc

Provide real-time previews of assessments before publishing.

Assessment Delivery: Online Testing: Students can take assessments online, either in real-time or within a specified time frame.

#### Result Analysis and Reporting:

Instant Results: Students receive immediate feedback on completion of the assessment.

Detailed Reports: Teachers and administrators can access comprehensive reports with individual and group performance analysis.

Analytics: visual representations (charts, graphs) to present data trends and insights.

Bidder should submit the reports of each school every week to BEPC. Bidder should share the data storage access to Department and same should not be used for any other purpose without consent. Bidder should not have any data backups in view of sensitivity. Bidder should provide the APIs and customization support to department. Solution Layout should be approved from BEPC.

## 6. Vocational Tools & Equipment

**Scope of work:** Supply, installation, and commissioning of vocational tools and equipment for any of the 2 trades in each school in 789 schools, along with comprehensive training for teachers and students. The training should focus on the effective use of tools, safety procedures, and basic skills related to the trade. This initiative is designed to help students gain practical knowledge and prepare for real-world job roles. Hands-on training sessions should be conducted by experts to ensure that teachers and students are confident in using the equipment. Training materials and manuals should also be provided for continued learning classroom integration.

#### Trade List:

S. No.	Trade
i.	Agriculture
ii.	Automotive
iii.	Apparel
iv.	Electronics
v.	Healthcare
vi.	Tourism
vii.	Telecom



## i. Agriculture:-

Agricultural Tools should provide hands-on training in modern farming practices through tools and equipment for soil testing, irrigation, planting, crop care, and harvesting to promote skill-based learning in sustainable agriculture.

S. No.	Tools & Equipment	Specification	Qty
1	Knapsack Sprayer	Tank capacity in litres-16, Straps length in mm - 840, Strap width in mm-38, Pump discharge in ml/min- 500 or more at 300 kPA, Tank filling hole diameter in mm- 90, Tank material-Plastic Lid or cap material-Plastic, Delivery hose length in cm- 110, Thickness of cushion on strap in mm-20, Width of cushion on strap in mm- 40, Overall Dimension of Manually Operated Knapsack Sprayer( L x W x H) in mm x mm x mm- 382x210x485, Empty weight of Manually Operated Knapsack Sprayer in kg-4.29	2
2	Grafting Knife	Material of Knife Alloy - Steel, Outer Handle Scales:- Plastic, Inner Handle Scales - Brass, Spring Steel - Wire, Rivet - Brass/Aluminium ally/Nickel plated steel Hardness of Blade (HB) 430 to 500 (+10/-10) The minimum thickness of the blades (in mm) 4 Length of blade in mm- 140 - 150 The distance from the outer edge to centre of rivet hole for blade(in mm) 5 The distance from the outer edge to centre of rivet hole for inner handle scale (in mm) 10 Diameter of rivet (in mm) 2 The msaterial should be free from stiffnes & unwanted play Warranty (Years) 1	2
3	Pruning Secateur	Length-200-230mm(+5/- 5), Weight- 140-160gm, Cutting Edge Length-35-40 millimeter, Width-45-50 millimeter, Durable handle material, Blade Material-High carbon steel with hard chrome, plating Cutting Capacity-15 millimeter, Good quality spring, Blade feature-it should be capable to cut the stem up to 2.5 cm dia.	2

4	Gardening Rake	Number of Spikes-14 ,The size of the rake measured from from the centre of extreme spike at one end to the centre of extreme spike at other end in mm (with tolerance @ $\pm 5\%$ )- 390 ,The length of the handle of Garden Rake (in metres)- 1.5M , Diameter of the handle of Garden Rake (in mm)-35MM ,Nominal Size of Sickle (in mm) with tolerance - 225 , Hardness of the blade of the sickle-45	2
5	Sickles	Type of Sickle - Sickles with solid blade Nominal Size of Sickle (in mm) with tolerance- 225;Hardness of the blade of the sickle-45	2
6	Pruning Saw	Handle Type Pistol Style Grip Handle Material Engineering Plastic Blade Material High Carbon Steel Blade Width 48.5 millimeter Handle Length 210 millimeter Blade Thickness 1Millimeter Total length: 510 millimeter Blade length:380 millimeter Blade feature Blade should be slight curve shape and it should have ground sharpe or serrated type edge on the cutting side	4
7	Gardening Kit	Kit Contains (Number of Gloves 1 pair Drip Trays2 2 Size of pot (Top diameter) (cm) 9- centimeter, Size of gloves Medium Number of seed packet 4 watering can 1, Number of Trowel 1 Item in a kit Fork, Gloves 2 Number of Weeder 3 Number of Fork 1 Number of soil discs 1 Number of shears 1 Material of Trowel SS Number of pots 3)	2
8	Spade	Length of Blade in mm 250 Mouth Width of Blade in mm 100 Thickness of Blade sheet in mm 40 Length of shaft in mm 600 Material of Blade Mild Steel Type of Handle D-shaped handle	5
9	Hammer	Material should be of Steel, Material of Handles should be of good quality wood. Type of Hammers - ball pein hammer	1

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10	Soil Testing Kit	Material- Plastic pH 4.5, 5.0, 5.5, 6.0, 6.5,7.0, 7.5, 8.0, 8.5, 9.0 Available Nitrogen 140,280, 420, 560, 700 (N) (Kg/ha), Available Phosphorus 7,14, 21, 28, 35 (P) (Kg/ha),Available Potassium 100,150, 200, 250, 300 (K),(Kg/ha) Organic Carbon 0.2, 0.4, 0.6, 0.8, 1.0 % No of Tests 50 in one kit. 1 years On-Site Warranty.	2
11	Drip Irrigation Kit	Size 10 Plants Drip Kit Colour Black Material Plastic Special Feature Automatic water your plants and flowers precisely and at ease, Watering the garden, potted plants, shrubs	2
12	Irrigation SPRINKLER	Material of Sprinklers Metal or copper alloy Features; Replaceable nozzles shall be attached to the sprinkler by threading, push in or any other method that permits rapid and effective replacement under service condition, Sprinkler parts, including nozzles of the same type and manufacture shall be interchangeable	2
13	Transparen T Grafting Tape	MULTI-USE ROLL - Each roll is 0.78" providing enough parafilm for up to 300 grafts per roll wide 109 yards long (2cm x 100M)	2
14	Gunny Bags	Material of Gunny bag - Jute, Outside Length 100 - 110 cm( Tolerance + 4 / - 0 ) , Outside Width 60 -70 cm, ( Tolerance + 4 / - 0 ) Mass of Bag at 20% moisture regain 907gram (Tolerance + 8% / - 6% ) MOISTURE REGAIN,Moisture Regain 22% ( Maximum ) , BAG STITCHING – Bag,Stitching Herakle Stitching as per .Latest Stitches per dm 9 to 11.	2
15	Flower Pot	Material Plastic Shape (When viewed from Top) Round Pot Length (Diameter) 500 millimeter Pot Width (Diameter) 400 millimeter Pot Height (Overall Height) 1000 millimeter	10
16	Water Analysis Kit	Parameter: Alkalinity, Hardness, Temp, Pb, Chlorine, Sulphate, Pottasium, Chloride, Fe, Mangnese, Phosphate, , Ammonia, Nitrite, Nitrate, and Color Yes Range pH 0-14 TDS0-2000 ppm Turbidity 0-1000 FNU Resolution pH 0.1 TDS 1 ppm Turbidity 1 FNU All heavy Metals 100 ppb Compound 1 ppm	2

		Compact size and user friendly, Local Graphical display for water quality parameter flow rate and water volume consumption	
17	Khurpi	Material of Khurpi Carbon Steel	2
18	Germination Tray	Material of tray HDPE Colour(ultra violet resistant) black Shape of trainer rectangular Weight of tray(in gms) 725 $\pm$ 2 Number of root trainers in each block 20 Supporting under surface rides between the cavities are both lengthwise and cross directions Number of through holes at the top surface of the block 12, Number of Guard or brush arrangement lengthwise 8 or 2 on each side Total size of tray(mm xmm) 328 x 258 x 165 Top inside diameter(in mm) 68 Bottom diameter of opening(in mm) 20 Distance of Taper from bottom(in mm) 15 Diameter at bottom(in mm) 42, Length (in mm) 100 Depth of Root trainer Ridges(in mm) 2 Number of equidistant root trainer ridges 6 Width of Outer rim at the top(in mm) 3.2, Thickness(in mm) 2 Thickness of Supporting under surface rides(in mm) 2, Depth of Supporting under surface rides (in mm) 25, Under surface distance between cells(in mm) 8 Diameter of through holes at the top surface of the block to allow aeration to stems & plant(in mm) 12	1
19	Hoe	Warranty 1 year Thickness of blade material 5-millimeter Width of blade at hinged spade end 5 inch, Length of blade of spade end 10 inch Length of Shaft 900 millimeter Width of blade at working spade end 7 inch Diameter of shaft 1.5 inch Number of prongs 4 Fixing of prong & blade part to shaft Mounted fitted Material of handle wood Material of Shaft wood Material of prongs Mild steel Material of blade Mild steel	5
20	Trowel	Type of Trowel Scoop Trowel Material of Blade Steel Material of Tang High tensile steel Material of Handle Phenolic moulding material Overall Length of Handle (in mm) 160	2

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		The tang shall be rigidly joined with blade either by welding or riveting Yes Material Coating of Blade Hard chromium Material Coating of Handle Lacquer coated Hardness of Trowel Blade (in HRC) 50-55 Heat treated surfaces shall be free from cracks, burrs, scales, rust, etc Yes	
21	Watering Can	Shape of Watering can Other Opening for Watering Filling, Type of Handle Saperate Handles for Hanging and Holding,Support Between Spout and Body Type of Spout With Perforation,Colour Green Material of Watering Can Polypropylene (PP) Capacity of Watering Container(In litre) 9.1-11 Height of Watering Can(in MM) 301-310	2
22	Pheromone Trap	Height of trap body 8 centimeter Mounting type Hanging type Depth of trap body 8 centimeter Width of trap body 9 centimeter Colour of box Green Packing Cardboard box packing No of holes to facilitate trap 1 Weight of trap body 50 gram Colour of Lid Green Material of construction Polystyrene	3
23	Food Analysis Kit	Box must useful tool to teach & learn about common adulterants and their detection for schools, teachers & parents, FSSAI Approved Test 102 Guide Book, Acid/Alkali Solution required for some tests, Packing type Bag Contains basic chemicals & small instruments (Lactometer & Magnet).	2
24	Shovel Measuring Tape	Type of Shovel Square Nose Shovel (General Purpose) Type of Handle D- Grip Warranty in years 1 Material of Shovel Blade Quality Steel Material of Rivets and Pins Rivet and pins shall be made of mild steel Material of Handle Shovel Shaft shall be made from wood Mouth width of Blade in mm (except round nose shovel) + - 6 mm tolerance 280,Length of Blade in mm +- 6 mm tolerance 340 Shoulder width of Blade in mm + - 6 mm tolerance 220	2

		<p>Weight of Blade in kg + - 10 tolerance 1.8  Length of handle in mm +- 10 mm 810  Thickness of Sheet of the Blade in mm 2  Overall weight of Shovel in kg 2.8</p> <p>Case material ABS Blade material Plastic  Size,(m) 15 Blade width,(inch) 1 Blade  thickness,(mm) 0.1 Case Shape Round Strong  copper rivet ensures a stronger end hook  Tape Colour White Case Color Grey Total  weight,(gm) 350</p>	
25	Bamboo Basket	Name of the sub-category: Cane, Bamboo & Natural Fibre Product Description Echo Friendly Basket Does it comply with "Make In India"	5
26	Trunk	<p>DIMENSION &amp; CONSTRUCTION</p> <p>Minimum Weight 16.5 Kg(Size A);  Steel Trunk Size LxWxH (mmXmmXmm)  800x525x375 (Size A)Tolerance in Length,  Width and Height +-5 mm Hasp and Staple  Size 150 Mm .</p>	2
27	Soil Auger	<p>Diameter of Posthol Type 50 millimeter  Type Helical Type (Screw type)  Parts 1. Auger head 2. Rod,3. Tee piece 4.  Handle Material Stainless Steel Thickness 15-  millimeter Diameter of Screw Type 25  millimeter Length of Rod 1 meter</p>	2
28	Seed Germinati O N Cycle Chart	Material- Laminated paper, Colour- Multicolour, Size- 100cmX70cm, Plastic rods on both ends, Hanging strip, Thickness- 30micron. Language- English.	2
29	Insect,Pest & Diseases Chart	Material- Laminated paper, Colour- Multi colour, Size- 100cmX70cm, Plastic rods on both ends, Hanging strip, Thickness- 30micron. Language- English.	2
30	Pro Tray	<p>Shape Rectangular Weight gm:100  Material: HDPE &amp; 10% LDPE ColorBlack No  of root trainer in each block 20 Height in cm 10  Length in cm,30 width in cm 15</p>	5

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31	Soil Moisture Meter	Material: Plastic+aluminium alloy Accuracy: °C/°F 1 Working Temperature: °C: 5 to 40 Soil Temperature Measurement Range: °C:9 to50 Soil PH Measurement Range:3.5-9.0 Power Supply: in Volts Probe Length: 15Cm15 Item Weight: 80 gm Length 300 mm	2
32	Seives	Material :Stainless steel Diameter inch-9 Size-mm2 Weight gm 50	2
33	First Aid Kit White Board	Large household multi-layer first aid kit multifunctional medicine box comprising of first-aid bandage, small scissors, tweezers or a cotton swab, ointment, and other basic over the counter drugs. QTY Clinical thermometer 1 Cotton bandage, Size : 3 mtrs. * 5 cm. 1 Adhesive plaster (Woven fabric) : Size 19*72 mm.1 Sterile gauze swab : 5*5 cm.1 Antiseptic liquid 100 ml,1 Antiseptic cream 25 gm 1 Microporous tape 1 Tweezer 1 Scissor 1 Examination gloves 2 Latex gloves 1 Natural Rubber Powder content < 15 mg / dm2 Extractable Sterilization Ethylene Oxide / Gamma irradiated RUBBER GLOVES Validation of Sterlization Chamber Pain relief spray 30 ml 1 Antiseptic soap 50 gm	2
34	Latex Rubber Gloves	Size- inch Free Size Natural Rubber Powder content < 15 mg / dm2 Extractable Sterilization Ethylene Oxide / Gamma irradiated RUBBER GLOVES Validation of Sterlization Chamber Protein Level: <200 micro gram/ dm2. Material Latex Rubber Water Proof	2
35	Rotary Tiller	"Heavy duty Blades Starting System " Recoil Starter Power 3 Hp Stroke 2 stroke Cyclinder Single Max Power: 2.2kw/7000 RPM .Tilling Depth : up to 6 inch Tilling Width : up to 20 inch Fuel Tank Capacity: 1.6L Fuel Mixture Ratio Petrol Two-cycle Oil (40:1 Carburetor : Diaphragm	1
36	Compostable Mulch Sheet	Usage Application Agriculture CPCB & IIP Licensed for overall migration ,CIPET Certified foe Biodegradability, Intertek certified for seal & pumpture, Packing Type Roll Made in India,	1

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		Color Black/Green Thickness in Micron 20 to 5 Width in m 1 size m/Roll 20	
37	Soil Testing Reagen Kit	Reagent Kit for-samples parameters 14 License Technology License by IISS Bhopal Type of parameters EC,pH, Organic Carbon, Pottasium, Nitrogen, sulphur, Lyme Gypsum, Iron, Zinc, carbon Phosphorus like parameters. No of Sample to be tetsted - 50 Sample	2
38	Infographics	3D Lenticular Fruits and Vegetable Puzzle Material Type PAPER Height - CM 30 WIDTH - CM 42 TYPE GSM 70 Quantity- Nos 2	2
39	Kissan Suraksha Kawach	Shoe cover Ancel Length Water Proof & Dust proof, Easy to wear, Length in mm 400 Weight gm 6.6 Cap, Weight:30 gm Material, Non- woven polypropylene Length in Inch 18 color Blue/Green Safety Goggle, weight in gm30 Body Cover, Material Spun Bond Weight gsm 90	1

## ii. Automotive:-

Lab should equip students with practical skills in vehicle maintenance and repair using automotive tools, diagnostic equipment, and engine models for hands-on learning in automobile technology and servicing.

Sl. No.	Tools & Equipment	Specification	Qty
1	Air Compressor	Type of Air Compressor Positive displacement - Reciprocating Piston Type Duty Cycle Intermittent, Tank Mounted Single Stage for compression. Air Cooled Cooling System Oil Lubricated Lubrication Type Rated Discharge Pressure (kg/cm <sup>2</sup> ) 7.0 to 7.9 "Maximum Working Pressure " 8 bar	1
2	Bench Vice	Material And Dimensional Parameters -: Material of Body for Bench Vice -Steel cast Material of Movable jaw- Steel cast Material of Swivel base plates- Steel cast Material for Jaw plates- Tool steel Material for Screw spindle and handle- Steel Material for Spindle nut- Grey cast iron Nominal size of bench vice in mm- (width of the jaw) (tolerance of $\pm 2$ percent) 125 Minimum mass of Fixed base bench vices- (in kg) 15 Minimum mass of Swivel base bench vices -(in kg) NA for Fixed base bench vice The hardness	1

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		of the jaw plates- (in HV) (445 HV to 596 HV Fixed base bench vice The hardness of the jaw plates- (in HV) (445 HV to 596 HV	
3	Bench Grinder	Wheel Size - 8X3/4Inch Height - 150 inch Width - 30 inch, Body Material - Cast Iron Disc Diameter - 9 inch Length - 50 inch Warranty - 3 year Weight - 30 kilogram Double Ended, Surface Finish - Color Coated.	1
4	Oil Draining& Filling Equipment	Material of Oil Can - Mild Steel, Material of Nozzle - Stainless Steel, Capacity of Oil Can - 500 ML Length of Spout - 50MM Outer Diameter of Spout Tip - 2MM, Inner Diameter of Spout Tip - 2MM, Diameter of Filling Hole - 2MM	3
5	Multi meter	Style - Digital Colour- Blue Item Weight - 13.8 Grams Item Dimensions LxWxH - 6.9 x 3.1 x 13.8 Centimeters Must include Instruction Manual, 1 Set test leads Measurement Accuracy $\pm 0.8\%$ rdgs (DC Volt), $\pm 1.2\%$ rdgs (AC Volt) Measurement Type – Multimeter Number of Items – 1	3
6	Hydro Meter	Package Dimensions - 30.41 x 9.9 x 7.9 cm Item Weight - 250-270 g	2
7	White Board	Material of Board Ceramic Steel Material of Frame Anodized extruded Aluminium alloy hollow section of designation conforming to IS: 1285 Material of Back Cover Galvanized steel sheets conforming to IS:277 Thickness and Material of back support (conforming to IS:12406) 9 millimetre, Writing cum projection screen board, Material of the frame - Anodized extruded Aluminium alloy, Length - feet 3 Width - feet 2 material - Alluminium Alloy	1
8	AC Clamp Meter	Power Source - Battery Powered Style – Digital, Item Weight - 1 Kilograms Item Dimensions LxWxH - 20 x 12 x 5 Centimeters Measurement Type – Ammeter , Multimeter	3
9	Coolant Tester	Product Dimensions 2.54 x 25.4 x 14.73 cm; Item Weight 90 g,Antifreeze and Coolant Tester Hydrometer	3

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10	Battery & Charging System Tester	Item Dimensions LxWxH : 32 x 8 x 8 Centimeters, Must Included : 1 x 12V Car Battery Alternator	1
11	Diagnostic tool	Package Dimensions - 12.9 x 11.5 x 3.6 cm; Item Weight Approx. 28 g Colour - Blue Compatible with Torque App Must Include the CD Connection Type: Bluetooth	1
12	Hand Tools	Material -Chrome Vanadium Steel Item Dimensions LxWxH 20 x 10 x 3 Centimeters,Head Style -Hex Finish Type -Nickel Chrome Set contains:- 2 x - 1/2" Spark Plug Sockets: 16MM & 21MM 1 x - 1/2" x5" Extension Bar. 1 x - 1/2" x10" Extension Bar. 1 x - 3 Way Adaptor. 1 x - 1" Ratchet Handle 6 x - 1/2" (Socket 12PT): 10-12-13-14-16-17MM 19 x - 1/2" (Socket 6PT) : 8-9-10-11-12-13-14-15-16-17-18-19-21-22-24-27-32MM	1
13	Pneumatic Tools	Torque (Nm) - Approx. 408 Weight - Approx. 4.53 kilogram, Free Speed (rpm) - Approx. 6.5 Torque (Nm) - Approx. 1669 Single trigger for both forward and reverse operation,Heavy duty gear box with thrust bearing for low friction and longer operational life,Low noise level with no vibration,Accessories like universal socket, universal joint and thin wall sockets available Square Drive Size in inch- 3/4 Diameter -66 millimeter, Height- 200 millimeter	1
15	Torque Wrenches	Item Weight : 475 g Net Quantity : 1.00 count	5
16	Fender covers/kits	Water Proof Long Lasting Colour -Black	5
17	Floor Mats	Colour- Grey Material -Ethylene Vinyl Acetate Size-Approx. 45cm x 500cm Pattern -Diamond Number of Pieces 1 Stain Resistant.	5
18	Cotton Gloves	Size-Small Width across palm - 10 cm for small Overall Length - 24 cm for small Depth of Cuff - 6 cm for small Total No of Wales - 68 for small	8

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19	Hard Toed Boots	Oil resistant Varieties of industrial protective rubber boots: Variety 1 (Industrial protective rubber knee boots.)	3
20	Sun Glasses	GOGGLE LENS Filter – 2- 1.2 UV according to EN 170, Impact Resistance: Designed to withstand energy impact of 120 m/s on the frame Maximum Weight of Chemical Splash Proof Goggle 100 grams	2
21	Metal Peg Display Board	"Basematerial: Fibreboard, Acrylic paint Metal parts: Steel, Powder coating" Steel, Epoxy/polyester powder coating Container: PET plastic No of Hook 10 Base Material Fireboard Metal parts Steel Width: 56 cm (22 ") Depth: 12 cm (4 ¾ ") Height: 56 cm (22 ")	2
22	Spark plugs	Spark plug sockets 67 mm drive size 16/21 mm Core Material Iridium Gap Size 0.9 Millimeters Top Material Type Alloy Steel Vehicle Service Type Motorcycle	2
23	Multi-meter	Digital multimeter having a plastic body with a LCD display system, with DC voltage of 200mV/600 and resistance: 200 ohm/ 2000k ohm. 80BK Temperature Probe Installed 9V battery Test leads with 4mm lantern tips Resistance to 50 MΩ; capacitance to 10,000 μF, frequency to 100 kHz; temperature from -40 °C to 400 °C, Dimensions 43 x 90 x 185 mm, Weight 300gm	3
24	Ruler	Steel ruler for measurement Length 300 mm Material Stainless steel Surface Rust resist finish Thickness 0.5- 2 mm	2
25	Gloves	Nylon anti cut safety hand glove Material Nylon Color Green, White & Grey etc. Usage/Application Industrial Categories Safety Gloves Feature Cut Resistant Finger Type Full Fingered Size/Dimension S, M, L, Free Size Gender Unisex Packaging Size 1 pair per packet Weight 30 gm	8
26	Ear plugs	Reusable corded ear plug beneficial for giving total protection to ears from high pitch noise and sound MATERIAL Polyurethane foam COLOR Orange NRR 32 dB CORD TYPE Uncorded STYLE Disposable	2

		SHAPE Tapered SIZE One size fits most PACKAGING 1 pair per poly bag; 10 pair per dispenser box; 10 boxes per case CASE 28.6" x 11.7" x 10.3" / 72.7cm x 29.7cm x 26.1cm CASE WEIGHT 12.2 lbs / 2.5 kg	
27	Puncture tool Kit	Type Universal Tubeless Tire Repair Kit Usage Emergency Flat Tire Repair Patch Puncture Kit Tool Bag for Car, Bike Kit Contains Reamer, Probe, Rubber Solution, 10 Puncture Repair Strips, Cutter, Storage Bag (2x Needle Tool Bits for Lifetime Reliability)	2
28	Nose Plier	Usage Industrial, Garage/Workshop Material Alloy Steel Colour Red/ Blue/ Green Length 6 inch Handle Material Plastic, Steel Type Long Nose Plier Specific Uses For Product Hold, Holding, Twisting, Cutting, Electrical, Bending Size-6 inch	2
29	Bump Caps	Ventilation Holes On Both The Sides Inside Harness of two Section PE Cradle Head Band Incorporating an adjustable Nape Strap with PU Sweat Band Material - Plastic Colour White	3
30	Air Tester	Material - Plastic Gauge Calibration - 10- 160 Hose Length - 20 inch	1
31	Hydraulic Jacks	Availability of Type Test Report for conformity of parameters from any ILAC/NABL accredited/Central Gov. LAB . Include the Test certificate. Warranty (Years) 1 Lifting Capacity (min.) - (Ton) 10, Working Pressure- (bar) 700-750 Lifting Stroke- (mm) 300	1
32	Vehicle safety stands	Product Dimensions - 12 x 16 x 14 cm Material - Plastic Colour - Red & white	3
33	Parts washing station car	Power Source - Corded Electric Colour - Yellow Item Dimensions LxWxH - 25 x 28 x 42 Centimeters Maximum Pressure - 130 Bars Hose Length - 5 Metres Tank Volume - 16 Litres warranty - 1year	1
34	Pullar	Package Dimensions - 20 x 10 x 3 cm; 490 Grams Item Weight - Approx.490 g High carbon steel	1

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		reversible legs and body Hex head forcing screws For use with ratchet or spanner Use for removing wheel bearings, hubs, gear pulleys	
35	Sliding Hammer	Package Dimensions : 15 x 10 x 5 cm Item Weight 300 grams	2
36	Oil Can	Use For StorageLubricating Oil Can Color Red Size 200 - 250 ML Shape, Round "Product Dimensions "x 12 x 10 cm Type 15 Pump Operated, Pressed Steel Oil Can	2
37	General Hand Tool	Product Dimensions: 28 x 4.5 x 25.3 cm; Item Weight: Approx. 2 kg 470 g	3

### iii. Apparel: -

Lab should equip students with practical skills in garment design and stitching using industrial sewing machines, cutting tools, and tailoring accessories for hands-on learning in fashion and apparel production.

Sl. No.	Tools & Equipment	Specification	Qty
1	Specialized Industrial Sewing Machines	Snap On Pressure Foot, Flatbed Zig Zag Machine, 9 Stitch Functions, Single Touch Reverse Stitch, Auto Tripping Bobbin Winder, Body Construction- Flatbed, 2 Dials for Pattern Selector & Stitch Length Control, Open Type Shuttle, Maximum Zig-Zag Width- 5 mm, Maximum Stitch Length- 4 mm, Machine Should Be Properly Fitted Within Stand and Table	8
2	Sewing Machine Accessories and Attachments	1 High Quality Bobbin Case, 5 High Quality Aluminium Bobbins, 1 Pair of Right & Left Single/Zipper Foot, 1 Gathering Foot, 1 Box [10 nos] Sewing Machine Needle of Size 14 And 1box [10 nos] Sewing Machine Needle of Size 16.	10
3	Shears (8-10" Iron Blade for Cutting Fabric)	Tailoring Scissors of Minimum 9.5 inch Must Be Made Up of Stainless Steel for Cutting a Fabric.	10
4	Paper Scissors	Plastic Handled Stainless Steel Scissor for Cutting Paper. Size – 6 Inch.	10

5	Seam Ripper	Handy Seam Ripper with Plastic Cover, Used for Opening Stitches for Sewing and Craft Works, Length – Large Size(LxW)-30 X 5 mm, Small Size(LxW): 60 X 5 mm, Handle Length 35, 98 mm	10
6	Tracing Wheel	Tracing Wheel with Minimum Length: - 15.2 cm, And Wheel Gear Diameter: - 2.2 cm.	10
7	Tailor's Chalk	Extra Smooth Tailoring/ Sewing Markers with Fashion Designing Triangle Scales, Set Of 15 Dust Free Tailoring Chalks	10
8	Craft Cutter	Metal Craft Cutters/Nippers with Plastic Handle for Multi-Use Cutting Threads, Paper, Crafts	10
9	Safety Pins	Steel Safety Pins of Medium (3.5cm) And Large Sizes (5.5cm)	10
10	Dress Maker's Pin	All Pins with Pointed Needle with Length 2.5 Cm x Diameter 0.5 Mm	10
11	Scale	Metallic Scale of Sizes 6" & 12"	10
12	Measuring Tape	PVC Measuring Tape of 1.5 Meter and 0.5 inches Width	10
13	Bobbin And Bobbin Case for Industrial Machine	Steel Bobbin and Bobbin Case, Material: Stainless Steel, Dimension(Lxbxh) - 4x3.5x1.3 cm	10
14	Hand Needles	Assorted Hand Sewing Needles for Embroidery and Mending, Should Be of Standard Size, Material: Stainless Steel, Finish: Polished, Rust Proof, Dimension(Lxb) - 5x0.26 cm	10
15	Machine Needles	Sewing Machine Needle with One Pack Containing Minimum 20 Needle, Standard Size, Size: 9, 11, 14, 16, 18;	10
16	Needle Threader	Steel Needle Threader, Size: Approx. 6.7 X 2.2 X 0.6 cm	10
17	Dress Form (Various Sizes of Male / Female / Kids)	Material - Foam with Plastic Dress Form Women's-Medium -1 Dress Form Men's Medium - 1	2
18	Threads	180 Meter Polyester Thread Used in Hand & Machine Work (Set Of 100)	3

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19	Personal Protective Equipment (Nose Mask, Goggles, Etc.)	Gown non-woven, 1 N95 Facemask, 1 Head Cap Non-Oven, 1 Disposable Gloves, 1 Shoe Cover Knee Length, 1 Waste Collection Bag, 1 Goggle, 1 Kit Size - 300x350 mm	10
20	Cutting Table	Pre-Laminated Folding Type Board of Measurement- 8'(L)X 6' (W) X 3'(H) Feet	1
21	Students Sewing Stools	Sewing Machine Stool	10
22	First Aid Box	Large Household Multi-Layer First Aid Kit. Multifunctional Medicine Box Comprising of First-Aid Bandage, Small Scissors, Tweezers, A Cotton Swab, Ointment, and Other Basic Over the Counter Drugs.	1
23	Dustbin	Plain Pedal Dustbin-1 Nig Plastic Garbage Bin- 1	2
24	Pouches For Storing Items	Clear Transparent Zip Lock Bags Large, Medium and Small Size- 200x300 mm, 250x350mm, 300x400 mm (For Storing Threads, Garments, Needles Etc)	10
25	Machine Oil	200 ml Bottle of Sewing Machine Lubricant Oil.	10
26	Documents/Charts	Tech Pack/ Specification Sheet Size Chart Trim Card Seam Samples of Different Fabric Buyer's Comment Sheet Operation Bulletin Company Quality Standards Handbook/ Guidelines Fabric Worksheet Style Confirmation Sheet Fabric Consumption Chart Fabric Requirement Sheet (Frs) Trims Requirement Sheet	10

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27	Pressing Table	Material: Should Have Metal Frame + Wooden Panel + Cotton Cloth Cover (High Temperature Resistance, Anti-Aging) Features: Retractable Iron Rest Frame, Non-Slip Soft Rubber Feet, Removable and Washable Cloth Cover Height Adjustment, Foldable, Save Space When Not in Use, Ironing Surface: 48"X16"(L X W) Inches	5
28	Iron/Press - Steam Press	Steam Iron 360° Swivel Cord 5 Modes Non-Stick Teflon Coated Soleplate Power: 800 Watts	5
29	Fabric Yardages, Surplus Fabric, Good Quality Muslin Mandatory, Other Optional, Qty May Vary)	Mtr = 1 Unit	5

#### iv. Electronics:-

The lab should train students in basic electrical and electronic skills through hands-on use of meters, tools, circuits, and appliances, enabling them to work safely with wiring, repairs, and system installations.

Sl. No.	Tools & Equipment	Specifications	Qty
1	Bench Vice 125mm	Steel Heavy-Duty Bench Vice Size 125 mm, 5 In 1 Type - Fixed, Construction - Cast Iron	5
2	Ruler (Steel)	30 cm Long	10
3	Measuring Tape	Measuring Tape Should Be of 5-Meter	10
4	Micrometres	Type - 103-137, Range - 0-25 mm Accuracy- $\pm 2\mu\text{m}$ , Mass- 175 gm Measuring Faces - Carbide Tipped Measurement Range (Mm) 100-125 Least Count / Resolution 0.01 Millimetre	5

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		Accuracy (Maximum Error in Reading) At 20 Deg C ( $\pm$ ) 0.01 Millimetre	
5	Vernier Callipers	8" 200 mm Digital LCD Vernier Calliper	5
6	Standard Wire Gauge	Imperial Wire Gauge	4
7	Filler Gauge	Stainless Steel Accuracy: $\pm (3+T/80)$ mm Range: 0.03-1.00 mm Quantity of Leaves - 32 Length - 100 mm	4
8	Dial Gauge	0.001 mm X 1 mm Dial Gauge Fitted With 8 Jewels	4
9	Try Square	Metal Try Square - Angle Cut 45 Deg/ 90 Deg, Casting Handle with Hardened Blade, Engraving Graduation on Blade. Size: 20.4 X 12.2 X 1.3 cm	4
10	Line Tester	Multipurpose Digital Tester with Lcd Display and Neon Bulb	10
11	Ammeter (Ac & Dc)	Electro Dynamo Meter Type Frequency Range 20 Hz - 3 Ghz, Capture/Demodulation Bandwidth (Max) 25 Megahertz	5
12	Voltmeter	Product Type Moving Coil Range 300 Volt Size -72 mm Range of Measurement:0-300 Volt Size of The Meter - 48 X 48 mm	5
13	Ohmmeter	Megger Type of Meter: Moving Iron, AC Voltage, Single Phase Support, Range of Measurement: 0 Volt to 150 Volt	4
14	Aluminium Wire	Digital - Current, Voltage, Capacitance, Sp Function: Diode Test, Audible Continuity, Data Hold. Type: Handheld Measurement Type: True RMS, DC Voltage Range – 600 Volt Ac Voltage Range: 600 Volt	10
15	Frequency Meter	Displays System Frequency Up To 50 Hz. Type -Analog Pointer Type Measuring Range: 45 To 65 Hz	2

16	Digital Volt Meter And Ammeter	Blue, Red Dual Led Display Size: 48 mm X 29 mm X 21mm. Display Color: Red & Blue Led (Dual Display) Display: 0.28" Led Digital Operating Voltage - Dc 4.5 ~ 30 Volt Measure Voltage -Dc 0 ~ 100 Volt. Minimum Resolution - 0.1 Volt Operating Current: <20 Amp Voltmeter :Range of Measurement: 0 Volt To 500-Volt, Ammeter: Size Of the Meter 72 X 72 mm Type Of Meter: Moving Iron	2
17	Tachometer	RPM Gauge Type: Microprocessor Based, Accuracy (Ph.): +/- 0.05, Temperature Compensation Type - Automatic, Temperature Accuracy (Degree C) - +/- 0.3 °C LED/ LCD / Touch Screen, 3 Digits	2
18	Electrician's Scissors	Metal Blade - High Carbon Steel Blade Length -100 mm Overall Length – 192 mm Blade Thickness - 2 mm	5
19	Hand Operated Shearing Machine	Spring Type - Material - Cast Iron Height- 2.5 Feet Weight: 5-7 Kg Type Of Hand Operated Shearing Machine Spring Type - Lever Hand Cutting Capacity for Sheet Material - Up To 1 mm Cutting Capacity for Round Material - 1 To 5 mm Material of Body - S Cutting Blade Length – 6 Inches	2
20	Pipe Cutter	Professional Pipe Cutting Tool Type -Slip Joint Pliers, Handle Material - High Quality, Aluminium Alloy	2
21	Electric Drill Machine with Drilling Bit	Simple Drill 10 mm + 6 Hss Bits+ 1 Masonry Bit, Power: 300 Watts, RPM - 2300 RPM, Voltage -220 Volt, Motor: Copper, Outer Body: PVC and Metal, Domestic Drilling Machine. Number Of Drill Bits Provided-1, Power Supply - 230 V, 50 Hz, Single Phase, Rotation Speed of the Hammer (In RPM) - 1000	2

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22	Grinder	6" Grinder for Sharpening & Grinding Used for Sharpening and Grinding with Clamping Base Which Attaches to Any Table or Workbench with Grinding Wheel Type of Machine Drum & Stone Roller Type Wet Grinder (Automatic), Maximum Drum Capacity (Ltr):9.5, Grinding Cycle Time(Minute): 10	2
23	Rasp File	8" Inches Wood Rasp File Set with Rubber Grip + Plastic Handles - Includes Hand Cut Round, Half-Round, And Flat Rasp File Kit Types of Engineer's Files-Half Round, Grades of Cuts: Bastard, Material: Alloy Steel	5
24	Hand Saw	14" Handsaw with Wooden Handle Length Of Handsaw Blade: 500 cm	5
25	Tennon Saw	File Sharpened Teeth with Plain Hardened Cutting Edges. Impact Resistant Handle. Material Of Handle - Wooden. Thickness Of Blade - 1 mm Number of Teeth Per Inch 20	5
26	Punch With Bit 8no& 10no	Punch Holder With 8 mm and 10 mm Bit	2
27	Spanner Set	8 Spanners of the Following Sizes: 6 X 7 mm, 8 X 9 mm, 10 X 11 mm, 12 X 13 mm, 14 X 15 mm, 16 X 17 mm, 18 X 19 mm, 20 X 22 mm Made Of Chromium Steel Coated with Nickel Chrome Alloy Set Of 8 Pieces	2
28	Screwdriver Kit	Screwdriver Kit Of 8 Blades with Tester, Flat Tip: 3. 2.5, 4. 5, 5 mm, No - 0, 1, 2, Pocker and Extension Rod. Blade Material Made from Manganese Steel	5
29	Mallet	Hard Noncorrosive Steel with Wooden or Rubber Grip on Handle.	3
30	Ball Pein Hammer	Hard Noncorrosive Steel with Wooden or Rubber Grip on Handle. Nominal Mass - 200 Grams Material of Handles: Wood	3
31	Claw Hammer	Hard Noncorrosive Steel with Wooden or Rubber Grip on Handle. Material Of Handles Wood	3

32	Plier Set Of 4	4-Piece Pliers Set Includes 8-Inch Slip Joint, 8-Inch-Long Nose, 8-Inch Lineman, and 7-Inch Diagonal/Side Cutting with Insulated Thick Rubber Covered Handles.	3
33	Rheostat 0-10ohm	0-To-10-Ohm Resistance Rheostat	2
34	Rheostat 0-30ohm	0-To-30-Ohm Resistance Rheostat	2
35	Wire Stripper	Electrical Insulation from Electric Wires.	2
36	Poker Screwdriver	95mm Poker Screwdriver ▪ - Made of High-Grade Steel and Transparent Green Cellulose Acetate Handle	5
37	Electrician Knife	Folding Knife for Cable Stripping and Cutting. 4.5" Insulated Nylon Handle 3 3/8" Blade Type Of Cutter Knife - Paper Cutter Knife (Snap Off Blade) Material of Body - Plastic Material of Blade - Carbon Steel Length of Blade - 99 mm Width of Blade - 24.9 mm Thickness of Blades - 0.5 mm	5
38	Adjustable Wrench	Adjustable Wrench Of 6 Inches of High-Grade Forging Quality Steel and Heat Treated In the Range Of 40 To 50 HRC Nominal Size of Wrenches (Length – 250 mm)	4
39	Wire Stripper, Cutter, Crimper and Pliers	Multi Crimp and Stripper Pliers Product Dimensions - 8.2 X 2.6 X 0.6 Inches With Insulated Rubber Grips Length of Hand Tool – 125 mm	4
40	Firmer Chisel	High-Quality Chrome Vanadium Steel Hardened to RC 58 With Wooden/ Rubberised Handle and Grip Nominal Size – 25 mm	4
41	Files	For Filing the Records	2
42	Capacitor	Used In Ceiling Fans	5
43	Dimmer Stat	Resistance Coil/Induction Coil Suitable for Fan Up To 100 Watt	2
44	Stopwatch With Battery	Digital Stopwatch with Battery. 12 - Hour Display Format Display - LED, Power Requirements - Battery,	2
45	Solder Wire	Solder Wire (Tin/Lead) - 60/40, 18 Swg	2
46	Copper Wire	Copper Wire for Electrical Fitting ,Type of Insulation - PVC,	2

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47	Aluminium Wire	Aluminium Wire for Electrical Fitting 2 Core 16 mm, Cable Size - 2.5 Sq. mm Type of Cable - Flat, Type of Conductor - Three Strand	2
48	Pvc Insulation Tape	0.125 mm x18 mm 10 Yards Self-Adhesive PVC Electrical Insulation Tape-Coloured Pack Of 4 Sunlight Resistant, Pressure Sensitive Vinyl Electrical Tape Length of Tape on a Roll -25 Meter	5
49	Flexible Pipe	Units In Meter Material - PVC Thickness - 1 – 5 mm Feature - Self-Extinguishing Length - 2-10 Meter Nominal Pressure: 2 Bar Material of Waste Fitting Brass Conforming to Grade 3 of Nominal Size 32 mm for Washbasin	10
50	Soldering Iron	Modular With Rubber Grip and Holder -1 -Piece 30- Watt Soldering Iron, 2 Soldering Tips And 1 Safety Stand	15
51	Modular Switches	16 A 240 Volt 2-Way Bell Switch -21, 10 Amp 240 Volt, 1 Way Switch- 3 With Suitable Plates 16 Amp Switch Modular	10
52	Modular Sockets	Combined Box 2-Hole WH Switch, 20-Amp, White Switch &Socket Combine (Anchor) (Switch & Socket Combine)	5
53	Wiring Boards	5 Volt /3.4 Amp PCB Board	5
54	Lead Acid Battery	Battery Type: Sealed Type Voltage (Volts) :100 Ah 900 A(En)12 Volt Battery Voltage 12 Volt Battery Capacity At 10 H Rate 20 Ah	2
55	Mcb's	Miniature Circuit Breaker) Blue, Black, Green. Activated Automatically, Rated Voltage - 240 Volt, Rated Current (Ampere) - 63 A	4
56	Power Supply Voltage Switch	Manual Switch Block That Selects One of Its Two Inputs to Pass Through to the Output. Maximum Power 120 Watts, DC Current Output Rating - 0 To 4 Amp	3
57	Desoldering Pump & Wire	Manual / Electric Vacuum Desoldering Pump Temperature Range 50 °C To 450 Deg °C, Power Cord Length -1.2 Meter	5

58	Water Gauge	Dial Size - 3 Inch Accuracy : 2 % Case Bezel : SS 304 Wetted Parts : SS 304 ,SS 316, Brass Range : Vacuum To 2000 Kg/cm <sup>2</sup> Liquid Filled : Glycerine or Dry Vacuum Gauge 0-760 mm Hg, Nominal Size of The Dial 100 mm Measuring Units mm Hg Measurement Range For Vacuum Gauge (Mm H <sub>2</sub> O) Na, Measurement Range For Vacuum Gauge (Mm Hg) - 760 To 0	5
59	Cables	10/14 Copper Wires, 1mm×2 Core RR Cables Copper Wire FR PVC 1.5 mm	5
60	Water Purifier	Capacity : 0-5 L Certification : NSF, ISO Purifier Type : Electric Purification Capacity(Per Hour) : 10-15 Litres/Hour Features : Auto Shut-Off, Smart Indicator Technology- RO+UV+UF+TDS, Primary Material - Plastic , Minimum Input Water Temperature -10 °C, Weight- 9.4 Kg, Type-Gravity Operated Water Purifier, Input Water TDS – 2000	2
61	Microwave Oven Grill, Convection Type	<b>Technical Specifications</b> Microwave Frequency (Mhz)2450 Power Source (V~hz) 230~50 Microwave Power Consumption 1400 Watts Grill Power Consumption 1000 Watts <b>Specifications Weight &amp; Dimensions</b> Net Weight Approx. 14.5 Kg Outer Dimension (H X W X D) 281 X 483 X 425 mm Turntable Diameter 270 mm <b>Aesthetics</b> Colour Black + Floral Design Cavity Powder Coated Display LCD ( Cooking Time/Power/Action Indicators	2

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		and Time Displayed ) <b>Features</b> Clock -Yes Safety - Yes Overheating Protection -Yes Child Safety Lock -Yes Performance Microwave Output 900 Watts Grill Heating Power 601-800 Watts, Capacity / Volume 20 Liters	
62	Mixer-Grinder	3 Hardened Stainless-Steel Blades for Multiple <b>Functions</b> 1.5 Litre Liquidizing Jar, 1 Litre Wet/Dry Grinding Jar, 0.4 Litre Chutney Jar Warranty: 2 Years on Product Power: 500 Watts Operating Voltage: 230 Volts <b>Includes:</b> Mixer Grinder, 3 Jars, 3 Blades, Capacity Of Bowl (Kg) 5 Arm Shaft Motor Location Bottom Dough Material Mechanism Rotating Arm Only Dough Rotating Device Blade Height Of Bowl 525 Bowl Inner Diameter 650	1
63	Juicer	Capacity : 100-500 ml •No.of Jar : 6 •Speed Setting : 1 •Power : 500 Watts •Body Material : Plastic And Metal •No.of Attachment : 4 Type Of Juicer Centrifugal Juicer Material Of Body Abs Plastic Material Of Pusher For Centrifugal Juicer And Masticating Juicer Abs Plastic Material Of Mesh Filter For Citrus Juicer Stainless Steel 304 Material Of Juice Collecting Jug Polycarbonate Capacity Of Pulp Container (In Kg) 1.5	2
64	Clamp Meter	Display: 3 -1/2 Digits Å with 1999 Counts, Operating Temperature & Humidity: 0 Deg C To 50 Deg C, < 80% Rh, Storage Temperature: -20 °C To 60 °C, < 80%	5

		Rh Display 4 - Digit Backlit LCD Measurement Type True RMS Count 4000 Resistance Measurement Range 100 Kg	
65	Soldering Flux	Temperature Range 50 °C To 450 °C, Temperature Accuracy $\pm 10$ °C, Temperature Stability $\pm 5$ °C, Output Voltage -12 Volts, Power Consumption – 150- 300 Watts Temperature Range 50 °C To 450 °C, Output Voltage-12 Volts	10
66	Hand Glove	Material: Polyurethane Coating, Anti-Static Nylon/Carbon Yarn Size (Palm Width in mm) Extra- Large (120 mm)	30

#### v. Healthcare:-

It should prepare students to support basic patient care and first aid by providing training with medical instruments, diagnostic tools, and hygiene equipment used in real healthcare settings.

Sl. No.	Tool & Equipment	Specification	Qty
1	AED Trainer With Adult Pad	OEM Product, To Safely Simulate Shock Delivered By AED, To Be Pre- Configured With 10 Realistic Scenarios Training Scenarios With Audible Messages And Batteries Function : Simulate The Operation Of The Clinical Aed, Feature : With Separate Program/Voice Card, Power Supply : DC 4.5v/3* AA Battery, Size : 155 x130 x 45 mm, Certification : CE ,Comprises of Manikin(S) and Accessories Necessary For Conducting Para Medical Trainings, Best Compression Depth, Cpr Training, Combined Cpr and Airway Training	2
2	Air Cushion	Standard OEM Product Rubberized Air Pillows Size: 61 X 35.6 X 10.2 cm.	2
3	Airway Mannequins	Standard OEM Product, Should Be Suitable For - <ul style="list-style-type: none"> <li>• Practicing of Oral And Nasal Intubation</li> <li>• Practicing Use Of Lma (Laryngeal Mask Airway)</li> <li>• Correct Tube Placement Can Be Checked By Practical Inflation Test</li> </ul>	2

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		<ul style="list-style-type: none"> <li>• Realistic Anatomical Features Allow Demonstration of Sellick Manoeuvre And Laryngospasm</li> <li>• Bag-Valve-Mask Ventilation Can Be Practiced</li> <li>• Stomach Inflation And Vomiting Situation Can Be Simulated</li> <li>• Provides Visual Inspection of Lung Expansion</li> <li>• Provides Auscultation of Breath Sounds Full Body Manikin Type, Comprises of Manikin(S) And Accessories Necessary For Conducting Para Medical Trainings, Airway Hygiene System</li> </ul>	
4	Ambu Mask	Standard Product <ul style="list-style-type: none"> <li>• Silicone Adult 1600ml resuscitator (W/ Pop-Off 60 cms 20)"</li> <li>• Silicon Mask 5</li> <li>• 2500 ml Oxygen Reservoir Bag.</li> <li>• Disposal Oxygen Tubing 2 Meter</li> <li>• 1000 Percent Medical Grade Silicone Material.</li> <li>• Latex Free Components</li> <li>• Available In Polysulfide Type.</li> <li>• Autoclavable</li> <li>• The Set To Include Pvc Reservoir Bag, Silicon Mask 5 And Disposable Oxygen Tubing.</li> <li>• 40 cm H2O Pressure Relief Valve</li> <li>• All In One Intake Valve. Self-Filling with Air, Usage for Infant/Child</li> </ul>	4
5	Artery Forceps	Material: Stainless Steel Size (L X W X H) - 10 cm X 12 cm X 2 cm Small Artery Forceps Straight/Curved 4 Inches	5
6	Bed Pan with Cover	Size: L-39.5 cm, W-30.5 cm, H-7cm Material : Stainless Steel Material Stainless Steel, With Cover, Medium Size	1
7	Betadine Solution Bottle	500 Ml Bottle Iodine, Brown Colour, 500 Ml	4
8	Blanket	Size: 180 × 260 Cm Material: Fleece Colour: Single Colour: Navy Blue/ Dark Blue 100% Woollen, Size 230 X 152 Cm,	5
9	Blood Concentrate	Standard Product; 120 Ml Bottle	4

10	Cervical Collar (Medium)	Material: Polyester 40%, Pu50%, Nylon10% Length Size: 19 Inches, 15 Inches Soft Collar, Flexible, Weight 250 Grams	1
11	Cleaning Solution	Multipurpose Cleaning Liquid In 500 Ml Bottle with Spray Cleaning Solution	4
12	Clinical Examination Table	<ul style="list-style-type: none"> <li>• Overall Approx. Size 1840 mm Lx575 mm Wx860 mm</li> <li>• Rectangular Tube Frame with Sheet Cabinets</li> <li>• 100 Mm Foam Mattress,</li> <li>• Reversible Rexine Cover</li> <li>• Three Cabinets, One with Lock. 1 Drawer with Lock</li> <li>• Examination Trolley With 3 Trays</li> <li>• Retractable Step Stool &amp; Writing Pad</li> <li>• Pretreated &amp; Powder Coated</li> <li>• With Lockers on All the Doors Material Mattress Platform Is Crca Sheet, Thickness of Leg Pipe 30 mm or more, MS ERW Rectangular Tube With 50 mmx30 mm Or More, Gauge 1.2 mm or more.</li> </ul>	2
13	Comb	Material: High Quality Plastic. Standard Product for Personal Grooming Purpose Material Plastic	5
14	Cotton Roles	250 Grams Roll Thickness 12 mm, Width 25 mm, Weight 200 Grams	4
15	Different Color Plastic Bags (Red, Yellow, Blue, Black) With Dust Bins	Contains: (A)4x Plastic Bags (One of Each Colour - Red, Yellow, Blue and Black) Material - Polypropylene Size - 48 X 58 Cm Type -Biohazard Disposable Bag (B)4x Dustbins Color Red, Blue, Green, Yellow, Black Material - Polypropylene Plastic Size (WxH) - 30x36 cm	1
16	Dissecting Forceps	Available Brand: Regular, Antirust, Antirust-Dx ... Size: 4", 5", 6" / 100 mm, 125 mm, 150 mm 8-Inch Forceps, Stainless Steel, Thickness Blade 1.8 mm, Overall Length 192 mm, Blade Length 25 mm.	3

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17	Draw Sheet	Standard OEM Product <b>Material Used Non-Woven</b> · Colour -Medical Blue · Weight: 25 Grams · Size: 200 X 150 cm · Application/Use: For Covering Bed <b>Special Feature:</b> Water Repellent General Surgery Drapes, Size 120 X 150 cm,	2
18	Duster	Material: Should Have Acrylic Duster with Removable Sleeve and Pvc Handle Duster, Floor Duster, Cleaning Duster, Size 30 X 30 Cm	2
19	Electronic B.P. Monitoring Machine	It Should Have Display Size 3 Inches Pulse 40 ~ 199 Pulse/Min (Accuracy: $\pm 5\%$ ) Range: 0 ~ 299 Mm Hg General Features: • Large And Clear Lcd Display • 2 X 120 Times Memory • Date/Time Display • Automatically Turn Off • 4 Number Aa Size Battery (1.5v Each) • Cuff Circumference: 22 ~ 32cm Digital, Automatic, Portable, Weight 2000 Grams, Measures 0 To 300 Mmhg	2
20	Eraser	Non-Dust White Erase Size: 3.5 X 2 X 1 Cm Packing Includes 20 Pieces	15
21	Extension Cord	Six Socket Extension Cord • 6 Separate Switches • 3 Core Fuses for Surge Protection • 2-Yard Copper Wire With ISI Marks And Appropriate Compliance to BIS Six Sockets, 3 Pin Type,	2
22	Fire Extinguisher	4 Kgs. ABC Type Isi Certification Standard OEM Product Stainless Steel Cylinder, Co2 Based	1
23	First Aid Metal Box	Size 45x 40x 30 Inches Material: Metal with Epoxy Coating Material ABS/ Tough & Amp; Steel Coloured, Lid Without Hinge Type with Self-Lock, Weight 100 Gram	1
24	Gauze Swabs	Material: Cotton Size: 4x4 Inches	20

		Dimension 50 mm,	
25	Gloves (Disposables)	1packet x 100 Pieces Material - Nitrile Rubber, Powder Content - < 2.0 Mg/Dm2 Extractable Protein Level - <200 µg/ Dm2 Sterilization: Nonsterile Disposable Surgical Rubber Gloves) - Pre-Powered	5
26	Gloves (Surgical)	1packet x 100 Pieces Material: Natural Rubber Powder Content - < 15 Mg / Dm2 Extractable Protein Level - <200 Micro Gram/ Dm2. Sterilization - Ethylene Oxide / Gamma Irradiated Rubber Gloves / Surgical Gloves, Material Natural Rubber Latex	5
27	Glucometer 30	Automatic Power - 90 Volts •Minimum Blood Sample Needed: 1.5 Microlitre •Measuring Range - 0.6 Mmol/L - 33.3 Mmol/L •Number Of Strips -10 Strips •Number Of Lancets -10 Lancets •Measuring Time -10 Sec •Display Type - LCD •Memory - 350 •10 Sterile Lancets, 1 Log Book, 1active Meter (With 1 Enclosed Battery), 1 Carry Case, 1 Lancing Device, 1 Vial Containing 10 Test Strips And 1 Coding Chip, 1 User Manual, 1 Quick Reference Guide, 2 Information Sheets, 1 Warranty Card Electro Chemical Technology, Device Weight 10 Grams, Single Cell/ Battery, Ranges 30 To 700.	1
28	Goggles	Frameless Polycarbonate Safety Eyewear with Wrap Around Design. •Lenses Are Impact Resistant to Level F. •Lenses Are Optical Class-1. •Scratch-Resistant Coating on Lens. •99.9% UV Protection. • Safety Goggle, As Per Bis Specifications, Material Polycarbonate	1

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29	Hair-Cap Packet	1packet*100 Pieces Atlas Disposable Caps Non-Linting Kaycel Fabric with A Polypropylene Top and Straps •Layers: 5-Layers Soft White Sweat Pad Surgeon Cap	1
30	Hospital Bed	Hospital Bed Length: At Least 2000 mm Breadth At Least 900 mm & Height At Least 500 mm Frame Work Made Of Rectangular MS Tubes Not More Than 18 g Perforated CRC/MS Sheet Top In Four Sections Backrest, Knee Rest, Trendelenburg /Reverse Trendelenburg & Hi-Low Positions Obtained By Separate Screw From Foot End Detachable/Collapsible/Swing Away ABS/SS Safety Side Railings ABS/55 Moulded Head & Foot Bows, Detachable IV Rod With Four Locations Bed Mounted On At- Least 120 mm Dia., Nonrusting, Swivelling Castors, Two With Brakes Pretreated And Powder Coated Mattress Suitable For The Bed Made of At Least 25 mm Thick Soft Density Top Layer And At Least 75mm Thick High Density Bottom Layer For Patient Comfort And Better Pressure Care Width Of Mattress, 900 mm To 920 Mm, Material Surface Is Crca Sheet, MS Erw Rectangular Tube With 50 mm x30 mm Or More, Gauge 1.2 mm Or More.	1
31	Kidney Tray (8")	Regular/304 G- SS Sizes, 8" Material: Stainless Steel Stainless Steel, 300 Grams	1
32	Liquid Soap Bottle	Foaming Handwash 215 ml Liquid Soap	6
33	Marker	With Replaceable Refill: Tip Size - 2.0 mm Board Marker	15
34	Mask Packet	1packet x 50 Pieces, Face Mask Ear Loop Medical Surgical Dust Face Mask, Bacterial Filtration Efficiency (Bfe) > 98% Conforms to En14683: Type II. Size - 18x9cm, Thickness - 3ply Disposable Mask,	2
35	Micropore	Material Type: Paper , Tape Size 5 Meters 1.25 cm X 5 Meter, 24 Pcs In A Box Micropore, Hold a Bandage or Other Dressing onto A Wound, 2 Inches	1

36	Nebulizer / Mesh Nebulizer	Adult/Kid Compressor Nebulizer For Inhalation Therapy Operating Air Flow Rate: 4.0 L/Min Mmad (Micro M): 2-6 $\mu$ m Medication Capacity (Ml):6 Ml Average Nebulization Rate (Ml/Min): 0.25 Ml/Min Particle Size (Micro M): 2-6 $\mu$ m Power Required: 230 V 50 Hz Power Consumption: 75 W Dimensions Height 10 cm x Width (Cm) 15.8 cm x Depth (cm) 17.5 cm Weight - 1500 Grams Contains: Jet Air Nebulizer, 5 Pieces Replacement Filters, Air Tube, Carrying Bag, Child Mask, Compressor, Mouthpiece, Instruction Manual Technology Aerosol With Piston Electro Compressor Type	1
37	Normal Saline Bottle	Sodium Chloride Glucose Intravenous Infusion Bp (0.9% 5%) 500 ml	4
38	Paper	70 GSM, A4 Size, Ream of 500) A4 Size Paper, 500 Pages	1
39	Pen	Ball Point Pen Ball Pen	15
40	Pencil	Lead Hardness - 2HB, 1 Packet Of 10 Each Pencil,	1
41	Pillow	<b>Specification:</b> Fabric - Micro Fabric Pattern Quilted Size -17 X 27 Inches Colour - White Shape - Vertical Filling Material - Cotton Cloth Plain Weave Polyester Cotton (67:33) White, Weight - 715-Grams	4
42	Pillow Covers	Colour - Solid Colours – Navy Blue/Dark Blue/White Etc, Size: 17" X 27" Inches Fabric - Cotton 100% , Pattern - Plain/Satin Stripe	6

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		Size - 76 X 48 cm	
43	Registers	Hard Cover, Long Notebook Registers Regular Register, 300 Pages, Length and Width 148 X 210 mm	3
44	Sample Collection Bottle	Sample Container Screw Cap, Material: Polypropylene, Size: 35 ml and 45 ml	20
45	Dressing Scissors	Material - Stainless Steel, Anti- Rust Size - 7 Inches, 180 Mm Variety -Sharp /Blunt Stainless Steel	3
46	Micro Surgical Scissors	9 cm (3.5") Long Straight, 6 mm Blades 3 mm Cutting Edge Stainless Steel Stainless Steel, 5 Inches	2
47	Shampoo Bottle	500 ml Bottle Hair Shampoo,	4
48	Pencil Sharpener	Material: Plastic Body with Metal Blade.	10
49	Splint Medium	Immobilization Splint Made of Eva Coated Re-Formable Aluminium Inlay. Medium Size (46 cm X 11 cm), Full X-Ray Transparent Wrist & Forearm Splint, Adult Use	1
50	Steel Basin	Standard Product, Material: Stainless Steel, Size - 12 Inches	1
51	Steel Bowl	Standard Product Material - Stainless Steel Round Bowl, Stainless Steel, Capacity of Bowl - 225 ml.	1
52	Steel Tray (Medium)	Medium And Small Rubber Stainless Steel. Size - 12 x10" Stainless Steel, Rectangular Shape with Lid, Size - 10 cm X 12 cm, Weight - 700 Grams	2

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53	Sterilizer (Shallow Dressing Drum)	Material: Stainless Steel Sheet by Deep Draw Process Size: 9" X 5" / 8" X 8" / 12" X 10" Inches Vertical Cylindrical Steam Steriliser Pressure Type, Steriliser Chamber Size: 300 mm (Diameter) X 500 mm (Length), , Reaffirmed 2001, With Amendment 1 & 2, Fitted with Silicon Door Gasket( Expansion Type).Electric Load Of the Unit Shall Be 4 Kw.	1
54	Stopwatch	TC6 Timer / Clock / Stopwatch Digital, Rectangular Shape	2
55	Stretcher	Should Be Light, Safe and Reliable, Made Of Aluminium Alloy and Hold for The Same, Easy to Lock and Unlock Features Safety Belts For Patient, Length Adjustable, Should Open into Two Halves, Not Exceeding the Below Dimension Product Dimensions - 192 X 43 X 8 cm Net Weight - 9 Kg Stretcher Bearing - 120 Kg Stretcher for Emergency and Rescue Operations, Material Powder Coated Mild Steel	2
56	Suction Apparatus	A/C Power. •Pumping Rate: 15 L/ min •Power: $\leq 90$ va •Max Negative Pressure Value: $\geq 0.075$ Mpa •Noise: $\leq 65$ db(A) Backup For 20 Min. Provision with Manual Operation in Case of Any Power Failure High Vacuum Suction Machine -Medical (Aspiration Unit)	1



57	Syringe Destroyer Needle Burner	Powder Coated Housing with Built in Removable Bin for Burnt Needle Stubs Cut Syringe Nozzles. Material: Moulded Type, Shock Proof and Made of ABS Plastic / Stainless Steel 304 Grade. High Carbon Steel Cutter to Cut Syringes. Slots: 2 Power: 100 Watt / 220 Volts, 10% 50 hz AC. AC Overload Protection Built in Fuse Electric Burning Syringe Cutting Needle Range 14 G To 30 G And 12 mm To 40 mm (0.5" To 1.5") Bin Size 87 X 78 X 85 Mm Dimensions 220 Mm X 180 mm X 150 mm Weight 3 Kg. Approx. Net. To Destroy the Used Injection Needles by Instant Electro Melting Process and To Cut Syringe Tips Manually Using the Appliance, Portable Electric Type, Electro-Melting Type	1
58	Talcum Powder	400gm Talcum Powder	4
59	Toothbrush	Medium Bristles. Toothbrush For Adults' Size Suitable for Adult Use	8
60	Toothpaste	200 Grams	4
61	Torch	<ul style="list-style-type: none"> <li>•1-Watt Super Bright Led</li> <li>•4 V/400 Mah Rechargeable Powerful Battery</li> <li>•Initial Charging: Min 18 Hrs</li> <li>•Regular Charging: 14 Hrs</li> <li>•High Quality Plastic Body</li> </ul> Battery Type: Lead-Acid Led Torch	1
62	Towel Big	Towels Surgical(Sheets) Material - Cotton Size -16x24 Inch Material Terry (Tricky Towel)	1
63	Urinal Set (Female)	Material - Stainless Steel, Capacity - 750 ml, Manual Flushing	2
64	Urinal Set (Male)	Material - Stainless Steel Capacity – 750 ml Bowl (Flat Back) Without Flushing Rim Size (410 X 265 X 305) mm; Fig. 2	2

65	Uro-Bag	Drain Bag Capacity 2000 ml Drain Type Metal Clamp With Foley Insert Tag Latex Free Reflux Style Anti Reflux Device Sample Access Port Type: Blunt Cannula Sterility or Sterile Material Transparent Polyvinyl Chloride, Capacity 2000 mm,	4
66	Weighing Machine (Digital Electronic Weighing Machine)	Features: High Precision Strain Gauge Sensor System 6 mm Tempered Glass 280 X 280 mm Capacity 180 Kg Graduation 100 Grams LCD Display Size: 73 X 28 mm Auto On Auto Zero & Auto Off Over Load Indication Low Battery Indication Cr 2032, Lithium Battery Portable Body Mass Index Machine, Weight Capacity 10 To 200 Kg, Platform Size 300 x 350 mm, Input Power Supply 230 V +/-10%, 50 Hz, Single Phase AC Supply, Battery Backups 4 Hours.	5
67	Wheelchair	Nylon Upholstery • Full-Length Arms Padded • Carry Straps On Seat Allow For Ease Of Folding And Lifting • Footrest • Fold -Down Back • Lightweight Seat Width Standard : 17 Inch Rear Wheel Size 24 Inch Solid Caster Size 8 Inch Footrest Detachable Armrest Padded And Detachable Coating Steel Powder Type Of Back Rest Removable, Frame Tube Thickness 22 mm, Loading Capacity 100 Kg,	2
68	White Board	Mounted on Stand Size - 5'x4' Feet Material of Board Ceramic Steel, Width of Aluminium Frame IS 20-mm, Dimension Of Board - 2x3 Feet	1
69	Writing Pad	150 Page Size: A4 Size Spiral Bound Material Plastic, Size 380 X 224 mm,	6



70	Bedsheet	Material - Cotton, Size - 36" X 80" Inches Colour - Solid Colour - Blue/ White/ Light Blue/ Green Material - Variety No-4; 100 % Cotton; 145 Grams Per Sqm, Length and Width 215 X 135 cm,	6
71	Walker	Material Steel Weight Max - 150 Kg Min. Handle Height - 32 Inches Max. Handle Height – 39 Inches Aluminium Tubular Frame, Foldable Walker, Frame Weight - 3.1 To 3.5 Kg, Users' Maximum Weight - 113 Kg	2
72	Measuring Tape	1x 1.5 Meter Flexible Measuring Tape Material Flexible - PVC, Tape Weight 60-To-80 - Gram, Thickness - 1 mm.	1
73	Thermometer - Digital	Oral, Prismatic Type, Cylindrical Bulb Lens Front, Dual Scale Measurement Range: 35-42°C & 94-108°F Accuracy $\pm 0.1^\circ\text{C}$ & $\pm 0.2^\circ\text{F}$ In Plastic Case. Electronic Medical Thermometer or Clinical Digital Thermometer, Weight 10 Gram	4
74	Sandbag	Filled Sandbag: Capacity: 15-20 Kg, Material - Woven Plastic/ Jute	5
75	Measuring Glass	Material - Plastic, Capacity - 50 ml	2
76	Syringe 50 cc/ml	Material: medical grade transparent polypropylene consist of barrel, plunger, standard piston in superior quality by high accurate Molds. Assorted sizes: size: 2ml, 3ml, 5ml, 10ml, 20ml, 30ml, 50ml material polypropylene, sterile hypodermic syringe for single use with needle and stainless-steel needles	20

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77	Ryle's Tube	Material: Non-Toxic, Non-Irritant PVC, Distal End Conned with Corrosion Resistant Stainless Steel Marked At 50 cm 60 cm & 70 cm from The Tip for Accurate Placement Length : 105 cm Sizes : Fg : 8/10/ 12 Nasogastric Feeding of Nutrition and Aspiration of Interstitial Secretion, Material Silicon Coated Pvc, Length 120 cm.	2
78	Vacutainer	Material: polyethylene terephthalate/ polystyrene, sterile Draw volume: 3-5 ml Pierceable/ leak-proof cap material polycarbonate with plastic cap, Capacity 2 Centilitre	5
79	Tourniquet	Material: Latex-Free Thermos Plastic Elastomer. Thickness: 0.55 mm (0.021") / 0.63 mm (0.024")/ 0.7 mm (0.027"), Length and Width: 3/4" X 29.52"(19 mm X 750 mm) / 1.5" X 32"(38 mm X 812 mm)	5
80	Crash Cart	Size: (760 L X 460 W X 860 H) cm Made in SS 304 Grade 18 Grade Stainless Steel Sheet Two Shelves in Instrument Trolley Rod Railing Fitting 04 Nos 5"X32 mm Castor Fitting. Material of Crash Cart Console ABS Thermoplastic Number of Baskets in Over Bridge 6 Width of Trolley 800 mm Height of Trolley 1100 mm Depth of Trolley 700 mm	1
81	Full Body Mannequin	Designed To Deliver Comprehensive BIS Training for Professional Rescuers Performance Indicator Providing Immediate and Objective Feedback on Key CPR Elements to Be Delivered with Caring Case Track Suit Directions for Use and 50 Manikin Wipes	1

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82	Oxygen Cylinder with Single Trolley	1x Oxygen Trolley Suitable for Dimension of the Oxygen Cylinder Castors Diameter - 100 mm Width: 12 - Inch Wheel Material - Rubber Material - Stainless Steel 200 Cuff Cylinder Capacity Carriage 2x Oxygen Cylinder - Standard B Type With Connector, Pressure Guage, Trolly, Humidified and Two Additional Keys With Empty Oxygen cylinder. Material of Construction: Aluminium - Anti Rust and Light Weight Capacity: 10 Litres Valves For Regulating Oxygen Supply Type of Trolley Sack Trolley Loading Capacity Minimum - 50 Kg Weight Of Trolley - 4.5 Kg	1
83	Wet Wipes - Cloth	Pack Of 10. Hypoallergenic Ingredients and Dermatologically Tested	10
84	Sphygmomanometer	Included Components Sphygmomanometer, Free Basic Stethoscope, Carrying Case, Calibration Key Power Source Manual Use for Arm Display Type Analogue	1
85	Wall Mounted Stadiometers	(2 Meter / 200 cm) Stadiometer Height Scale Stadiometer Wall Mounted Growth Stature Meter Measure Height Measuring Measurement Tape	1
86	Weighing Scale	Machine For Body Weight Display Type LCD	1

#### vi. Tourism:-

It should train students in travel operations, customer service, and front-office management using real-world tools like computers, booking forms, promotional materials, and simulation kits to prepare them for the hospitality and tourism industry.

Sl. No.	Tool & Equipment	Specification	Qty
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V2

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1	Desktop Computer with Anti-Virus	Intel® Core™ I3 / AMD RYZEN™ 3 Or Equivalent, Minimum 4core, 8-Threads, 8mb L3 Cache, 4.20 GHZ Boost Frequency or Higher. Qualified Processors – Intel Core I3 12100 / AMD RYZEN 3 5300g or Equivalent, Intel H670 / AMD Pro 565 Or Equivalent, 4 GB Hard Disk (GB) : 500 GB Or More Operating System (Pre-Loaded): Windows Or Equivalent USB Port 3.0(No.) : 1 or More USB Port 2.0 (No.): 2 or More Cabinet : Small Form Factor Network Connectivity : 10/100/1000 on Board Integrated Gigabit Port Keyboard : Standard Mouse: Optical Monitor Resolution (Pixels) : 1366 X 768 Pixels Monitor Size (Inches): 18.5 Inches Antivirus Ms Office Licence or Equivalent (Latest Version)	5
2	Printer	Printer (Black). Copy, Print, Scan, 16 Mb Internal Memory. Up To 46 Db. Noise Level. Output Tray Capacity 50 Pages. Media Size Supported A4, A5, B5, Letter, Legal, Envelopes, Custom Size. Input Tray Capacity 100. USB Support-Yes. 1. Spill-Free Replenishment System. 2. Operation System: Windows. 3. Print Up To 5000 Pages with A Set of Colour Ink Bottle; Print Up To 7500 With A Set of Black Ink Bottle. 4. Create Borderless Brochures, Flyers, Photos and Other Documents.	1
3	Computer Tables	750 mm(W)X 570 mm (D)X 750 mm(H) Wooden Top With 15 Mm Thick Covered with PVC, Frame- MS Tube 25 mm – Powder - Coated. Computer Table with Key Board Drawer and Tabletop, Material Hollow Rectangular Section of Size 50 X 25 X 1.6 mm Thick, CRC Sheet, Five Level Screw Etc.	5
4	Chairs	Material Plastic W X H X D - 55 Cm X 87 Cm X 60 Cm (1 Ft 9 Inch X 2 Ft 10 Inch X 1 Ft 11 Inch), Weight- 2.8 Kg, Stackable Chairs	30
5	Front Office Counter	Size: 2960 D x 880 D x 1100 H in (mm)	1
6	Round Clock	8 Inches Diameter with Cell, Wall Clock 8 X 8-Inch Round	7



7	White Board	Whiteboard Type: Regular Height- 457.2mm, W 304.8 mm · Writing Board, Ceramic Steel, Size 3 X 4 Feet, Thickness 1.4mm	1
8	Passport Or Visa Demo Dummy	Dummy Passport	4
9	Broachers	(Hotels-20 Types, Travel Agency 20 Types, MTDC Offices 20)	1
10	Forms	Reservation Form100, Confirmation Form100, Cancelation Form100, Customer Information Forms 100, Feedback Form100	1
11	Posters	(Travel Agency 3, Hotels-3, Restorants-3, Travel) 4 Feet By 4 Feet	1
12	Posters On Famous Tourism Places	(Manmade, Natural, Symbiotic, Cultural, Sports Etc) 5 Feet By 4 Feet	2
13	Promotional Umbrella	Umbrella Material- Abs Plastic, Size- 6ft.Dia Table Size- 16-Inch X32 Inch Print Area- Front 32"X32"; Side 16"X32" Tourism Stalls for Branding or Advertising or Service on the Tourist Spot. Like Packages, Guide, Bookings, Food and Beverage, Accommodation Etc Commercial Patio Umbrella, Length of Umbrella Ribs Is 200 Cm,	2
14	Supply Extension Cable Port	5 Pins	2
15	Books- Travel Experiences	Books On Traveller's Experiences	10
16	Books- Traveller's Guide	Travelers Guide For Destinations As Follows,3- Local Destinations,6 - Other State Level, Destinations- Mahabaleshwar, Ajanta Ellora, Konkan, Tad Oba, Forts,Mumbai.9- Other National Destinations- Kashmir, Himachal Pradesh, Rajasthan, Kerala, North East, Andaman-Nicobar, Goa, Madhya Pradesh, Forest Safaris,6- International-Destinations- Europe, Dubai, Singapore- Bangkok, United States, South Africa, Nepal	30

17	Trainers Table	Product Dimensions: Total Height = 750mm, Length = 1200mm, Depth = 600mm Top: 18 Mm Engineered Wood Tabletop With 2 Mm Machine Edge Banding. Legs: Durable Steel Powder Coated Under Structure Made Of 16-Gauge Steel Tubes Powder Coated To da Grey Colour	1
18	Trainers Chair	Material: Breathable Mesh for The Backrest and Polyester Fabric for The Seat. (Ac Mesh & 5060 Fabric Seat). Base: 700 Mm Diameter Nylon Base With 50mm Castors for Stability and Easy Movement. Arms: Fixed Arms for Shoulder Support Seat Contour: Seat Pan Depth Is Designed So That the Forward Most Point on the Lumbar Support Is Placing Gentle Pressure on the Lower 5 Vertebrae on The Spine. Lumbar Support: Fixed Lumbar Support to Support Your Lower Back. Tilt: Push Back Tilt Mechanism to Move Only the Back Rest Back for Comfort Pneumatic Height: Change the Height of The Chair Relative to the Floor By 100 Mm	1
19	Debit / Credit Card Machine	14 X 9 X 4 Cm, 200+ Grams	1
20	Register And Logbooks	General Size and Purpose	4

## vii. Telecom: -

The kit should provide students with hands-on training in fiber optics, digital networks, and IoT through industry-grade tools, simulators, and safety equipment to build skills for modern communication technologies.

Sl. No.	Tool & Equipment	Parameter	List of value	Qty
1		Type	Optical Power Meter	1

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	Fiber Optic Power Meter	Wavelength Range (Nm)	800-1700	
		Universal Connector	Fc/SC/ST	
		VFL (Options)	1mw/10mw/20mw/30mw/50mw	
		Battery Working Hours(H)	≥72	
		Size (Mm)	112x66x30	
		Net Weight (G)	140/150	
2	OTDR	Wavelength (Nm)	1550 nm or 1310 and 1550 nm	1
		Dynamic Range (Km)	22 DB or 24/22 DB	
		Testing Range	5m to 60 Km	
		Measurement Accuracy	±1 M	
		. Reflection Accuracy	Better Than ±2 Db	
		Power Required	DC Operated	
3	Laptop	Intel Core i5 1235u Or AMD RYZEN 5 7530U or Equivalent, Chipset – Intel / AMD Integrated SOC Or Equivalent Up To 4.4 GHZ Frequency, 6 Cores, 12 Threads, Chipset: Intel Integrated Soc Or Equivalent Ram Size (GB) : 8 GB DDR4-2933 MHZ RAM(1 X 8 GB), Hard Disk (GB) : 512 GB PCIE® NVME™ M.2 SSD, Operating System (Pre-Loaded): Windows 11 Home Or Equivalent, USB Port 3.0(No.) :1 Or More, USB Port 2.0 (No.):1 Or More, Network Connectivity :10/100/1000 On Board Integrated Gigabit Port, Display: 35.6 Cm (14 Inch) Diagonal, HD (1366 X 768), Micro-Edge, Brightview, 250 Nits, 45% NTSC, Monitor Size (Inches): 35.6 Cm (14) Diagonal HD Display Or Higher Warranty (Year) : 1 Year (1/1/1) Limited Warranty Includes 1 Year Of Parts And Labour. On-Site Repair. Keyboard: Full-Size, Jet-Black Keyboard, Pointing Device: Image Pad with Multi-Touch Gesture Support; Precision Touchpad Support, Wireless: Realtek Rtl8821ce-M 802.11a/B/G/N/A (1x1) Wi-Fi® And Bluetooth® 4.2 Combo Or Equivalent, Power Supply: 65W Smart AC Power Adapter, Battery, With MS Office		1
4	Computer System	Compatible With All Windows	Yes	2
		Processor	64 Bits	
		Processor Type	Core To Duo/ I5	
		Wi-Fi Enable	Yes	
		Keyboard	Yes	
		Mouse	Yes	
		CPU Speed – GHZ	3	
		DDR3 Ram - GB	4	
		Monitor Size - Inch	15	

5	UPS	Resolution $\pm$ %	3	2
		Crest Factor	0.125694444	
		Transfer Time Milliseconds.	5	
		UPS Battery Type	Sealed Lead-Acid	
		Configuration	Single-Phase Input	
		Operation	Fully Automatic	
		User Interface	Rs232 Port	
		AC Voltage - Volts	120	
		Frequency - Hz	60	
		Maximum Current - Amps	12.8	
		Number Of Cells - No's	3	
		Dimensions - Length - Mm	499	
		Width - Mm	134	
		Height - Mm	226	
		Environmental Audible Noise - DbA	50	
6	Anti-Virus Software	Platform Support	Windows 10 (32-Bit And 64-Bit)	1
		Simplifies Administration with Automated Update Deployment and License Renewal	Yes	
		Storage Type	CD/DVD	
		Validity	1 Year	
		One Antivirus For One Laptop	Yes	
7	Libra Office/Ms Office	Latest Version - One for Each Laptop Computer		
8	Digital Multimeter	Type Of Digital Multimeter -	Handheld	1
		Ac Voltage Accuracy - Percent	1	
		Temperature Accuracy - 2 Percent	2	
		Frequency Accuracy - Percent	0.1	
		Ac Voltage Range - Volt	600	
		Temperature Resolution - Degree Celsius	1	
		Dc Voltage Range - Volt	1000	
		Frequency Resolution (HZ) -	0.001	
		Dc Voltage Accuracy - Percent	0.5	

12

W





	Connector Crimper	Stripped Length Mm,	12.7	
		Terminal And Wire at a Rate No Faster Than Mm	25	
		Item Dimensions Length - Cm	17	
		Width - Cm	5.5	
		Height - Cm	3.1	
		Weight - Gram	200	
12	Fiber Optic Stripper	Type	Optic Fibre Striper	2
		Material	Metal Plastic	
		Weight - Gram	140	
		Dimensions	x 7.5 x 1 cm 17.5	
		Easy To Operate	Yes	
		Easy To Store	Yes	
13	Internet of Things (IOT) Kit	<p>The Kit Should Be Programmable &amp; Should Offer Opportunity to Explore and Innovate in The Field of Cloud Computing and Internet. The Kit Should Also Be Mobile App Controlled (Android &amp; Ios) &amp; Should Operate Both on Local &amp; Cloud Server, With Separate UI/UX For Each Project (Minimum 10 Projects) For Which Cardboard Structures Should Be Included in The Kit. The Kit Should Have 2 Microcontroller Programming Boards Having Esp 8266 Architecture to Have Server Client Communication, Powered By 5V Power Bank, Light Sensor, Temperature-Humidity Sensor, Sonar Sensor, IR Sensor, Moisture Sensor, Accelerometer/Gyro Meter Sensor, Sound Sensor, Push Switch and Relay Switch. The Kit Should Include Utility Based Cardboard Structures to Construct Real World IOT Applications Like:</p> <ul style="list-style-type: none"> <li>• Smart IOT Home Applications,</li> <li>• Smart Dustbin• Liquid Dispenser</li> <li>• Smart Lamp• Air Guitar</li> <li>• Smart Alarm• Smart Lamp</li> <li>• Smart Dustbin• Smart Liquid Dispenser</li> <li>• Gesture Based Light Control Cardboard Sheets Should Have Matching Numbers Printed for Easy Intuitive Structure Building by Children, (Ex: Matching 1 To 1, 2 To 2, For Building Structures). Apart From the Above, Students Should Be Above to Experiment With,</li> <li>• Cloud-Based Security System</li> <li>• Cloud-Based Weather Station</li> <li>• Face Recognition-Based Door Unlocking System</li> </ul>		



		<ul style="list-style-type: none"> <li>• Ai Gesture Based Led Brightness Controller</li> <li>• Cloud-Based Wildfire Alarm System</li> </ul>		
14	Tweezers	Material	Medical Grade Stainless Steel	5
		Corrosion Resistant	Yes	
		Size	15cm	
		Reusable	Yes	
		Sterile/Nonsterile	Nonsterile	
15	Cleaver	Blade Type	Zigzag	5
		Handle Material	Plastic	
		Easy Grip	Yes	
		Blade Material	Harden Steel	
		Easy To Operate	Yes	
		Rustproof	Yes	
16	Connectors	Type	2-Line Phone Connector	50
		No. of Port	1	
		Termination	IDC / IDT	
		Contact Resistance	20 MOHM	
		Current Rating	1A	
		Insulation Resistance	1000 MOHM	
17	Power Extension Cord	No. Of Sockets	4	1
		Material	Polycarbonate	
		Length Of the Cable in the Extension Cord - Mtr	1.5	
		No. Socket Pins - Nos	5	
		Current - Amp	6	
18	Fire Extinguisher	Fire Extinguisher, Co2 Based, Portable, Duly Charged	Yes	1
		Capacity - Kg	3	
		Product Dimensions - Length - Cm	30	
		Dia - Cm	10.16	
		Hose Length Mm	600	
		Width - Cm	30	
19	Hand Blower	Material	Plastic	1
		Head Style	Tip	
		Item Dimensions Length - Cm	12	
		Width -Cm	12	
		Height-Cm	4	
		Weight - Gm	60	

20	Hand Brush	Material	Plastic	5
		Bristle Stiffness	Medium	
		Color	Blue	
		Brush Type	Hair Filament	
		Size - Cm	10	
		Weight - Gm	55	
21	Cello Tape	Cello Tape Great for Permanent Mending of Torn Paper, Gift Wrapping, Covering Notebooks, Arts and Craft Assignments, Class Projects, Sticking Decorations or Timetables, Light Sealing Etc. It Is Invisible on Most of the Paper and Won't Show on Photocopies. Can Be Written on With Pen, Pencil or Marker Can Be Torn by Hand - No Need for Scissor or Cutter		
		Length -Meter	65	
		Width - Inch	1	
22	Pvc Electronics Tape	Self-Adhesive PVC Electrical Insulation Tape-Coloured Sunlight Resistant, Pressure Sensitive Vinyl Electrical Tape		10
		Width - Mm	0.125	
		Height - Mm	18	
		Length - Yards	10	
		No. Tape In Packets - Nos	4	
		Color	Multicolour	
23	Safety Goggles	Medical Safety Goggles Made-	Polycarbonate	5
		Frame Size -	Medium	
		Lens -	Clear With Adjustable Strap	
24	Smart Iot Based Logic Tutor	Material	PVAC	1
		Operating Manual	Yes	
		Basic Logic Gate	Types Of 6	
		Button & Led Indicators for Logic Detection	Yes	
		Book Size Length	60 Cm	
		Battery Backup	2 Hour	
		Height	1 Cm	
		Operating Voltage/Current	12-15 /5 V/MA	
25	Electrical Tool Kit	Screwdriver	1	5
		Combination Plier	1	
		Nose Plier	1	
		Wire Stripper	1	

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14



		PVC Electric Tape	1	
		Adjustable Spanner	1	
		Line Tester	1	
		Multimeter	1	
		Tool Kit Bag	1	
26	Hand Glove	Size- Inch	9	5
		Powder Free	Yes	
		Non-Sterile	Yes	
		Material	Latex	
		Waterproof	Yes	
27	Basic Smart Ai Based Training Kit	AI Camera	Resolution: 1.2 Megapixels Frame Rate: 54 Frames Per Second (FPS) Colour: Colour Imaging USB Type C Hub Lens Pocket USB Port	1
		Display:	15.6" 16:9 LCD Panel with Led Backlight, Service Life Up To 50,000 Hours	
		Touchscreen	Di/O For Accurate Real-Time Triggering	
		Surface Treatment	Anti-Fingerprint Coating for Ease of Cleaning and Enhanced Readability	
		Viewing Angles:	Wide Viewing Angles Supporting Both Portrait and Landscape Modes	
		Durability:	Ip-Rated for Water and Dust Protection	
		Smart Ai Camera System	Yes	
		Integration:	Includes Image Sensor, And Vision Software Suites, Ready to Deploy	
		Design	All-In-One Design Minimizes Cabling, Footprint, and Maintenance	

		Accessories	Validated And Comprehensive Accessories, Reducing Effort on Surveying and Debugging	
		Software:	Pre-Installed Software and Sample Code for Easy Setup	
28	Technician Safety Helmet	Require Standard Size Which Generally Fits All Interiors Are with Air-Mesh Fabric to Keep Cool Inner	Yes	5
		Material: Mesh Outer Material	Plastic	
		Material	ABS	
		Size	M	
29	Keyboards	Runs On Operating System, Bit-	64	2
		Keyboards Specifications-	Standard Wired Keyboard Compatible with Desktop	
		Material	Plastic	
		No. Of Keys in the Keyboards	104	
		Keyboards Interface Port-	PS/2	
30	First Aid Box	Large Household Multi-Layer First Aid Kit Multifunctional Medicine Box Comprising of First-Aid Bandage, Small Scissors, Tweezers or A Cotton Swab, Ointment, And Other Basic Over The Counter Drugs.		1
		Clinical Thermometer	1	
		Cotton Bandage, Size: 3 Mtr. * 5 Cm.	1	
		Adhesive Plaster (Woven Fabric): Size 19*72 Mm.	1	
		Face Mask	5	
		Sterile Gauze Swab: 5*5 Cm.	1	
		Antiseptic Liquid 100 ML	1	
		Antiseptic Cream 25 Gm	1	
		Microporous Tape	1	
		Tweezer	1	
		Scissor	1	



		Examination Gloves	2	
		Pain Relief Spray 30 Ml	1	
		Antiseptic Soap 50 Gm	1	
31	VGA Cable	Cable Material: Plastic, Copper, PVC. Conductor Material: Tin,		2
		Cable Material	Plastic, Copper, PVC	
		Conductor Material	Tin	
		Type:	Male/ Female	
		Connector Material	Silver Plated.	
		Cable Length - Mtr.	1.5	
32	Fiber Optic Simulator	Type	Tear Light	1
		Voltage	12 V	
		PCB Board with Basic Circuit	Yes	
		Contains	Yes	
		Resistor	Yes	
		ICS	Yes	
		Transistor	Yes	
		Diodes	Yes	
33	Pen Drives	Memory Storage Capacity Gb	16	2
		Item Dimensions- Length- mm	4.5	
		Width -mm	1.48	
		Height - mm	0.5	
		Weight -mm	6.4	
34	Flexo-Lite	Description	Flexible Lite Pipe	2
		Lenth	254 mm	
		Lens Style	Round With Flat Top	
		Lens Size	4.2 mm	
		Color	Clear	
35	Optic Connector	Housing Material	Polymer	2
		Ferrule Material	Ceramic	
		Type	Coupler	
		Mounting Type	Panel Mount, Snap-In	
		Features	Angle Polished, Dust Cap, Shutter	
36	Wooden Table	Tabletop Material -	Wooden	1
		Tabletop Length -	4 Feet	
		Tabletop Width -	3 Feet	
		Tabletop Thickness -	18mm	

		Table Stand -	Four Legs Square Iron Pipe Frame	
		Height Of Table -	2.5 Feet	
		Table Frame	Iron	
		Type	Folding	
36	Storage Cupboard	Dimension Of Closet	5.8 X 3 Feet	1
		Material	Iron	
		Type	Double Door,50 Kg	
		Compartment	4	
		Dimension Of Compartment		
		Length -	1.2 Feet	
		Width -	3 Feet	
		Depth -	1.45 Feet	
38	Fibre Patch Cable	Cable Type	Fibre Optic, Ethernet	2
		Dimensions	x 16.99 x 3.81 cm 16.99	
		Batteries Required	No	
		Weight	249 Grams	
		Bend Radius	10 mm (Static)	
		Length	30 Mtr	
39	Universal Tool Kit	Screwdriver- 01 Nos, Combination Piler-01 Nos, Line Tester-01 Nos Wire Stripper- 01 Nos PVC Electronic Tape-01 Nos	Yes	2
40	Extractor Tool	Material	Metal	2
		Application	Socket Terminals Removal Tool	
		Weight	113 Grams	
		Height	2 Inches	
		Width	Inches 5	
		Dimensions	12.7x12.7x5 Cm	

## 7. Vocational - Raw material grant

**Scope of work:** Each school should be supplied with trade-specific consumables and raw materials to support practical training and classroom activities for two vocational trades. These materials should be essential for enabling regular hands-on practice, skill development, and demonstration-based learning aligned with the selected job roles in all 789 schools.



Job List:

S. No.	Job role
i.	Agriculture
ii.	Automotive
iii.	Apparel
iv.	Electronics
v.	Healthcare
vi.	Tourism
vii.	Telecom

**i. Agriculture:**

Sl. No.	Tools & Equipment	Specification	Qty
1	Latex Rubber Gloves	Size- inchFree Size Natural Rubber Powder content < 15 mg / dm2 Extractable Sterilization Ethylene Oxide / Gamma irradiated RUBBER GLOVES Validation of Sterilization Chamber Protein Level: <200 micro gram/ dm2. Material Latex Rubber Water Proof	5
2	Gardening Kit	Kit Contains (Number of Gloves 1 pair Drip Trays2 2 Size of pot (Top diameter) (cm) 9- centimeter, Size of gloves Medium Number of seed packet 4 watering can 1, Number of Trowel 1 Item in a kit Fork, Gloves 2 Number of Weeder 3 Number of Fork 1 Number of soil discs 1 Number of shears 1 Material of Trowel SS Number of pots 3)	1
3	Flowerpot	Material Plastic Shape (When viewed from Top) Round Pot Length (Diameter) 500 millimeter Pot Width (Diameter) 400 millimeter Pot Height (Overall Height) 1000 millimeter	2
4	Khurpi	Material of Khurpi Carbon Steel	2
5	Watering Can	Shape of Watering can Other Opening for Watering Filling, Type of Handle Saperate Handles for Hanging and Holding,Support Between Spout and Body Type of Spout With Perforation,Colour Green Material of Watering Can Polypropylene (PP) Capacity	2

		of Watering Container(In litre) 9.1-11 Height of Watering Can(in MM) 301-310	
6	Seed Germination Cycle Chart	Material- Laminated paper, Colour- Multicolour, Size- 100cmX70cm, Plastic rods on both ends, Hanging strip, Thickness- 30micron. Language- English.	2
7	Insect,Pest & Diseases Chart	Material- Laminated paper, Colour- Multi colour, Size- 100cmX70cm, Plastic rods on both ends, Hanging strip, Thickness- 30micron. Language- English.	2
8	Compostable Mulch Sheet	Usage Application Agriculture CPCB & IIP Licensed for overall migration ,CIPET Certified for Biodegradability, Intertek certified for seal & puncture, Packing Type Roll Made in India, Color Black/Green Thickness in Micron 20 to 5 Width in m 1 size m/Roll 20	1
9	Kissan Suraksha Kawach	Shoe cover Ancel Length Water Proof & Dust proof, Easy to wear, Length in mm400 Weight gm6.6 Cap, Weight:30 gm Material, Non-woven polypropylene Length in Inch 18 color Blue/Green Safety Goggle, weight in gm30 Body Cover, MaterialSpun Bond Weight gsm 90	1
10	Soil Testing Reagen Kit	Reagent Kit for-samples parameters 14 License Technology License by IISS Bhopal Type of parameters EC,pH, Organic Carbon, Pottasium, Nitrogen, sulphur, Lyme Gypsum, Iron, Zinc, carbon Phosphorus like parameters. No of Sample to be tested - 50 Sample	1

## ii. Automotive

Sl. No.	Tools & Equipment	Specification	Qty
1	Bench Vice	Material And Dimensional Parameters -: Material of Body for Bench Vice -Steel cast Material of Movable jaw- Steel cast Material of Swivel base plates- Steel cast	1



		Material for Jaw plates- Tool steel Material for Screw spindle and handle- Steel Material for Spindle nut- Grey cast iron Nominal size of bench vice in mm- (width of the jaw) (tolerance of $\pm 2$ percent) 125 Minimum mass of Fixed base bench vices- (in kg) 15 Minimum mass of Swivel base bench vices - (in kg) NA for Fixed base bench vice The hardness of the jaw plates- (in HV) (445 HV to 596 HV Fixed base bench vice The hardness of the jaw plates- (in HV) (445 HV to 596 HV	
2	Oil Draining& Filling Equipment	Material of Oil Can - Mild Steel, Material of Nozzle - Stainless Steel, Capacity of Oil Can - 500 ML Length of Spout - 50MM Outer Diameter of Spout Tip - 2MM, Inner Diameter of Spout Tip - 2MM, Diameter of Filling Hole - 2MM	1
3	Multi meter	Style - Digital Colour- Blue Item Weight - 13.8 Grams Item Dimensions LxWxH - 6.9 x 3.1 x 13.8 Centimetres Must include Instruction Manual, 1 Set test leads Measurement Accuracy $\pm 0.8\%$ rdgs (DC Volt), $\pm 1.2\%$ rdgs (AC Volt) Measurement Type – Multimeter Number of Items – 1	1
4	Hand Tools	Material -Chrome Vanadium Steel Item Dimensions LxWxH 20 x 10 x 3 Centimeters,Head Style -Hex Finish Type -Nickel Chrome Set contains:- 2 x - 1/2" Spark Plug Sockets: 16MM & 21MM 1 x - 1/2" x5" Extension Bar. 1 x - 1/2" x10" Extension Bar. 1 x - 3 Way Adaptor. 1 x - 1/" Ratchet Handle 6 x - 1/2" (Socket 12PT): 10-12-13-14-16-17MM 19 x -1/2" (Socket 6PT) : 8-9-10-11-12-13-14-15-16-17-18-19-21-22-24-27-32MM	1
5	Cotton Gloves	Size-Small Width across palm - 10 cm for small Overall Length - 24 cm for small Depth of Cuff - 6 cm for small Total No of Wales - 68 for small	5

6	Sun Glasses	GOGGLE LENS Filter – 2- 1.2 UV according to EN 170, Impact Resistance: Designed to withstand energy impact of 120 m/s on the frame Maximum Weight of Chemical Splash Proof Goggle 100 grams	2
7	Spark plugs	Spark plug sockets 67 mm drive size 16/21 mm Core Material Iridium Gap Size 0.9 Millimeters Top Material Type Alloy Steel Vehicle Service Type Motorcycle	2
8	Gloves	Nylon anti cut safety hand glove Material Nylon Color Green, White & Grey etc. Usage/Application Industrial Categories Safety Gloves Feature Cut Resistant Finger Type Full Fingered Size/Dimension S, M, L, Free Size Gender Unisex Packaging Size 1 pair per packet Weight 30 gm	4
9	Puncture tool Kit	Type Universal Tubeless Tire Repair Kit Usage Emergency Flat Tire Repair Patch Puncture Kit Tool Bag for Car, Bike Kit Contains Reamer, Probe, Rubber Solution, 10 Puncture Repair Strips, Cutter, Storage Bag (2x Needle Tool Bits for Lifetime Reliability)	1
10	General Hand Tool	Product Dimensions: 28 x 4.5 x 25.3 cm; Item Weight: Approx. 2 kg 470 g	1

### iii. Apparel

Sl. No.	Tools & equipment	Specification	Qty
1	Sewing Machine Accessories And Attachments	1 high quality bobbin case, 5 high quality aluminium bobbins, 1 pair of right & left single/zipper foot, 1 gathering foot, 1 box [10nos] sewing machine needle of size 14 and 1 box [10nos] sewing machine needle of size 16.	15
2	Shears (8-10" Iron Blade For Cutting Fabric)	Tailoring scissors of minimum 9.5 inch made up of stainless steel for cutting a fabric.	15
3	Seam Ripper	Handy seam ripper with plastic cover, used for opening stitches for sewing and craft works, length : large size (lxw): 30 x 5 mm, small size (lxw): 60 x 5 mm, handle length (in mm) : 35, 98	15



4	Tailor's Chalk	Extra smooth tailoring, sewing markers with fashion designing triangle scales, set of 15 dust free tailoring chalks	15
5	Safety Pins	Steel safety pins of medium (3.5cm) and large sizes (5.5cm)	15
6	Scale	Metallic scale of sizes 6" & 12"	15
7	Measuring Tape	Pvc measuring tape of 7.5 m and 0.5" width	15
8	Bobbin And Bobbin Case For Industrial Machine	Steel bobbin and bobbin case, material: stainless steel, dimension (lxbxh) in cm: 4x3.5x1.3	15
9	Hand Needles	Assorted hand sewing needles for embroidery and mending, standard size, material : stainless steel, finish ; polished, rust proof, dimension (lxb) in cm: 5x0.26	15
10	Machine Needles	Sewing machine needle with one pack containing minimum 20 needle, standard size, size: 9, 11, 14, 16, 18;	15
11	Threads	180 mts polyester thread used in hand & machine work (set of 100)	15
12	Personal Protective Equipment (Nose Mask, Goggles, Etc.)	Gown non oven 1 n95 facemask 1 head cap non oven 1 disposable gloves , 1 shoe cover knee length 1 waste collection bag 1 goggle 1 kit size mm 300x350	30
13	Pouches For Storing Items	Clear transparent zip lock bags with write on panels - large, medium and small size- 200x300mm, 250x350mm, 300x400mm (for storing threads, garments, needles etc)	15
14	Machine Oil	200ml bottle of sewing machine lubricant oil.	15
15	Documents/Charts	Tech pack/ specification sheet size chart trim card seam samples of different fabric buyer's comment sheet operation bulletin company quality standards handbook/ guidelines fabric worksheet style confirmation sheet fabric consumption chart fabric requirement sheet (frs) trims requirement sheet	10
16	Fabric Yardages, Surplus Fabric, Good Quality Muslin Mandatory )	25 mtr = 1 unit	10

iv. Electronics

Sl. No	Tools & Equipment	Specifications	Qty
1	Ruler (Steel)	30cm long nominal size (cm)30	5
2	Measuring Tape	Measuring tape of 5 meter x 19 mm size of tape (lxw)(mmxmm) 600x25	5
3	Aluminium Wire	Digital dmm - current, voltage, capacitance, frequency & resistance measurement., frequency range: 99.99-20.00 mhz, dc voltage range: 400mv/4/40/400/1000v, ac current accuracy: $\pm(2.0\%rdg + 4dgt)$ , duty cycle: 0.1-99.9%, sp function: diode test, audible continuity, data hold. Type: hand held, measurement type: true rms, dc voltage range - 600 volt, ac voltage range : 600 volt	8
4	Rasp File	8" wood rasp file set with rubber grip + plastic handles - includes hand cut round, half-round, and flat rasp file kit types of engineer's files-half round, grades of cuts : bastard, material : alloy steel	5
5	Punch With Bit 8no& 10no	Punch holder with 8mm and 10mm bit d	2
6	Screw Driver Kit	Screwdriver kit of 8 blades with tester, flat tip: 3. 25, 4. 5, 5 mm, die no - 0, 1, 2, pocker and extension rod. Blade material made from manganese steel	5
7	Wire Stripper	Electrical insulation from electric wires.	2
8	Wire Stripper, Cutter, Crimper And Pliers	Multi crimp and stripper pliers product dimensions 8.2 x 2.6 x 0.6 inches with insulated rubber grips length of hand tool in mm 125	4
9	Stopwatch With Battery	Digital stopwatch with battery. 12 hour display format display: led, power requirements : battery, display : led, cabinet material : plastic, wooden	2
10	Solder Wire	Solder wire (tin/lead) - 60/40 18 swg	5
11	Copper Wire	Copper wire for electrical fitting type of insulation: pvc, price/meter	2
12	Aluminium Wire	Aluminium wire for electrical fitting 2 core 16mm, cable size (sq-mm): 2.5, type of cable -flat, type of conductor - three strand	2

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13	Pvc Insulation Tape	0.125mmx18mm 10 yards self adhesive pvc electrical insulation tape-colored pack of 4 sunlight resistant, pressure sensitive vinyl electrical tape length of tape on a roll (meter) -25	10
14	Flexible Pipe	Units in mtrs material :pvc thickness: 1 - 5mm feature :self-extinguishing length :2-10m nominal pressure: 2 bar material of waste fitting nominal size 32 mm for washbasin	10
15	Desoldering Pump & Wire	Manual / electric vacuum desoldering pump temperature range 50 deg c to 450 deg c, power cord length (minimum) 1.2 mtrs	5
16	Cables	10/14 copper wires 1mm×2 core rr cables copper wire fr pvc 1.5mm	2
17	Hand Glove	Material : polyurethane coating, anti-static nylon/carbon yarn size (palm width in mm) extra large (120 mm)	10
18	First Aid Box	"large household multi-layer first aid kit multifunctional medicine box comprising of first-aid bandage, small scissors, tweezers or a cotton swab, ointment, and other basic over the counter drugs." clinical thermometer 1 cotton bandage, size : 3 mtrs. * 5 cm. 1 adhesive plaster (woven fabric) : size 19*72 mm. 1 face mask - 05 sterile gauze swab : 5*5 cm. 1 antiseptic liquid 100 ml 1 antiseptic cream 25 gm 1 microporous tape 1 tweezer 1 scissor 1 examination gloves 2 pain relief spray 30 ml 1 antiseptic soap 50 gm 1	1

**v. Healthcare**

Sl. No	Tool & Equipment	Specification	Qty
1	Air Cushion	Standard oem product rubberized coir pillows size: 61 x 35.6 x 10.2 cm.	5
2	Ambu Mask	Standard product <ul style="list-style-type: none"> <li>• silicone adult 1600miresuscitator (w/ pop-off 60cmh20)"</li> <li>• silicon mask 5</li> <li>• 2500ml oxygen reservoir bag.</li> <li>• disposal oxygen tubing 2 meter</li> <li>• 1000 percent medical grade silicone material.</li> <li>• latex free components</li> <li>• available in polysulfide type.</li> <li>• autoclavable</li> </ul>	
		<ul style="list-style-type: none"> <li>• the set to include pvc reservoir bag, silicon mask 5 and disposable oxygen tubing.</li> <li>• 40cm h20 pressure relief valve</li> <li>• all in one intake valve. Self filling with air, usage for infant/child</li> </ul>	5
3	Betadine Solution Bottle	500 ml bottle providone iodine, brown color, 500 ml	5
4	Blanket	Size: 180 × 260 cm material: fleece colour: single colour: navy blue/ dark blue 100% woolen, size 230 x 152 cm,	5
5	Cleaning Solution	Multi purpose cleaning liquid in 500 ml bottle with spray cleaning solution	5
6	Comb	Material: high quality plastic. Standard product for personal grooming purpose material plastic	5
7	Cotton Roles	250 gm roll thickness 12 mm, width 25 mm, weight 200 gram	5
8	Different Color Plastic Bags ( Red , Yellow, Blue, Black) With Dust Bins	Contains: <ul style="list-style-type: none"> <li>(a)4x plastic bags (one of each colour - red, yellow, blue and black)</li> <li>material: polypropylene</li> <li>size: 48 x 58 cm</li> <li>type: biohazard disposable bag</li> <li>(b)4x dustbins</li> <li>color red, blue, green, yellow, black</li> <li>material polypropylene plastic</li> <li>size 30*36 cm (w*h)</li> </ul>	5

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9	Draw Sheet	Standard oem product material used: non woven · color: medical blue · weight: 25 gsm · size: 200 cm x 150 cm · application/use: for covering bed · special feature: water repellent general surgery drapes, size 120 x 150 cm,	5
10	Duster	Material: acrylic duster with removable sleeve and pvc handle duster, floor duster, cleaning duster, size 30 x 30 cm	2
11	Gauze Swabs	Material: cotton size: (4x4 inch) dimension 50 mm,	25
12	Gloves(Disposables)	1packet*100 pieces material: nitrile rubber, powder content : < 2.0 mg/dm <sup>2</sup> extractable protein level : <200 µg/ dm <sup>2</sup> sterilization : non sterile disposable surgical rubber gloves conforming to is:13422/1989 (ra 2003) -pre powdered	20
13	Gloves(Surgical)	1packet*100 pieces material: natural rubber powder content : < 15 mg / dm <sup>2</sup> extractable protein level : <200 micro gram/ dm <sup>2</sup> . Sterilization : ethylene oxide / gamma irradiated rubber gloves / surgical gloves, material natural rubber latex	20
14	Goggles	•frameless polycarbonate safety eyewear with wrap around design. •lenses are impact resistant to level f. •lenses are optical class-1. •scratch-resistant coating on lens. •99.9% uv protection. •meets or exceeds •. Safety goggle, as per Bis specifications, material polycarbonate	20
15	Hair-Cap Packet	1packet*100 pieces atlas disposable caps non-linting Kayce fabric with a polypropylene top and straps •layers: 5-layers soft white sweat pad surgeon cap	20
16	Liquid Soap Bottle	Foaming handwash 215 ml, 1 litre, liquid soap	10

17	Marker	With replaceable refill: tip size (mm):2.0mm board marker	15
18	Normal Saline Bottle	Sodium chloride glucose intravenous infusion bp (0.9% 5%) 500ml 500 ml	5
19	Paper	70 gsm, a4 size, ream of 500) a4 size paper, 500 pages	2
20	Pen	Ball point pen, ball pen	5
21	Pencil	Lead hardness:2b 1 packet of 10 each, 10 pencils packet	5
22	Pillow	Specification: fabric: micro fabric pattern :quilted size : 17 x 27 inches color: white shape: vertical filling material: cotton cloth plain weave polyester cotton (67:33) white, 715 gram weight,	6
23	Pillow Covers	Color: solid colours: navy blue/ dark blue/ white etc size: 17" x 27" fabric: cotton 100% pattern: plain/satin stripe size: 76 x 48 cm	6
24	Registers	Hard cover, long notebook registers regular register, 300 pages, length and width 148 x 210 mm	5
25	Shampoo Bottle	500 ml bottle hair shampoo, 200 ml	4
26	Pencil Sharpener	Material: plastic body with metal blade. 10 pencil sharpeners	10
27	Talcum Powder	400gm ponds talcum powder, 200 gram	5
28	Tooth Brush	Medium bristles. Toothbrush for adults size suitable for adult use	8
29	Toothpaste	200gms/100 gram	5
30	Towel Big	Towels surgical(sheets) material: cotton •size: 16x24 inch material terry (trucky towel), size 150 x 75 cm	5

12

12



31	Uro-Bag	Drain bag capacity ml 2000 ml drain type metal clamp with foley insert tag latex free reflux style anti reflux device sample access port type: blunt cannula sterility o.r. sterile material transparent polyvinyl chloride, capacity 2000 millilitre,	4
32	Writing Pad	150 pages size: a4 size spiral bound material plastic, size 380 x 224 mm,	6
33	Bedsheet	Material: cotton size: 36" x 80" colour: solid colour - blue/ white/ light blue/ green material: variety no-4; 100 % cotton; 145 gms per sq.m, length and width 215 x 135 cm,	6
34	Sand Bag	Filled sandbag: capacity: 15-20 kg material: woven plastic/ jute	2
35	Wet Wipes - Cloth	Pack of 10.hypoallergenic ingredients and dermatologically tested	10

**vi. Tourism**

S. No	Tool & Equipment	Specification	Qty
1	Round Clock	8 inches diameter with cell wall clock 8 x 8 inch round	7
2	Passport Or Visa Demo Dummy	Dummy passport	10
3	Broachers	(hotels-20 types, travel agency 20types, mt dc offices 20)	10
4	Forms	Reservation form100, confirmation form100, cancelation form100, customer information forms 100, feedback form100	10
5	Posters	( travel agency 3, hotels-3, restorants-3, travel) 4 feet by 4 feet	10
6	Posters On Famous Tourism Places	(manmade, natural, symbiotic, cultural, sports etc) 5 feet by 4 feet	10

7	Promotional Umbrella	Umbrella material- abs plastic, size- 6ft.dia table size- 16 inch x32 inch print area- front 32"x32"; side 16"x32" tourism stalls for branding or advertising or service on the tourist spot. Like packages, guide, bookings, food and beverage, accommodation etc commercial patio umbrella, length of umbrella ribs is 200 cm,	5
8	Supply Extension Cable Port	5 pins	5
9	Books- Travel Experiences	Books on traveler's experiences	10
10	Debit / Credit Card Machine	14 x 9 x 4 cm; 210 grams	1
11	Register And Log Books	General size and purpose	4
12	First Aid Box	"large household multi-layer first aid kit multifunctional medicine box comprising of first-aid bandage, small scissors, tweezers or a cotton swab, ointment, and other basic over the counter drugs." clinical thermometer 1 cotton bandage, size : 3 mtrs. * 5 cm. 1 adhesive plaster (woven fabric) : size 19*72 mm. 1 face mask - 05 sterile gauze swab : 5*5 cm. 1 antiseptic liquid 100 ml 1 antiseptic cream 25 gm 1 microporous tape 1 tweezer 1 scissor 1 examination gloves 2 pain relief spray 30 ml 1 antiseptic soap 50 gm 1	1

**vii. Telecom**

Sl. No.	Tool & Equipment	Parameter	List of value	Qty
1	Fiber Optic Power Meter	Type	Optical power meter	2
		Wavelength range (nm)	800-1700	
		Universal connector	Fc/sc/st	
		Vfl (options)	1mw/10mw/20mw/30mw/50mw	



		Battery working hours(h)	≥72	
		Size (mm)	112x66x30	
		Net weight (g)	140/150	
2	Digital Multimeter	Type of digital multimeter -	Hand held	2
		Ac voltage accuracy - percent	1	
		Temperature accuracy - 2percent	2	
		Frequency accuracy - percent	0.1	
		Ac voltage range - volt	600	
		Temperature resolution - degree celsius	1	
		Dc voltage range - volt	1000	
		Frequency resolution (hz) -	0.001	
		Dc voltage accuracy - percent	0.5	
		Dc voltage resolution - millivolt	0.1	
		Display (digits) -	4.5	
		Weight gm	120	
		Material	Plastic	
3	Connector Crimper	Type	Crimping connector	5
		stripped length mm ,	12.7	
		Terminal and wire at a rate no faster than mm	25	
		Item dimensions length - cm	17	
		Width - cm	5.5	
		Height - cm	3.1	
		Weight - gram	200	
4	Fiber Optic Stripper	Type	Optic fibre striper	5
		Material	Metal plastic	
		Weight - gram	140	
		Dimensions	x 7.5 x 1 cm 17.5	
		Easy to operate	Yes	
		Easy to store	Yes	
5	Tweezers	Material	medical grade stainless steel	10
		Corrosion resistant	Yes	
		Size	15cm	
		Reusable	Yes	
		Sterile/non sterile	Non sterile	
6	Cleaver	Blade type	Zigzag	10
		Handle material	Plastic	
		Easy grip	Yes	
		Blade material	Harden steel	

		Easy to operate	Yes	
		Rustproof	Yes	
7	Connectors	Type	2 line phone connector	100
		No.of port	1	
		Termination	Idc / idt	
		Contact resistance	20mohm	
		Current rating	1a	
		Insulation resistance	1000mohm	
8	Power Extension Cord	No. Of sockets	4	5
		Material	Polycarbonate	
		Length of the cable in the extension cord - mtr	1.5	
		No. Socket pins - nos	5	
		Current - amp	6	
9	Hand Brush	Material	Plastic	10
		Bristle stiffness	Medium	
		Color	Blue	
		Brush type	Hair filament	
		Size - cm	10	
		Weight - gm	55	
10	Cello Tape	Cello tape great for permanent mending of torn paper, gift wrapping, covering note books, arts and craft assignments, class projects, sticking decorations or time tables, light sealing etc. It is invisible on most of the paper and won't show on photocopies. Can be written on with pen, pencil or marker can be torn by hand - no need for scissor or cutter		20
		Length -meter	65	
		Width - inch	1	
11	Pvc Electronics Tape	Self adhesive pvc electrical insulation tape-colored sunlight resistant, pressure sensitive vinyl electrical tape		20
		Width - mm	0.125	
		Height - mm	18	
		Length - yards	10	
		No. Tape in packets - nos	4	
		Color	Multicolor	
12	Safety Goggles	Medical safety goggles made-	Polycarbonate	10
		Frame size -	Medium	
		Lens -	Clear with adjustable strap	
13	Electrical Tool Kit	Screw driver	1	5
		Combination plier	1	

12

12



		Nose plier	1	
		Wire stripper	1	
		Pvc electric tape	1	
		Adjustable spanner	1	
		Line tester	1	
		Multimeter	1	
		Tool kit bag	1	
14	Hand Glove	Size- inch	9	10
		Powder free	Yes	
		Non-sterile	Yes	
		Material	Latex	
		Water proof	Yes	
15	Technician Safety Helmet	Require standard size which generally fits all interiors are with air-mesh fabric to keep collinear	Yes	10
		Material :mesh outer material -	Plastic	
		Material -	Abs	
		Size -	M	
16	Vga Cable	Cable material : plastic , copper, pvc. Conductor material : tin,		5
		Cable material	Plastic, copper, pvc	
		Conductor material	Tin	
		Type : .	Male/ female	
		Connector material	Silver plated.	
		Cable length - mtrs.	1.5	
17	Pen Drives	Memory storage capacity gb	16	5
		Item dimensions- length- mm	4.5	
		Width -mm	1.48	
		Height - mm	0.5	
		Weight -mm	6.4	
18	Flexo-Lite	Description	Flexible lite pipe	2
		Lenth	254mm	
		Lens style	Round with flat top	
		Lens size	4.2mm	
		Color	Clear	
19	Optic Connector	Housing material	Polymer	2
		Ferrule material	Ceramic	
		Type	Coupler	
		Mounting type	Panel mount, snap-in	

		Features	Angle polished, dust cap, shutter	
20	Fibre Patch Cable	Cable type	Fibre Optic, Ethernet	2
		Dimensions	x 16.99 x 3.81 cm 16.99	
		Batteries required	No	
		Weight	g 249	
		Bend radius	10mm (static)	
		Lenth	30 mtr	
21	Universal Tool Kit	Screw driver- 01 nos, combination piler-01 nos ,line tester-01 nos wire stripper- 01 nos pvc electronic tape-01 nos	Yes	10
22	Extractor Tool	Material	Metal	15
		Application	socket terminals removal tool	
		weight	g 113	
		Height	Inches 2	
		Width	Inches 5	

## 8. Vocational - Hands-on Skill Training to Students

The bidder shall conduct 2-day training workshop to the students and teachers of the respective trades at the 789 schools for every six months:

### 1. Training Duration and Structure:

The bidder shall conduct a 4-day hands-on training workshop at each school, designed for both students and teachers participating in the respective vocational trades. Each day will include a minimum of 4 hours of structured sessions, incorporating both theoretical instruction and practical application.

### 2. Training Coverage:

The training should emphasize the effective utilization of equipment, development of trade-specific skills, adherence to operational best practices, and implementation of safety protocols to ensure proper handling and maintenance. Particular focus should be given to real-world applications, task-based learning, and live skill demonstrations, aimed at fostering confidence and self-reliance among participants.

### 3. Training Materials and Resources:

The bidder shall provide:

- Printed handouts/user guides for each trade
- Video manuals** demonstrating equipment usage and safety instructions, which shall be installed in the school's system for **on-demand access** by teachers.



4. **Assessment and Feedback:**

On the final day of training, the bidder shall conduct a **structured assessment** for both students and teachers to evaluate skill comprehension and practical readiness. The assessment shall include **hands-on tasks, oral questioning, and observation-based evaluation.**

5. **Reporting and Documentation:**

A **comprehensive report** shall be submitted to the concerned department after completion of each workshop. This report shall include:

- a. Attendance of participants
- b. Training schedule and content covered
- c. Assessment results and feedback summary

9. **Math Student Kit**

**Scope of work:** Supply of Math kits for students along with training. (Ten (10) kits each for classes 6 to 10 respectively) are to be provided in 836 schools. Each of the 836 schools should be provided with Math kits along with training support.

**Kit Components:**

- a. Activity Materials: Math Kit for each class should have Mathematical activities mapped with curriculum covering all chapters of the respective class.
- b. Instruction Manual: Step-by-step guides for each activity. should be mapped to the curriculum.
- c. Additional Resources: Links to video tutorials and additional reading material should be provided.

**Activities Included:**

Geometric Constructions: Using compasses, rulers, and protractors to construct shapes and angles.

- a. Fractions and Decimals: Visual aids and manipulatives to understand the concepts of fractions and decimals.
- b. Algebraic Expressions: Tools to simplify and solve algebraic expressions.
- c. Probability: Simple experiments to understand probability concepts.
- d. Statistics: Collecting and analyzing data using charts and graphs.
- e. Linear Equations: Hands-on activities to solve linear equations and inequalities.
- f. Coordinate Geometry: Using graph paper and tools to plot points and understand the coordinate plane.
- g. Number Theory: Exploring prime numbers, factors, and multiples through engaging activities.
- h. Ratios and Proportions: Visual aids to understand and solve problems involving ratios and proportions.
- i. Mensuration: Measuring and calculating the area, volume, and perimeter of various shapes.

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### DETAIL SPECIFICATIONS:

Sr. No.	Name	Technical Specifications
1	Math Kit for Class 6	<p>The kit should contain various magnetic boards such as the Number System Operator (N), Algebra Annotator (A), Coordinate System Demonstrator (CL), Geometry Expositor (G), Mensuration Evaluator (M), and Circle Descriptor. Along with these magnetic boards, the kit should include accessories like Data Handling Bar Plates, Button Magnets, Smiley Magnets (10 pieces), Triangle Plates, one Measuring Scale, Plastic Sticks and Square Plates (25 pieces). The kit should be reusable and safe, with non-toxic materials clearly labeled.</p> <p>Using this kit, students should be able to perform activities covering a wide range of topics included in their curriculum. The topics and corresponding activities should include:</p> <ul style="list-style-type: none"> <li>○ Whole Number</li> <li>○ Playing with Numbers</li> <li>○ Understanding Elementary shapes</li> <li>○ Decimal</li> <li>○ Integers</li> <li>○ Fractions</li> <li>○ Prime and Composite Number</li> <li>○ Data Handling</li> <li>○ Menstruation</li> <li>○ Algebra</li> <li>○ Ratio &amp; Proportion</li> <li>○ Symmetry</li> <li>○ Practical Geometry</li> </ul>
2	Math Kit for Class 7	<p>The kit should contain various magnetic boards such as the Number System Operator (N), Algebra Annotator (A), Coordinate System Demonstrator (CL), Geometry Expositor (G), Mensuration Evaluator (M), and Circle Descriptor</p> <p>Along with these magnetic boards, the kit should include accessories like Data Handling Bar Plates, Button Magnets, Smiley Magnets (10 pieces), Triangle Plates, one Measuring Scale, Plastic Sticks and Square Plates (25 pieces). The kit should be reusable and safe, with non-toxic materials clearly labeled.</p> <p>Using this kit, students should be able to perform activities covering a wide range of topics included in their curriculum. The topics and corresponding activities should include:</p> <ul style="list-style-type: none"> <li>○ Integers</li> <li>○ Fractions</li> <li>○ Data Handling</li> <li>○ Simple Equations</li> <li>○ Lines and Angles</li> <li>○ Congruence of Triangles</li> </ul>



		<ul style="list-style-type: none"> <li>○ Comparing Quantities</li> <li>○ Rational Numbers</li> <li>○ Practical Geometry</li> <li>○ Perimeter and Area</li> <li>○ Algebraic Expressions</li> <li>○ Exponents and Powers</li> </ul>
3	Math Kit for Class 8	<p>The kit should contain various magnetic boards such as the Algebra Annotator (A), Coordinate System Demonstrator (CL), Geometry Expositor (G), Mensuration Evaluator (M), and Circle Descriptor (C). Along with these magnetic boards, the kit should include accessories like Data Handling Bar Plates, Button Magnets, Smiley Magnets (10 pieces), Triangle Plates, one Measuring Scale, Plastic Sticks and Square Plates (25 pieces). The kit should be reusable and safe, with non-toxic materials clearly labeled.</p> <p>Using this kit, students should be able to perform activities covering various topics in their CBSE curriculum. The topics and corresponding activities should include:</p> <ul style="list-style-type: none"> <li>• Rational Numbers</li> <li>• Linear Equations in One Variable</li> <li>• Quadrilaterals</li> <li>• Square and Square Roots</li> <li>• Cube &amp; Cube Roots</li> <li>• Comparing Quantities</li> <li>• Algebraic Expressions</li> <li>• Algebraic Identities</li> <li>• Menstruation</li> <li>• Exponents &amp; Powers</li> <li>• Direct &amp; Inverse Proportion</li> <li>• Factorization</li> </ul>
4	Math Kit for Class 9	<p>Using this kit, students should be able to perform activities covering a wide range of topics included in their curriculum. The topics and corresponding activities should include:</p> <ul style="list-style-type: none"> <li>• Number System</li> <li>• Polynomials</li> <li>• Co-Ordinate Geometry</li> <li>• Linear Equation in two variables</li> <li>• Introduction to Euclid's Geometry</li> <li>• Lines and Angles</li> <li>• Triangles</li> <li>• Quadrilateral</li> <li>• Area of parallelograms and Triangles</li> <li>• Circle</li> <li>• Heron's Formula</li> <li>• Statistics</li> </ul>
5	Math Kit for Class 10	<p>The kit should contain various magnetic boards such as the Algebra Annotator (A), Coordinate System Demonstrator (CL), Geometry</p>

	<p>Expositor (G), Mensuration Evaluator (M), and Circle Descriptor (C). Each of these magnetic boards should be at least 283mm * 283mm in size. Along with these magnetic boards, the kit should include accessories like Data Handling Bar Plates, Button Magnets, Smiley Magnets (10 pieces), Triangle Plates, one Measuring Scale, Plastic Sticks and Square Plates (25 pieces). The kit should be reusable and safe, with non-toxic materials clearly labeled.</p> <p>Using this kit, students should be able to perform activities covering a wide range of topics included in their curriculum. The topics and corresponding activities should include:</p> <ul style="list-style-type: none"> <li>• Real Number</li> <li>• Polynomials</li> <li>• Pair of Linear equations</li> <li>• Quadratic Equation</li> <li>• Arithmetic Progression</li> <li>• Triangles</li> <li>• Co-Ordinate Geometry</li> <li>• Introduction to trigonometry</li> <li>• Circle</li> <li>• Area related to circle</li> <li>• Statistics</li> </ul>
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Note:

- Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.
- Bidder needs to submit the test reports for safety of tools from NABL accredited lab.

## 10. Maths School Kit

**Scope of work:** Maths Lab should be established in each of the 836 schools with the following specifications.

1. Supply of tools for hands on learning.
2. Activity based Video tutorials.

### DETAIL SPECIFICATIONS:

Sr. No.	Description	Specifications	Qty
1	9" Geoboard	Should be of 9" transparent square plastic geoboard with a 10x10 pegs array and 8-10 coloured rubber bands	5
2	8" Fraction Geoboard	Should be of 8" two-sided plastic geoboard. One side circular with 17 pegs, the other side square with 25 pegs. It includes 8-10 rubber bands.	5



3	X-Y Coordinate Board	X-Y coordinate board should be of size 16x16 cm with transparent movable strips for both X and Y axis. It should also include 30 to 40 pegs and 8 to 10 rubber bands.	5
4	Linking Cube Graph Board with linking cubes set of 100	1 Linking Cubes graph board should be of 15 inches x 15 inches with 10 grooves. Kit also includes 2 cm plastic linking cubes in 10 different colours.	1
5	2D-3D Geometric Set	Set of 11 three-dimensional shapes, each 8 cm in size, including a cube, cone, cylinder, triangular pyramid, square pyramid, pentagonal pyramid, hexagonal pyramid, triangular prism, rectangular prism, pentagonal prism, and hexagonal prism. The set also includes foldable 2D nets and removable bases for each 3D shape.	2
6	2D-3D Flip Chart	Faces, edges, vertices and nets for building 3D shapes	5
7	Volume Relation between Cube and Sphere	The kit should contain a transparent cube with a 9 cm edge, open at the top, and 2 connecting hemispheres with an 8 cm diameter, which can be placed inside the cube. The material thickness for both the cube and hemispheres is 1 mm.	5
8	Geometric Volume Set	Set of 17 transparent three-dimensional shapes, each 5 cm in size, including 2 square prisms, 2 rectangular prisms, 1 pentagonal prism, 2 triangular prisms, 1 square pyramid, 1 triangular pyramid, 1 pentagonal pyramid, 2 cylinders, 1 cone, 1 sphere, 1 hemisphere, 1 hexagonal pyramid, and 1 hexagonal prism. Each shape should have removable base and stopper for easy filling with dry or wet material.	2
9	Hollow Cylinder	Transparent hollow cylinder with a height of 10 cm, an outer diameter of 8 cm, and an inner diameter of 4 cm.	5

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10	Hollow Sphere	Transparent Hollow Sphere with a height of 10 cm, outer diameter of 10 cm and Inner Diameter of 6 cm.	5
11	Teacher Geometry Box	Big sized Geometrical instruments – Scale, Protractor, Set Square and Compass	1
12	Trigonometry Board	The set should include a square trigonometry board with dimensions 20 x 20 cm, representing the circular system in trigonometry. It also comes with connectors, pins, a set of rubber bands, and plastic measuring strips.	5
13	Arithmetic Progression Kit	Set of 50 magnetic rectangular foam tiles in two sizes: Type 1: 8.4 x 2.4 x 0.5 cm and Type 2: 5.8 x 2.4 x 0.5 cm, and 50 magnetic square foam tiles, each 2.4 x 2.4 x 0.5 cm.	5
14	Ruler Set	Plastic Flexible Ruler of 30 cm length	5
15	Algebra Tiles	Set should contain 20 small square tiles, 10 rectangular tiles and 5 big square tiles.	5
16	Clinometer Compass	A clinometer of length 25 cm should include a handle, a compass, and a movable needle to indicate different angles.	5
17	Plane Erase Board (Set of 30 Boards)	Set of 30 write-and-wipe A4 size plain, made from 300 GSM laminated card.	1
18	X-Y Dry Erase Board (Set of 30 Boards)	Set of 30 write-and-wipe A4 size double-sided Cartesian axis, made from 300 GSM laminated card.	1
19	Graph Erase Board (Set of 30 Boards)	Set of 30 write-and-wipe A4 size double-sided graph, made from 300 GSM laminated card.	1
20	Fraction Circles	9 Plastic Fraction Circles that includes whole, half, thirds, quarter, fifths, sixths, eighths, tenths and twelfths part of the circle	5
21	Symmetry Kit	It should include a sturdy rectangular base measuring 30 x 15 cm, perfectly sized to securely hold a semi-circular-shaped mirror and a rectangular-shaped mirror. These mirrors	5



		should be made with durable, child-safe materials that provide clear reflections. The kit should also include colorful plastic pattern blocks, each with a height of 1 cm, available in various shapes such as triangles, squares, and etc	
22	Base Ten Blocks	Wooden / plastic model containing blocks as below: 1) 100 pieces of 1 cm x 1 cm x 1 cm 2) 20 pieces of 1 cm x 1 cm x 10 cm 3) 10 pieces of 1 cm x 10 cm x 10 cm 4) 1 piece of 10 cm x 10 cm x 10 cm	2
23	Storage Cabinet	Plastic Storage Cabinet	2
<b>Total Number of items</b>			<b>83</b>

Note:

- Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission
- Bidder needs to submit the test reports for safety of tools from NABL accredited lab.

## 11. Science Student Kit

**Scope of work:** Science kits should be supplied to students along with training, with ten (10) kits each for Classes 6 to 10 to be provided in 836 schools.

### Kit Components

- Experiment Materials: Science Kit for each class should have Minimum 10 experiments mapped with curriculum.
- The base material (PVC/Hardboard/ EVA foam /wood etc.) of the kits should be durable, suitable for multiple use.
- Instruction Manual: Step-by-step guides for each experiment, mapped to the CBSE syllabus.

### Included Experiments

The experiments should cover a variety of topics in the syllabus for classes 6th to 10th, such as:

- Acid-Base Reactions: Understanding pH levels and indicators.
- Electric Circuits: Basics of series and parallel circuits.
- Electrical properties: Demonstrating the physical and chemical properties of electricity
- Laws of Motion: Demonstrating Newton's laws with simple apparatus.
- Density and Buoyancy: Experimenting with different materials in water.
- Magnetism: Exploring magnetic fields and forces.





- g. Chemical Reactions: Observing exothermic and endothermic reactions.
- h. Sound Waves: Studying the properties of sound through various mediums.
- i. Harmonic motion: Understanding the laws of harmonic motion using a pendulum.
- j. Work and energy: Understanding energy transfer concepts.
- k. Light Refraction: Understanding how light bends through different materials.
- l. Food and Nutrition: Simple experiments to understand the chemistry of our food.

### **DETAILED SPECIFICATIONS**

Sr. No.	Name	Technical Specifications
1	For all Science Kits	<p>The kit should offer the opportunity to explore science and provide students the opportunity to explore scientific concepts through hands-on experiments and interdisciplinary learning. It Develops skills in science, technology, engineering, and mathematics through practical application.</p> <p>The kit should include a variety of pre-cut plain/ Printed sheets (as base) as per the requirement of experiment in different colors and thicknesses, electronic components, non-toxic chemicals &amp; supporting materials, and experiment tools to perform at least 10 experiments. It should include a detailed color manual with step-by-step instructions for each experiment, including illustrations and scientific explanations, detailed video with associated STEM learning outcomes. The kit should be robust, reusable, and suitable for institutional use. The kit should be supported by Videos enabling to learn and use the elements of ideation, critical thinking, creativity &amp; innovation, and collaborative learning. The kit should design with safety using non-toxic materials, clearly labelled, and child-friendly tools.</p>
2	Science Kit for Class 6	<p>The kit should offer the opportunity to explore science and provide students the opportunity to explore scientific concepts through hands-on experiments and interdisciplinary learning. It Develops skills in science, technology, engineering, and mathematics through practical application.</p> <p>The kit should include a variety of pre-cut plain EVA foam sheets in different colors and thicknesses, electronic components, non-toxic chemicals &amp; supporting materials, and experiment tools to perform at least 10 experiments. It should include a detailed color manual with step-by-step instructions for each experiment, including illustrations and scientific explanations, detailed video with associated STEM learning outcomes. The kit should be robust, reusable, and suitable for institutional use. The kit should be supported by Videos enabling to learn and use the elements of ideation, critical thinking, creativity &amp; innovation, and collaborative learning. The kit should design with safety using non-toxic materials, clearly labelled, and child-friendly tools.</p> <p>The kit should be containing the following materials to perform the experiments:</p>

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	<ul style="list-style-type: none"> <li>- An EVA foam pre-cut sheet with a diagram printed on it, and it must include necessary experiment supplies such as soil, filter paper, funnel, paper cup, stirrer, and straw in a separate package with labels.</li> <li>- An EVA foam pre-cut sheet with a diagram printed on it , and it must include necessary experiment supplies such as pins and translucent paper in a separate package with labels.</li> <li>- An EVA foam pre-cut sheet with a diagram printed on it and it must include necessary experiment supplies such as mirrors and cardboard pipe in a separate package with labels.</li> <li>- An EVA foam pre-cut sheet with a diagram printed on it, and it must include necessary experiment supplies such as a bulb with holder, cells &amp; holder, key, screws, wires, and screwdriver in a separate package with labels.</li> <li>- The Kit must include necessary experiment supplies such as a stirrer, iodine solution, starch powder, and bowl in a separate package with labels.</li> <li>- The Kit must include necessary experiment supplies such as a bar magnet, iron filling, and paper sheet in a separate package with labels.</li> <li>- The Kit must include necessary experiment supplies such as a bar magnet, iron filling, and paper sheet in a separate package with labels.</li> <li>- An EVA foam pre-cut sheet with a diagram printed on it , and it must include necessary experiment supplies such as a mirror, ambulance sheet, and torch in a separate package with labels.</li> <li>- The Kit must include necessary experiment supplies such as a beaker, beaker cap, buzzer, cell &amp; holder, metal strips, salt, and double side tape in a separate package with labels.</li> </ul> <p>The Kit must include necessary experiment supplies such as sodium hydroxide, methylene blue, sugar, bottle, stirrer, gloves, vinegar, baking soda, ballon, and spoon in a separate package with labels.</p> <p>Using this material, students should be able to create at least 10 experiments covering various topics in their curriculum. The topics and corresponding activities should include:</p> <ul style="list-style-type: none"> <li>-Sedimentation, decantation &amp; Filtration Process</li> <li>-Pinhole Camera</li> <li>-Periscope</li> <li>-Electric circuit with switch</li> <li>-Starch Test in a Food</li> <li>-Protein Test in a food</li> <li>-Introduction about Bar Magnet</li> </ul>
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		<ul style="list-style-type: none"> <li>-Mirror reflects a beam of light</li> <li>-Conductivity test using different liquids</li> <li>-Reversible and Irreversible reaction</li> </ul>
3	Science Kit for Class 7	<p>The kit should offer the opportunity to explore science and provide students the opportunity to explore scientific concepts through hands- on experiments and interdisciplinary learning. It develops skills in science, technology, engineering, and mathematics through practical application. The kit should include a variety of pre-cut plain EVA foam sheets in different colors and thicknesses, electronic components, non-toxic chemicals &amp; supporting materials, and experiment tools to perform at least 10 experiments. It should include a detailed color manual with step-by-step instructions for each experiment, including illustrations and scientific explanations, detailed video with associated STEM learning outcomes. The kit should be robust, reusable, and suitable for institutional use. The kit should be supported by videos enabling to learn and use the elements of ideation, critical thinking, creativity &amp; innovation, and collaborative learning. The kit should design with safety using non-toxic materials, clearly labeled, and child-friendly tools. The kit should be containing the following materials to perform the experiments:</p> <ul style="list-style-type: none"> <li>- An EVA foam pre-cut sheet with a diagram printed on it and it must include necessary experiment supplies such as a screwdriver, buzzer, cells &amp; holder, metal wire, wires, and double-sided tape in a separate package with labels.</li> <li>- An EVA foam pre-cut sheet with a diagram printed on it , and it must include necessary experiment supplies such as pulley, DC motor, disc, cells &amp; holder, key, screws, and screwdriver in a separate package with labels.</li> <li>- The Kit must include necessary experiment supplies such as a screen, holder, convex lens, and candle in a separate package with labels.</li> <li>- The Kit must include necessary experiment supplies such as a screen, holder, concave lens, and candle in a separate package with labels.</li> <li>- An EVA foam pre-cut sheet with a diagram printed on it , and it must include necessary experiment supplies such as a mirror and torch in a separate package with labels.</li> <li>- An EVA foam pre-cut sheet with a diagram printed on it and it must include necessary experiment supplies such as a transparent glass with 85mm height and 75mm diameter, Y tube, two small balloons and big balloon in a separate package with labels.</li> <li>- The Kit must include necessary experiment supplies such as a stirrer, bowls, citric acid, red litmus, blue litmus, vinegar</li> </ul>

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		<p>(CH<sub>3</sub>COOH), soap solution, and milk of magnesia in a separate package with labels.</p> <ul style="list-style-type: none"> <li>- The Kit must include necessary experiment supplies such as a stirrer, bowls, citric acid, pH strip, vinegar (CH<sub>3</sub>COOH), soap solution, and milk of magnesia in a separate package with labels.</li> <li>- The Kit must include necessary experiment supplies such as thread and paper cups in a separate package with labels.</li> <li>- The Kit must include necessary experiment supplies such as a bar magnet and iron fillings in a separate package with labels.</li> </ul> <p>Using this material, students should be able to create at least 10 experiments covering various topics in their curriculum. The topics and corresponding activities should include:</p> <ul style="list-style-type: none"> <li>-Steady hand testing electric game</li> <li>-Newton's Disc</li> <li>-Image formation using Convex Lens</li> <li>-Image formation using concave lens</li> <li>-Convergent and Divergent rays</li> <li>-Mechanism of Breathing</li> <li>-Red and Blue Litmus Test</li> <li>-ph Test</li> <li>-Circuit Making &amp; Switch</li> <li>-Change in the color of copper sulphate react with metal</li> </ul>
4	Science Kit for Class 8	<p>The kit should offer the opportunity to explore science and provide students the opportunity to explore scientific concepts through hands- on experiments and interdisciplinary learning. It develops skills in science, technology, engineering, and mathematics through practical application. The kit should include a variety of pre-cut plain EVA foam sheets in different colors and thicknesses, electronic components, non-toxic chemicals &amp; supporting materials, and experiment tools to perform at least 10 experiments. It should include a detailed color manual with step-by-step instructions for each experiment, including illustrations and scientific explanations, detailed video with associated STEM learning outcomes. The kit should be robust, reusable, and suitable for institutional use. The kit should be supported by videos enabling to learn and use the elements of ideation, critical thinking, creativity &amp; innovation, and collaborative learning. The kit should design with safety using non-toxic materials, clearly labeled, and child-friendly tools. The kit should be containing the following materials to perform the experiments:</p> <ol style="list-style-type: none"> <li>1. Three EVA foam pre-cut sheets with a diagram printed on it and it must include necessary experiment supplies such as ball with, two marbles, thread, bowl and straws in a separate package with labels.</li> <li>2. Making a Kaleidoscope: An EVA foam pre-cut sheet with a diagram printed on it in size , and it must include necessary experiment</li> </ol>

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		<p>supplies such as mirrors, transparent sheets, thermocol balls, and tape in a separate package with labels.</p> <p>3. An EVA foam pre-cut sheet with a diagram printed on it , and it must include necessary experiment supplies such as mirrors in a separate package with labels.</p> <p>4. An EVA foam pre-cut sheet with a diagram printed on it, and it must include necessary experiment supplies such as copper wire, balloon, paper foil, transparent sheet, and sandpaper in a separate package with labels.</p> <p>5. The Kit must include necessary experiment supplies such as a stirrer, iron nails, zinc granules, aluminium strips, copper strips, aluminium sulphate, copper sulphate, ferrous sulphate, zinc sulphate, and bowls in a separate package with labels.</p> <p>6. Two EVA foam pre-cut sheets with a diagram printed on it in and it must include the necessary experiment supplies such as a mirror, pins, and scale in a separate package with labels.</p> <p>7. An EVA foam pre-cut sheet with a diagram printed on it, and it must include necessary experiment supplies such as a mirror, pins, protractor, and torch in a separate package with labels.</p> <p>8. An EVA foam pre-cut sheet with a diagram printed on it, and it must include necessary experiment supplies such as a beaker with approx. 100ml volume, beaker cap, copper sulphate, cells, and holder, copper strip and stainless screw in a separate package with labels.</p> <p>9. The Kit must include necessary experiment supplies such as a thread and paper cups in a separate package with labels.</p> <p>10. The Kit must include necessary experiment supplies such as a bar magnet and iron fillings in a separate package with labels.</p> <p>Using this material, students should be able to create at least 10 experiments covering various topics in their curriculum. The topics and corresponding activities should include:</p> <ul style="list-style-type: none"> <li>-Work and Energy Activity</li> <li>-Kaleidoscope</li> <li>-Multiple Images</li> <li>-Electroscope</li> <li>-Relative reactivity of Metal</li> <li>-Study the formation of image in a plane mirror</li> <li>-Calculate angle of incidence and reflection</li> <li>-Electroplating</li> <li>-Toy telephone</li> <li>-Non-contact forces and magnetic lines</li> </ul>
5	Science Kit for Class 9	<p>The kit should offer the opportunity to explore science and provide students the opportunity to explore scientific concepts through hands- on experiments and interdisciplinary learning. It develops skills in science, technology, engineering, and mathematics through practical application.</p>

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	<p>The kit should include a variety of pre-cut plain EVA foam sheets in different colors and thicknesses, electronic components, non-toxic chemicals &amp; supporting materials, and experiment tools to perform at least 10 experiments. It should include a detailed color manual with step-by-step instructions for each experiment, including illustrations and scientific explanations, detailed video with associated STEM learning outcomes. The kit should be robust, reusable, and suitable for institutional use. The kit should be supported by a Videos enabling to learn and use the elements of ideation, critical thinking, creativity &amp; innovation, and collaborative learning. The kit should design with safety using non-toxic materials, clearly labelled, and child-friendly tools.</p> <p>The kit should contain the following materials to perform the experiments:</p> <ol style="list-style-type: none"> <li>1. The Kit must include necessary experiment supplies such as transparent glass, PVC pipe, balloon, white hard plastic straw, and clay in a separate package with labels.</li> <li>2. The Kit must include necessary experiment supplies such as 2 Paper cups, 4 Sketch colors, and 2 Filter papers of 110mm diameter in a separate package with labels.</li> <li>3. An EVA foam pre-cut sheet should have a diagram printed on it in a black color. It must include necessary experiment supplies such as Pendulum bob, Thread, and white hard stick in a separate package with labels.</li> <li>4. An EVA foam pre-cut sheet should have a diagram printed on it in a black color. It must include necessary experiment supplies such as a <math>\text{CaCO}_3</math> pack in 1 drum vial, 2 empty vials, motor, 2 Cells, cell holder, wire, and small pulley in a separate package with labels.</li> <li>5. The Kit must include necessary experiment supplies such as balloons, Tape, and thread in a separate package with labels.</li> <li>6. An EVA foam pre-cut sheet should have a static model of an atom sticker. It must include necessary experiment supplies such as thumbnails, transparent glass or bowl, and thermocol balls in a separate package with labels.</li> <li>7. An EVA foam pre-cut sheet should have a diagram printed on it. It must include necessary experiment supplies such as beaker, funnel, 2 Filter paper of , 4 white hard plastic sticks, wooden stirrer, and soil packed in a pouch in a separate package with labels.</li> <li>8. The Kit must include necessary experiment supplies such as Iodine Solution, starch powder, transparent glass, wooden stirrer. The iodine solution is packed in vial and starch powder is in 1 drum vial in a separate package with labels.</li> <li>9. The Kit must include necessary experiment supplies such as paper cup, thick sheet in a separate package with labels.</li> </ol>
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		<p>10. The Kit must include necessary experiment supplies such as Test Tube, Candle, Camphor, test tube handle, cork in a separate package with labels.</p> <p>Using this material, students should be able to create at least 10 experiments covering various topics in their curriculum. The topics and corresponding activities should include:</p> <ul style="list-style-type: none"> <li>-Sound is produced by vibration</li> <li>-Chromatography</li> <li>-Simple pendulum and its time period</li> <li>-Centrifugal separation</li> <li>-Balloon plane</li> <li>-Static model of an atom</li> <li>-Filtration Process</li> <li>-Osmosis process</li> <li>-Law of inertia activity</li> <li>-Sublimation Process</li> </ul>
6	Science Kit for Class 10	<p>The kit should offer the opportunity to explore science and provide students the opportunity to explore scientific concepts through hands-on experiments and interdisciplinary learning. It develops skills in science, technology, engineering, and mathematics through practical application. The kit should include a variety of pre-cut plain EVA foam sheets in different colors and thicknesses, electronic components, non-toxic chemicals &amp; supporting materials, and experiment tools to perform at least 10 experiments. It should include a detailed color manual with step-by-step instructions for each experiment, including illustrations and scientific explanations and detailed video. The kit should be robust, reusable, and suitable for institutional use. The kit should be supported by a teaching-learning platform (LMS-based Content) enabling to learn and use the elements of ideation, critical thinking, creativity &amp; innovation, and collaborative learning. The kit should design with safety using non-toxic materials, clearly labelled, and child-friendly tools.</p> <p>The kit should be containing the following materials to perform the experiments:</p> <ol style="list-style-type: none"> <li>1. An EVA foam pre-cut sheet should have a diagram printed on it. It must include necessary experiment supplies such as 4 metal plates, 1 Cell, Copper wire of 28 gauge, connecting wires, 4 screws, and screwdriver in a separate package with labels.</li> <li>2 An EVA foam pre-cut sheet should have a diagram printed on it. It must include necessary experiment supplies such as bulb, bulb holder, variable resistor, connecting wires, double side tape in a separate package with labels.</li> <li>3. An EVA foam pre-cut sheet should have a diagram printed on it . It must include necessary experiment supplies such as LEDs, Resistors, connecting wires, 2 Cells, cell holder, screws, screwdriver, and aluminium plate in a separate package with labels.</li> </ol>

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	<p>4. An EVA foam pre-cut sheet should have a diagram printed on it. It must include necessary experiment supplies such as LEDs, Resistors, connecting wires, 2 Cells, cell holder, screws, screwdriver, and aluminium plate in a separate package with labels.</p> <p>5. The Kit must include necessary experiment supplies such as transparent glass, 2 rods, salt, connecting wires, 2 cells, cell holder, and EVA base in a separate package with labels.</p> <p>6. The Kit must include necessary experiment supplies such as <math>\text{CuSO}_4</math>, <math>\text{Na}_2\text{SO}_4</math>, <math>\text{BaCl}_2</math>, Iron Nails, 4 transparent bowls, wooden stirrer.</p> <p>7. The Kit must include necessary experiment supplies such as Citric acid, Vinegar, <math>\text{Mg}(\text{OH})_2</math>, Soap Solution, pH paper booklet, and red and blue litmus paper booklet.</p> <p>8. The Kit must include necessary experiment supplies such as Iodine Solution, starch powder, transparent glass, wooden stirrer.</p> <p>9. The Kit must include necessary experiment supplies such as Glass slab, pins, Paper, protractor in a separate package with labels.</p> <p>10. The Kit must include necessary experiment supplies such as Iodine solution, starch powder, amylases, pipette, wooden stirrer, and 3 transparent bowls in a separate package with labels.</p> <p>Using this material, students should be able to create at least 10 experiments covering various topics in their curriculum. The topics and corresponding activities should include:</p> <ul style="list-style-type: none"> <li>- Make your own motor</li> <li>- Variable Resistance</li> <li>- Series Circuit</li> <li>- Parallel Circuit</li> <li>- Electrolysis of water</li> <li>- Displacement and Double Displacement Reaction</li> <li>- pH Test &amp; Red and Blue litmus test</li> <li>- Magnetic effect using a bar magnet</li> <li>- Refraction of light through a glass slab</li> <li>- Effect of salivary amylases on food</li> </ul>
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Note:

- Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission
- Bidder needs to submit the test reports for safety of tools from NABL accredited lab.

## 12. STEM School Kit

**Scope of work:** Science (STEM) Labs/Kits should be established in 836 schools as per the following specifications.

1. Supply of tools for hands on learning.
2. Delivery of activity based video tutorials.

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### DETAIL SPECIFICATIONS:

Name of Kit	Description	Qty
Strawbot	<p>The kits should feature a robust physical framework constructed from MDF material and connecting parts for other components, providing the necessary structure like a Bat, Swimmer, Crawler, Skipper, Paralympic, etc. The Kit should include MDF sheets (240mm x 100mm x 3mm) cut into specific shapes (O, Y, L, X, T, I, T-Lock, 3 Leg, 1 Leg), bottom plates (80mm x 20mm x 3mm) cut into H shapes, motor arms (25mm x 20mm) in Z shapes, top plates (30mm x 25mm x 20mm) in U shapes, plastic straws (200mm length, 6mm diameter), 3 to 12 V DC, 150RPM two-side shaft BO motors with compatible wheels (70mm diameter, 6mm width, rubber grip). The kit should include all necessary accessories battery casings for two AA cells with switches, standard AA batteries, thin rubber bands (3 inches), DIY craft scissors, and 15cm plastic scales.</p>	4
Electronic Starter Kit	<p>The kit should offer the opportunity to explore working with real electronic components without a soldering iron. Kids work with real electronic components and breadboard is frequently used for prototyping real electronics projects. The kit should have a breadboard, Jumpers, Connectors etc, should be part of the kit. The kit should be a prototyping component Package that has basic components like breadboard, Resistors, Capacitors in variable values, switches, Voltage regulator (7805), timer IC (555), transistor (BC 547), buzzer, different color 5mm LED and Breadboard with a jumper cable bundle. The students will learn multiple circuit fundamentals like current flow, voltage distribution, Series and parallel, transistors, and logic gates. Many real projects can be created like doorbells, Night lights, water level indicators, and hand dryers.</p> <p>The kit should also have a printed Manual for step-by-step building instructions for at least 10 Projects with material included in the kit accompanied by diagrams, and simulation. circuit explanation and output detailed programming videos with associated STEM learning outcomes. The kit should be robust, reusable, and suitable for institutional use. Audio Visual explanation on clearly understanding the breadboard assembly and its use and explaining different concepts.</p>	4

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STEM Electronics	<p>The kit should have a power distribution module (onboard 3 inputs and 3 outputs in the form of a JST connector), at least 18 different types of input-output modules. It should be for educational purposes, prototyping, and small-scale development projects.</p> <p>The power distribution module must have a distributing signal and power to up to three other modules. It must have a minimum of three input ports and three output ports. The power distribution module's PCB board must have handle protection, with a minimum size of 59mm x 47mm, and be encased in color-coded rubber or plastic casings with openings for connections. The modular design of the power modules must ensure that all functional components can be connected via JST connectors.</p> <p>The kit should have different types of sensor modules that cover a wide range of sensing capabilities and must have a light sensor, IR sensor, switch, POT, and more. Additionally, the kit should have gate modules like AND, OR, and NOT gates. The PCB board must have handling protection, with a minimum size of 37mm x 27mm, and be encased in color-coded rubber or plastic casings with openings for connections. The sensor module should be designed to be modular, allowing it to be connected via JST connectors with a supporting microcontroller.</p> <p>The kit should have various output modules such as LED modules in different colours, a buzzer module, a motor module, a vibro motor module, and a laser module. The PCB board should have protection for handling, a minimum size of 37mm x 27mm, and be encased in color-coded rubber or plastic casings with openings for connections. The output module is designed to be modular, allowing it to be connected via JST connectors with a supporting microcontroller.</p> <p>The kit packaging must be in a strong cardboard box with a plastic tray. Plastic tray should have separate placeholders for each 18 modules so that these modules remain intact during transportation and later on as well. The box must be designed with separate compartments for the sensors, output modules, power distribution modules, and other blocks. It must have the essentials for powering and connecting various components. These should consist of a power bank, JST wires, and power cables for connecting the power board to other peripherals.</p>	4
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Little-Science-Bot	<p>The kit should include a variety of MDF cutouts and components for creating battery-operated models. It contains MDF pieces for different models including cutouts measuring 140x104x3mm, 112x114x3mm, and 92x74x3mm. The kit also includes over 35 unique interlocking pieces such as T Pieces, Motor Arm Pieces, and Linker Pieces for creating rotating legs for a walking dog model.</p> <p>An MDF sheet should be cut into three sizes: 140x107x3mm, 82x72x3mm, and 172x136x3mm for a walking robot. It also needs over 35 unique interlocking pieces such as hands, legs, and the robot face.</p> <p>An MDF sheet needs to be cut into three sizes: 156x154x3mm and 136x152x3mm cutouts for a cart-pushing robot. The robot features over 30 unique interlocking pieces such as wheels, linkers, hands, legs, and a cart.</p> <p>An MDF sheet needs to be cut into three sizes: 188x114x3mm, 146x134x3mm, and 134x102x3mm for a flying dinosaur model. The model has over 35 unique interlocking pieces, including wings with living hinge mechanisms and wheels. An MDF sheet needs to be cut into three sizes: 142x164x3mm, 124x148x3mm, and 163x104x3mm for a walking dino, consisting of over 45 unique interlocking pieces including 16 Teeth Gears, 12 Teeth Gears, and 8 Teeth Gears.</p> <p>The kit should include all necessary accessories candle wax, thin rubber bands (minimum 3 inches), transparent cello tape (at least 15 meters), a plastic geared DC motor (60mm x 20mm x 20mm, 3 to 12 V DC, 150 RPM with dual shafts), a battery holder for two AA cells with a two-way slide switch and cover, standard AA batteries, and a DIY craft scissor. With the help of this kits students can learn different kind of STEM concept like force ,friction and energy conservation etc.</p>	4
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Note:

- Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission
- Bidder needs to submit the test reports for safety of tools from NABL accredited lab.

### 13. Sports Equipment

**Scope of Work:** Sports equipment, with a focus on cricket kits, should be supplied to 836 schools to promote physical education and team sports. This initiative should encourage student participation in outdoor games, enhance physical fitness, and foster team spirit through structured sports activities.

List of items:

Sl. No.	Items	Quantity
1	Sports Kit for Primary School	1

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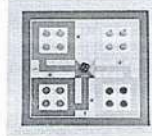
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2	Sports Kit for Elementary School	1
3	Sports Kit for Secondary/Senior Secondary Schools	1

### Detail Specifications:

#### 1. Sports Kit for Primary School



Sl. No.	Item	Specifications	Qty	Image
1	Football 3 No Rubber Synthetic	Size: 3 (Junior), Material: Synthetic Waterproof stitched Bladder : Rubber Numbers of Panels: 32 Surface: Smooth, Circumference: 58 to 60 cm, Weight with air: 300 to 320 grams	1	
2	Plastic Bat 2 No.	Material: Plastic, Size: Length: 27" & Width: 3" - 4", Weight: 320-350 Grams, Material of Handle: Hard Plastic with Grip Rubber, Shape of Handle: Round	2	
3	Plastic Stumps (Set of 6) with bails and base	Material: Plastic Length- 26 Inches, Width of base - 10 Inches and above Total Weight 320 -350 Gram Each stump weight 100 Grams and bails weight 20 Grams	2	
4	Plastic Ball	Material: Plastic Weight: 20-30 Grams	4	
5	Hurdles 6 inches	Material: PVC Height (inch) : 6 inch Bottom : 6.5 inch Width : 18 inches Thickness : 20 mm Weight : 180 to 260 Grams	4	
6	Ludo	Material: Wooden Board with 2 set coin/Goti & Dice. Ludo Size: 12 Inches X 12 Inches, weight of goti is 1 to 2 gms per piece, Dice size 10-14 mm, Total Weight - 500 Grams or above	1	

7	Carrom Board	Material: Wooden, Size: 21 Inches X 21 Inches, Carrom coin/goti: 2 set wooden coin/goti of Black and white colour with one red colour (Queen). Striker: 1pc in other different colour Carrom coin/goti weight: 100 gram or above, Total Weight – 1.5 to 2 Kgs and above	1	
8	Skipping Rope	Material: Rubber rope with Wooden/Plastic Handle. Length- 9ft. Weight- 160 Gram or above	2	
9	Marking Cones 6 inches	Material- LDPE Length- 6 Inches, Base Dia: 100- 115mm Weight 35 Grams or above	4	
10	Marking Cones 9 inches	Material- LDPE Length- 9 Inches, Base Dia: 138 - 155 mm Weight - 70 Grams or above	4	
11	Marking Cones 12 inches	Material- LDPE Length- 12 Inches, Base Dia: 165- 177 mm Weight - 110 Gram or above	4	
12	Flying Disc/Frisbee	Material: Plastic, Dia: 8 Inches, Weight: 75-85 Gram	2	
13	Tennikoit	Material: Rubber, Size: 6 inches, Weight: 220-250 Gram	2	




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14	Soccer Cone	Material: Plastic Size: 2 inch height, 7 inches Dia Weight: 20-30 Gram	10	
15	Kit Bag	Material: PVC coated fabric with cardboard bottom. Comes with heavy duty zipper and shoulder strap. Approximate Size- Length 2 Ft., Width 1 Ft., Depth 1ft., Weight 1 kg or above.	1	





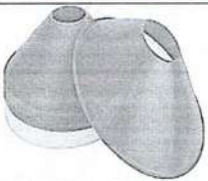



## 2. Sports Kit for Upper Primary School

Sl. No.	Item	Specifications	Qty	Image
1	Football 4 No.	Size: 4, Material: Synthetic Waterproof stitched Bladder: Rubber Numbers of Panels: 32 Surface: Smooth Circumference: 60 to 65 cm, Weight with air: 350 to 370 grams	1	
2	Volleyball	Material-PU/Rubber Circumference: 65~67cm Diameter: 20.5~21.5 cm Construction- Pasted Panels-18 Panel Moulded Colour: yellow and blue or multi-coloured Weight: 260~280 grams Winding-Nylon Water Proof Bladder - Rubber	1	
3	Foot pump	Material- Metal, Plastic/Rubber padded Foot operated. Weight – 220 gm or above PSI - 100 or above.	1	

4	Wooden Stump (Set of 6) with bails (4 No.)	Material: Wooden, Size: Above ground 28-30 Inches; Below ground 4 inches, Dia: 1.2 - 1.5 inches, Weight of stump: 300 gm - 500 Gram or above Weight of Bail: 15 - 25 Gram or above	2	
5	Wooden Bat 4 No.	Material of Blade: wooden, Sizes: 4, Length 31 inches x Width 3.8 inches, Material of Handle: Wood, Mass of Cricket Bat: 800 - 900 Grams Rubber Grip : Rubber Shape of Handle: Round	2	
6	Wooden Bat 6 No.	Material of Blade : wooden, Sizes: 6, Length 806 mm x Width 102 mm or above, Material of Handle : Wood Mass of Cricket Bat: 1050- 1200 grams Rubber Grip : Rubber Shape of Handle : Round	2	
7	Tennis Ball	Material- Rubber Item Weight - 90 Grams or above Dia: 65 mm $\pm$ 2 mm Ball must be wrapped with coloured felt cloth/fabric.	2	
8	Badminton Racket	Frame: Aluminium Alloy, Stem: Steel, Eyelets : Nylon or Polypropylene. Mass of badminton without gut: 85 to 95 gm, Coating: Aluminium alloy frame shall be anodized. Utility: Training, Handle: Wood, String Material: High Quality Nylon, String Construction: Multifilament,	2	



		String Warp: Double Warp, No. of holes on racket: 74 or above.		
9	Shuttle Cock	Material- Light Cork & Plastic, Head Diameter: 25-28 mm, Overall length: 80-90 mm, Skirt Dia: 58-68 mm, Weight of each cock is 1.5 Gram or Above	6	
10	Skipping Rope	Material: Rubber with Wooden/Plastic Handle. Length- 9ft, Weight- 160 Gram or above	2	
11	Relay Baton	Material- Plastic, Length - 290 mm Dia- 40 mm Weight of each Baton - 45 Grams or above	1	
12	Wooden Chess 16"	Material: Wooden 18 mm thick premium quality particle board. Size- 16 inch X 16 Inch, Weight- 1.50 Kg or above Chessmen- 2 set LDPE, Chessmen Weight- 350 Gram or above each set	1	
13	Carrom Board	Material- Wooden, Size: 26 inches X 26 Inches, Carrom coin/goti: 2 set wooden coin/goti of Black and white colour with one red colour (Queen) Striker: 1pc in other different colour Carrom Coin/goti Weight - 100 Gram and above Total Weight- 2-3 Kgs or above	1	






14	Hurdle's 9 Inches	Material : PVC Height (inch) : 9 inch Bottom : 8 inch Width : 18 inches Thickness : 20 mm Weight : 220 to 280 Grams	4	
15	Marking Cones 6 inches	Material- LDPE Length- 6 Inches, Base Dia: 100- 115 mm Weight: 35 Grams or above	4	
16	Marking Cones 9 inches	Material- LDPE Length- 9 Inches, Base Dia- 138 - 155 mm Weight - 70 Grams or above	4	
17	Marking Cones 12 inches	Material- LDPE Length- 12 Inches, Base Dia- 165- 177 mm Weight - 110 Gram or above	4	
18	Soccer Cone	Material- LDPE, height: 2 inch, Dia: 7 inches, Weight: 20-30 Gram	1	
19	Frisbee	Material - LDPE/PP Dia: 10.5 inch, Weight 120 Gram	1	
20	Tennikoit	Material: Rubber, Height: 6 inches, Weight 220-250 Gram,	1	
21	Kit Bag	Material: PVC coated fabric with cardboard bottom. Comes with heavy duty zipper and shoulder strap. Approximate Size- Length 2 Ft., Width 1.5 Ft., Depth 1.5 ft. Weight 2 Kg or above	1	






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### 3. Sports Kit for Secondary/Senior Secondary Schools

Sl. No.	Item	Specifications	Qty	Image
1	Football No 5	Material- Synthetic Waterproof stitched Leather Size: 5, Bladder: Rubber Numbers of Panels: 32 Surface: Smooth Dia - 21.5 Cm - 22.5 Cm, Weight with air: 400 - 450 Grams	2	
2	Volley ball No. 4	Material: PU/Rubber, Circumference: 65 - 67 Cm, Diameter: 20.5 - 21.5 cm, Construction: Pasted, Panels: 18 Panel Moulded, Colour: Yellow and blue or multi-coloured Weight with air: 260 - 280 gm, Winding: Nylon Winding Water Proof	2	
3	Throw ball No. 5	Material: Synthetic, Panels: 18 Moulded, Circumference: 68 - 70 cm, Construction: Stitched, Recommended for-Match, , Weight with air: 410 - 450 grams.	2	
4	Foot pump	Material- Metal, Plastic/Rubber padded Foot operated. Weight – 220 gm or above PSI - 100 or above.	1	
5	Cricket Bat Full Size	Material of Blade: Wooden, Sizes: 851 mm x 108 mm or above, Material of Handle : Wood Mass of Cricket Bat: 1125 - 1200 grams Rubber Grip : Rubber Shape of Handle : Round	2	








6	Cricket Bat No. 6	Material of Blade : Wooden. Sizes: 785 mm x 95 mm or above, Material of Handle : Wood Mass of Cricket Bat: 1050 - 1200 grams Rubber Grip : Rubber Shape of Handle : Round	2	
7	Tennis ball	Material: Rubber, Ball must be wrapped with coloured felt cloth/fabric. Ball Weight 120gm $\pm$ 10 gms Diameter 65 mm $\pm$ 2 mm	6	
8	Wooden Stump (Set of 6) with bails (4 No.)	Material: Wooden, Size: Above ground 28-30 Inches; Below ground 4 inches, Dia: 1.2 - 1.5 inches, Weight of stump: 300 gm - 500 Gram or above Weight of Bail: 15 - 25 Gram or above	2	
9	Badminton Racket	Frame: Aluminium Alloy, Stem : Steel, Eyelets: Nylon or Polypropylene. Mass of badminton: 95 to 105 gm , Length - 673 mm X Width - 190 mm , Coating: Aluminium alloy frame shall be anodized. Utility: Training, Handle: Wood, Frem is String: Yes , String Material: High Quality Nylon String, Construction: Multifilament String Warp: Double Warp No. of holes on racket: 74 or above.	4	
10	Shuttle Cock	Material- Light Cork & Plastic, Head Diameter: 25 - 28 mm Overall length 80-90 mm, Feather Dia 58-68 mm Weight of each cock is 1.5 Gram or Above	8	



11	Marking Cones 6 inches	Material- LDPE Length- 6 Inches, Base Dia- 100- 115 mm Weight 35 Grams or above	4	
12	Marking Cones 9 inches	Material- LDPE Length- 9 Inches, Base Dia- 138 - 155 mm Weight - 70 Grams or above	4	
13	Marking Cones 12 inches	Material- LDPE , Length- 12 Inches, Base Dia- 165- 177 mm,  Weight - 110 Gram or above	4	
14	Hurdels 12 Inches	Material : PVC, Height (inch) :12 inch, Bottom : 8.5 inch, Width : 18 inches, Thickness : 20 mm, Weight : 300 Grams or above	4	
15	Wooden Chess 16"	Made of 18 mm thick premium quality particle board. Size- 16inch X 16 Inch, Chess Board Material- Wooden Weight- 1.50 Kg or above Chessmen- LDPE, Weight- 350 Gram or above	1	
16	Frisbee/Flying Disk	Material - LDPE/PP, Dia 10.5 inch, Weight 120 Gram	5	
17	Skiping Rope	Material: Rubber Rope with Wooden/Plastic Handle. Length- 9ft, Weight- 160 Gram or above	5	

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18	Stop Watch	Digital	2	
19	Volley Ball Net	Head Band- PVC Net Material- Nylon Weight : 1.5 Kg above	1	
20	Relay Baton set of 6 Pcs	Material- Plastic, Length - 290mm, Dia- 40 mm, Weight of each Baton - 45 Grams or above	1	
21	Carrom Board	Material- Wooden, Size: 34 inches X 34 Inches, Carrom coin/goti: 2 set wooden coin/goti of Black and white colour with one red colour (Queen) Striker: 1pc in other different colour Carrom Coin/goti Weight - 130 Gram and above Total Weight- 4-5 Kgs or above	1	
22	Soccer Cone	Material: Plastic, Height 2 inch, Dia: 7 inches, Weight -20 Gram or above	10	
23	Tennikoit	Material: Rubber, Size: 6 inches, Weight 220 – 250 Gram	2	
24	Kit Bag	Material: PVC coated fabric with cardboard bottom. Comes with heavy duty zipper and shoulder strap. Approximate Size- Length 3 Ft., Width 2 Ft., Depth 1.5 ft. Weight 2.5 Kg or above	1	



Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.

## 14. Development of Playground Facilities

**Scope of work:** Outdoor and Indoor sports game facilities. Any two of below items should be developed/supplied in 836 schools as per the following specifications.







### Outdoor Sports

Detail Specifications:


Sl. No.	Playground	Detailed Specifications
1	Badminton Court Flooring & Fixed Type Poles	<p>Preparation: To clear the area of grass, roots, debris, and any large rocks. Build a sloped sub-base: The court should have a slight slope (about 1–2% gradient) to allow water to runoff naturally. This prevents pooling of water in low areas.</p> <p>Line Marking: To groove the line on the ground according to the standard line marking of the game and fill it with fine lime stone powder.</p> <p>Fixed Type Badminton Poles with Net Standard size : playing area : 44ft x 20 ft</p> <ul style="list-style-type: none"> <li>• <b>Signage and Display:</b> Install a <b>sunboard panel (minimum 5mm thickness)</b> displaying court guidelines, equipment details, and usage norms.</li> </ul>
2	Volleyball Court Flooring & Fixed Type Poles	<ul style="list-style-type: none"> <li>• Preparation: To clear the area of grass, roots, debris, and any large rocks. Build a sloped sub-base: The court should have a slight slope (about 1–2% gradient) to allow water to run off naturally. This prevents pooling of water in low areas.</li> <li>• Line Marking: To groove the line on the ground according to the standard line marking of the game and fill it with fine lime stone powder.</li> </ul> <p>Fixed Type Volleyball Poles with Net Standard size : Playing area - 59ft x 29.5ft</p> <p><b>Signage and Display:</b> Install a <b>sunboard panel (minimum 5mm thickness)</b> displaying court guidelines, equipment details, and usage norms.</p>

### Indoor – Table Tennis set up & School Cricket Kit

Detail Specifications:

Sl. No.	Playground	Detailed Specifications																																		
3	Table Tennis Set up (qty: 2)	<p>Provision of Professional Table Tennis (T.T) Table – - 15mm engineered wooden top with anti glare finish Black Table with 20x30 mm steel frame and 50 mm wheels (8 with locks) to provide stability and easy mobility. 2 TT Rackets, 6 Balls, 1 Table Cover &amp; Clamp Net</p> <ul style="list-style-type: none"><li>• <b>Signage and Display:</b> Install a <b>sunboard panel (minimum 5mm thickness)</b> displaying court guidelines, equipment details, and usage norms.</li></ul>																																		
	School Cricket Kit	<p>Provision of cricket kit for Primary, Upper Primary and Secondary /Sr Secondary schools.</p> <p><b>i. Primary School: (6 Kits per school)</b></p> <table><tr><th>Sl. No.</th><th>Item</th><th>Specification</th><th>Picture</th></tr><tr><td>1</td><td rowspan="8">Cricket Kit (Size-3 No.)</td><td>One Bat- wooden- Bat Size-3 (724 mm x 96 mm) (Length x Width)</td><td rowspan="8"></td></tr><tr><td>2</td><td>One Pair of Leg Guard- Length 19 Inches</td></tr><tr><td>3</td><td>One Pair of Gloves- Length Approx. 17 Cm</td></tr><tr><td>4</td><td>One Elbo guard</td></tr><tr><td>5</td><td>One Abdo</td></tr><tr><td>6</td><td>One Pair of Thigh guard</td></tr><tr><td>7</td><td>One Helmet</td></tr><tr><td>8</td><td>One Kit Bag</td></tr></table> <p><b>ii. Upper Primary School: (6 Kits per school)</b></p> <table><tr><th>Sl. No.</th><th>Item</th><th>Specification</th><th>Picture</th></tr><tr><td>1</td><td rowspan="3">Cricket Kit (Size-4 No.)</td><td>One Bat- wooden- Bat Size-4 (787 mm x 96 mm)( Length x Width )</td><td rowspan="3"></td></tr><tr><td>2</td><td>One Pair of Leg Guard- Length 21 Inches</td></tr><tr><td>3</td><td>One Pair of Gloves- Length Approx. 19 Cm</td></tr></table>	Sl. No.	Item	Specification	Picture	1	Cricket Kit (Size-3 No.)	One Bat- wooden- Bat Size-3 (724 mm x 96 mm) (Length x Width)		2	One Pair of Leg Guard- Length 19 Inches	3	One Pair of Gloves- Length Approx. 17 Cm	4	One Elbo guard	5	One Abdo	6	One Pair of Thigh guard	7	One Helmet	8	One Kit Bag	Sl. No.	Item	Specification	Picture	1	Cricket Kit (Size-4 No.)	One Bat- wooden- Bat Size-4 (787 mm x 96 mm)( Length x Width )		2	One Pair of Leg Guard- Length 21 Inches	3	One Pair of Gloves- Length Approx. 19 Cm
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		4		One Elbo guard	
		5		One Abdo	
		6		One Pair of Thigh guard	
		7		One Helmet	
		8		One Kit Bag	
		<b>iii. Secondary /Sr. Secondary School: ( 6 Kits per school)</b>			
		<b>Sl. No.</b>	<b>Item</b>	<b>Specification</b>	<b>Picture</b>
		1	Cricket Kit (Size-6 No.)	One Bat- wooden- Bat Size-6 (806 mm x 102 mm)( Length x Width )	
		2		One Pair of Leg Guard- Length 24 Inches	
		3		One Pair of Gloves- Length Approx. 21 Cm	
		4		One Elbo guard	
		5		One Abdo	
		6		One Pair of Thigh guard	
		7		One Helmet	
		8		One Kit Bag	

## 15. Digital Hardware and Software

**Scope of work:** Digital hardware and software solutions should be supplied, installed, and accompanied by training to establish ICT enabled Learning labs in 836 schools. The setup should include State of Art Configured i-5 Desktops, Printer, Headset, Webcams, Network equipment, Chairs, Tables, Device management Systems, Microsoft Tools for AI programing, Hackathons and administrative tasks.

BOQ:

Sl. No.	Item Details	Qty
1	Desktop	06
2	Headset	06
3	Web Camera	06

4	UPS	06
5	Software Bundle	06
6	Server	01
7	Network Printer	01
8	Electrification	01
9	Table	8
10	Chair	30

### Detail Specifications:

Desktop		
Desktop computer with an Intel Core i5 processor (12th or 13th generation), equipped with 16GB DDR4 RAM, a 256GB NVMe SSD + 1TB HDD, preloaded with Windows 11 under STF. Dedicated 2GB graphics card (NVIDIA GT 730 or equivalent), a Full HD LED monitor (minimum 21.5"), and Microsoft M365A1 with Microsoft Authorization, Wi-Fi 6, Bluetooth 5.0, connectivity ports: minimum 3-USB 3.2, HDMI, and RJ45. with 90% or more power efficiency. All the desktops shall be integrated with English language lab software license		
Headset		
Over the ear headset with cushion and 3.5 mm jack, 1.5M cable length, 40mm or higher driver, 32 Ohm or higher speaker Impedance, 20Hz to 20 KHz frequency, 98dB sensitivity, Adjustable Mic.		
Web Camera		
Specification Category	Details	
Lens	f= 4.7 to 94 mm	
Zoom	20 X	
Sensor	1/28" Progressive CMOS	
Video Output	USB 3.0/SDI	
Single System	1080 P (1920 * 1080) and 720 P (1280 * 720)	
Tilt Movement Range	100 or Higher	
Pan Movement Range	300 or Higher	
Remote Control	IR Wireless	
UPS		
600 VA UPS		
Software Bundle		
Open-Source AI Software, Microsoft M 365-A1 with Microsoft Authorization, DMS and Anti Virus		
Server		
Server with minimum intel i7 processor, 12th Generation, 1 TB SSD, 16 GB RAM (10 Cores, 5.0 GHz Turbo)		



<b>Network Printer</b>	
<b>Main Unit</b>	
Machine Type	A3 Monochrome Laser Multifunctional
Memory	Standard: 1.0 GB RAM
Core Functions	Print, Copy, Scan
<b>Print</b>	
Print Speed (BW)	1-sided: Up to 24 pages per minute (A4), Up to 12 pages per minute (A3), Up to 11 pages per minute (A4R)
	2-sided: Up to 16.7 pages per minute (A4), Up to 7.5 pages per minute (A3), Up to 7.8 pages per minute (A4R)
Print Resolution (dpi)	600 x 600
<b>Copy</b>	
Copy Speed	1-sided: Up to 24 pages per minute (A4), Up to 12 pages per minute (A3), Up to 11 pages per minute (A4R) 2-sided: Up to 16.7 pages per minute (A4), Up to 7.5 pages per minute (A3), Up to 7.8 pages per minute (A4R)
First-Copy-Out Time (BW)	Platen: Approx. 7.4 s or less (A4)
Copy Resolution (dpi)	600 x 600
<b>Scan</b>	
Document Feeder Paper Capacity	50 sheets (80 g/m <sup>2</sup> (gsm))
Acceptable Originals and Weights	Platen: Sheet, Book Document Feeder media weight: - 1-sided (simplex) scanning: 50 to 105 g/m <sup>2</sup> (BW/CL) - 2-sided (duplex) scanning: 50 to 105 g/m <sup>2</sup> (BW/CL)
<b>Electrification</b>	
Bidder should perform Necessary Electrification in Lab with ISI Standard Make Proved material.	
<b>Table</b>	
Computer Table of Size- 750(L)*600(W)*750(H) mm approx. made of high quality pre-laminated particle board with PVC strips edge	
<b>Chair</b>	
Chair with back support, without arm rest. Material of Chair body may be Polypropylene with steel legs.	

## 16. Language Lab

**Scope of work:** Language Labs should be supplied, installed, commissioned, and supported with training in 836 schools to enhance English language learning. The lab setup should include the necessary hardware and software to facilitate interactive and immersive instruction focused on listening, speaking, reading, and writing (LSRW) skills. The software should be made in India.

S. No.	Description	Qty. Per Lab
i.	English language Lab Software	1
ii.	Wired Headphones	15
iii.	Android Notebooks	15
iv.	Networking Device for wifi connection	1

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission along with the software license credentials.

### DETAILED SPECIFICATIONS –

#### a. English language Lab Software

Technical Specifications
1. The software should have various levels of logins for Head of Department, Teachers & Students.
2. The Software should work on Desktop PCs, Slim PCs, Thin Clients, and tablets. It will work on Windows, Linux as well as the Android operating systems
3. All the interface of the Head of Department & Teacher should be password controlled. Each student would also be provided with an individual student user id and password.
4. At any given time, multiple teachers should be able to login simultaneously.
5. The software should generate each student's performance report and the teacher can view it at any given time. The software will be able to generate teachers' activity reports as well and it is available to the Head of Department.
6. The teacher shall be able to create and assign lessons / works to all or selected students in a group or the entire class and create exams and conduct them based on text / audio-based activities. The teacher can upload files for students to access from their login ids. The teacher will create session modules for students to access a content management library on the student's dashboard for self-study even when the teacher is not present in class.
7. The software should have teaching content to be used in the classroom and practice material to be practiced by the students in the language lab. It will allow blended teaching methodology, considered the best one for skill-based language learning.



8. The student can perform reading aloud activity for more than one student or whole class at the same time without disturbing the others and record their reading. And where teachers can listen to their reading student wise at any time after the activity and give feedback to individual students.
9. Provision to automatically generate graphical representation on the recorded audio of the learner as against the originals for self-assessment and evaluation. This will facilitate pronunciation related improvement. It will also let a student understand which part of the word, phrase or sentence recorded needs improvement.
10. The software should allow the teacher to have text chat with all the students or a group of students. This could be broadcast mode or personal chat mode.
11. The software should have a provision for talking to a certain student, group of students or broadcast to all the students in the class.
12. The teacher should be able to share their screen with the students or see their screen to monitor the activities.
13. The Software should have 10 levels ranging from pre-A1 to C1 level with substantial content to hone the learner skills and should be based on the Blended Learning Mechanism, i.e. It should have Instructor Lead Teaching (ILT/ Classroom teaching) content as well as Computer Based Teaching (CBT/Lab practice) content. Basic Level should use the contextual learning methodology.
14. The software should consist of a glossary of words with correct pronunciation in the Indian context. The software will have feature where Vocabulary Test can be taken – The activity should allow teachers to easily conduct word quiz -type language learning tests. The system should have a ready word list and students will then need to simply fill in their answers in a dialog that is launched on their screens. The activity should allow teachers to create, launch and save tests, as well as collect results. Teachers should be able to see the individual reports of each student's activity. The content shall have below featured: – a. Boggle b. True or False c. Rearrange the sentence d. Fill in the Blanks e. Multiple Choice Question f. Match the Items g. Select Word h. Syllable Breakup i. Punctuation j. Insert Word k. Audio Record Subjective Answers

15. The software should have 3D animated near human looking mouth movements for proper articulation for all 44 sounds. These include the Vowel Sounds – Monophthongs Diphthongs and Consonant sounds. These should be available as front facing and side facing models.
16. It should cater to all the four skills with the following given activities: a. Speaking b. Listening c. Reading d. Writing
17. The software should have 300 learning modules, 6000 exercises/ assessments and 3000 vocabulary words.
18. Train the Trainer program will be provided by a subject matter expert.

#### **b. Wired Headphones**

Headset: 3.55 mm Stereo Headset / USB headset

##### **Control the Call –**

Hop on any call with ease.

With a flexible boom mic which blocks the background noise to keep your call focused.

Have in-line volume control and mute to control the environment

Durable soft cushioned ear cups are designed for all-day comfort

3.5mm universal headphone jack or USB

Compatible with Windows 10, Chrome OS and Mac OS

#### **c. Android Notebooks**

Specification Category	Specification Attribute	Details
Android Notebook Configuration	SOC	Octa-Core, 4*A73 4*A53 or Higher Frequency of 1.8 GHz or more
	System Memory	4 GB or Higher
	System Storage	64 GB
	Operating System	Android 11.0 or Later
Hardware	Form Factor	Notebook with inbuilt physical QWERTY KeyBoard & Mouse Touch Pad
	Screen Size	11.6" diagonal or more
Mobile Device Management	In-Built	The tool to manage devices, data security, push device policies, push custom apps, reports, management of applications and devices, whitelist or blacklist applications, URLs, control device functionality such as Bluetooth, Wi-Fi, Brightness Admin portal to manage Tablet/Notebook remotely



		to enrol, deploy and configure all Tablet/Notebook, applications and security Policies
		Install or upgrade applications remotely, Features for Admin to change wallpapers remotely, Features to prevent user to change wallpapers set by admin, Features for admin to remotely send audio, video, PDF and APK files
Display	Panel Type	LCD Panel, IPS Technology
	Resolution (pixel) & Brightness	1366 x 768 or Higher, 250 Tenders or Higher
I/O Ports	In-Built	Mini HDMI, SD Card Slot (upto 512 GB external SD Card), USB 2.0 x 2, 3.5 mm Stereo out
Certification		BIS
Training		Training teachers for mapping computer / tablet to smart class for teaching-learning process.

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.

## 17. Musical Instrument

**Scope of Work:** Functional and age-appropriate musical instruments should be provided in 836 schools to promote music education and creative expression among students. Each school should receive one set of instruments for the Upper Primary level and one set for the Secondary/Senior Secondary level. The instruments should be selected to support both traditional and modern music learning within the school curriculum and co-curricular activities.

### Bill of Material

Sr. No.		Quantity
i.	Musical Instrument for Upper Primary School	01
ii.	Musical Instrument for Secondary/ Sr. Secondary School	01



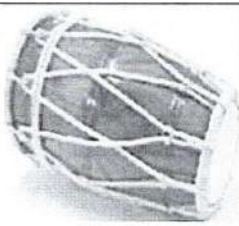
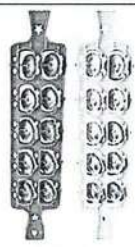

### Detailed Specifications

#### i. Musical Instrument for Upper Primary School

Sr. No.	Name	Specs	Image	Qty
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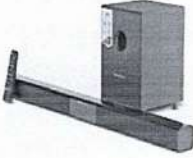




1	Tabla Set	Pair Made of Metal + wood; Metal Tabla, Dia 7 Inches, Wooden Tabla Dia 5-6 inches, Upper base made of goat leather, Weight - 3 to 4 Kg with good quality bag and Accessories.		1
2	Dafli (Tambourine)	Overall Dia - 8 inch. Plastic Frame thickness 5mm, Polyester sheet film of 125 micron Grooves - 6 nos. 3 steel jingles in each groove, jingle dia - 40 mm, thickness 0.3 mm, Weight: 250 to 350 gm		2
3	Dholak/ Naal	Made of wood/Fibre & Side base made of goat leather with Rope fitting. Length: 15 to 18 Inches, Upper Dia - 7 Inches Lower Dia - 9 Inches, Weight: 700 Gram to 1000 Gram. Provided with good quality Bag/Case with zip		1
4	Virgin Plastic Zheeka Big 10 jingles	Virgin Plastic body, 10 Jingles made of stainless steel, length 18 Inches, Width 4 Inches. Weight: 180-220 gm		2
5	Virgin Plastic Zheeka Small 6 jingles	Virgin Plastic body, 6 Jingles made of stainless steel, length 10 Inches, Width 3 Inches. Weight: 90-150 gm		2




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6	Brass Manjira	Manjira made of brass, Size 3-inch dia tied with a white rope, Weight 100-150 gm.		1
7	Keyboard 61 keys	61 Keys, Full Size Piano Style Keys, Keyboard with handle to carry, Minimum 32 Polyphony, Minimum 120 tones, Minimum 60 Rhythms, Sustain Required, Reverb: Yes, Speaker Output: 2W + 2W, 2 speakers USB (to Host): Yes (Micro B), At least 10 Hours Battery & Power – AC Adaptor 9 V or higher. Size (W x D x H): 820 x 256 x 73mm or higher, Weight: 2.5 kg to 4.5 kg. Warranty - 1 year		1
8	Bansuri (Flute)	Material - Mild Steel, Length 12 inches, no. of holes 7, Mouthpiece made up of plastic. Weight: 50–60 gm		2
9	Ghungroo anklet (25 pc per anklet)	Pair of Ghungroo made of brass with 25 bells of 1 cm in each anklet tied with white rope. Weight: 150-200 gm		1
10	PA System - Speaker and Mic	Output Power: 50W or more BT v5.0 or latest   HDMI   Optical IN   USB   AUX Driver Size: 5.5 x 9.5 cm (x2) or more Impedance: 8Ω Frequency Response: 50Hz–20kHz S/N Ratio: ≥66dB		1





		Separation: $\geq 40\text{dB}$ File Format Support (USB): MP3 Line Input: 3.5mm, Optical IN, HDMI (ARC) Max Supported USB Memory: 32GB or more Speaker with 2 Cordless Mic Warranty - 1 Year.		
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**ii. Musical Instrument for Secondary/ Sr. Secondary School**

Sl. No.	Name	Specs	Image	Qty
1	Harmonium	Harmonium should be top 3 selling brand in India. Length: 22 Inch, 11.50 Inch Width, 9.5 Inch height, No. of Stoppers 9, No of Keys 42, Body Material Wood, Keys: made of plastic, stopper: made of iron, 3.5 Octave, double bellow, double reed. Weight: 7-8 Kg. Provided with good quality cushioned Box/Case with zip. Warranty - After Sales Service for one year.		1
2	Dafli (Tambourine)	Overall Dia - 8 inch. Plastic Frame thickness 5mm, Polyester sheet film of 125 micron Grooves - 6 nos. 3 steel jingles in each groove, jingle dia - 40 mm, thickness 0.3 mm, Weight: 250 to 350 gm		2
3	Dholak/ Naal	Made of wood & Side base made of goat leather. Length: 15 to 18 Inches, Upper Dia - 7 Inches Lower Dia - 9 Inches, No. of Keys/ nut bolts - 18, Size of keys minimum 2.5 inches, Weight: 3.5 Kg to 4.5 kg. Provided with good quality Box /Case with zip		1



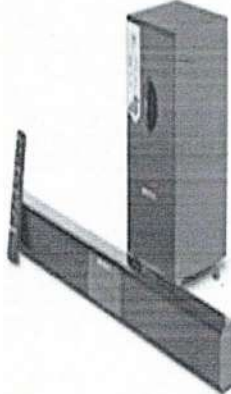

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4	Tabla set	Pair Made of Metal+wood; Metal Tabla Dia 7 Inches, Wooden Tabla Dia 5-6 Inches, Upper base made of goat leather, Weight – 3 to 4 Kg with bag and Accessories with good quality cushioned Box/Case with zip		1
5	Virgin Plastic Zheeka Big 10 jingles	Virgin Plastic body, 10 Jingles made of stainless steel, length 18 Inches, Width 4 Inches. Weight: 180-220 gm		2
6	Virgin Plastic Zheeka Small 6 jingles	Virgin Plastic/ wooden body, 6 Jingles made of stainless steel, length 10 Inches, Width 3 Inches. Weight: 90-150 gm		2
7	Brass Manjira	Manjira made of brass, Size 3-inch dia tied with a white rope, Weight 100-150 gm.		2

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8	Keyboard 61 keys	61 Keys, Full Size Piano Style Keys, Keyboard with handle to carry, Minimum 32 Polyphony, Minimum 120 tones, Minimum 60 Rhythms, Sustain Required, Reverb: Yes, Speaker Output: 2W + 2W, 2 speakers USB (to Host): Yes (Micro B), At least 10 Hours Battery & Power - AC Adaptor 9 V or higher. Size (W x D x H): 820 x 256 x 73mm or higher, Weight: 2.5 kg to 4.5 kg. Top 3 selling brand in India.		1
9	Bansuri (Flute)	Material - Mild Steel, Length 12 inches, no. of holes 7, Mouthpiece made up of plastic. Weight: 50-60 gm		2
10	Speaker and Mic	PA System - Output Power: 100W or more BT v5.3 or latest   HDMI (ARC)   Optical IN   USB   AUX Driver Size: Sound bar 6 cm X 2 or More, Subwoofer 13 cm X1 or more Impedance: Sound bar - 8 Ohm, Subwoofer: 4 Ohm Frequency Response: 20Hz-20kHz S/N Ratio: >70dB Separation: >32dB File Format Support (USB): MP3 Line Input: 3.5mm, Optical IN, HDMI (ARC), Max Supported USB Memory: 32GB or more Speaker with 2 cordless Mic Warranty - 1 year.		1
11	Gungroo anklet (25 pc per anklet)	Pair of Ghungroo made of brass with 25 bells of 1 cm in each anklet tied with white rope. Weight: 150-200 gm.		2

Note:

- Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission
- Bidder needs to submit the test reports for safety of tools from NABL accredited lab.

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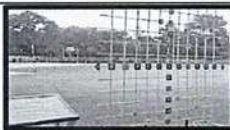

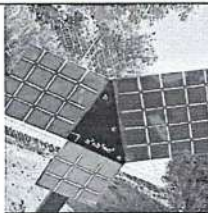


## 18. Outdoor Science Park

**SCOPE OF WORK:** Supply and installation of Outdoor Science Parks in selected 38 schools should promote experiential, interactive, and play-based learning through life-size science models. These open-air Teaching-Learning Material (TLM) parks should be designed to make scientific concepts more accessible and engaging for students through practical demonstration and self-exploration.

- BEPC will provide a maximum 2000 sq. ft. area for the development of the Outdoor Science Park along with plastic net fencing.
- A list of class-wise experiments should be displayed in the park.
- All models should have variability for different experiments and activities.
- Models/exhibits should be durable and weatherproof for outdoor installation.
- Training videos/ Tutorials may be provided for each exhibit.

### List of Equipment:


Sr. No.	Models	Concept	Images
1	Newton's Cradle	Showcases the conservation and transfer of kinetic energy between colliding spheres. Size: Length should be of 4 Ft., Width should be of 3 Ft. and Height 6 Ft. Solid Balls Diameter- 2.5 inch	
2	Play with Mirrors	Explores reflection and symmetry through mirror arrangements. Size: Diameter should be of 2.6 Ft., Height should be of 6 Ft. Acrylic Mirror	
3	Time Indicator Globe	Displays different time zones around the world on a rotating globe. Size: Table diameter should be of 2 Ft. Total Height 4 Ft. Materials: MS, FRP, Vinyl print.	

4	Periodic Table	Organizes elements by increasing atomic number and groups them based on similar chemical properties and electron configurations. Height should be approx. ( $\pm$ ) 1 ft. Occupancy area: 6ft x 4ft Material: - MS painted frame & plastic blocks	
5	Cartesian Plane	Visualizes coordinates and plotting points on a two- dimensional grid. Height should be of 5 ft., and Width – 3 ft	
6	Gear Belt chain drive	Mechanisms that transmit power and motion between shafts, allowing for efficient mechanical movement and speed control. Size should be of 1 x 4 x 6 Ft.	
7	Pythagoras Theorem	Demonstrates the relationship between the sides of a right-angled triangle.	
8	DNA Model	This DNA Double Helix Model stands approx.5–6 feet tall and is mounted on a sturdy 2.5 × 2.5 feet painted concrete base.	
9	Newton's Color Wheel Model	It demonstrates the composition of white light. White light is nothing but a mixture of colours. A famous theory is explained by whirling colored wheel. Total Height should be 3 Ft. Occupancy area – 5' x 3'	

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10	Wave Motion Model	Node, antinode and collision of two waves can be visualized here. The height should be 8 Ft. Occupancy area – 4' x 4'	
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## 19. Band Uniform

**Scope of Work:** Band uniforms (25 sets per school) should be supplied to 836 schools to enhance student participation in ceremonial, cultural, and national events. The provision of standardized, high-quality band uniforms should aim to instill discipline, pride, and team spirit in school marching bands and musical groups. Each set should contain the following line items: -

### Detailed Specifications



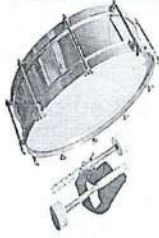
Sl. No.	Item name	Material/ Fabric
1	Band coat/jacket	Gavadin
2	Trousers/skirt (trouser for boys	Gavadin
3	Headgear/ P Cap	Wool and cotton
4	Lanyard	Zari and polyester
5	Belt	Cotton mix
6	Gloves (white)	Cotton mix
7	Sashes or cummerbund	Zari and polyester
8	Anklets	Zari and polyester
9	Shoes	Black, standard marching type
10	Socks	Cotton

- Uniforms should be visually consistent with the school's cultural and institutional identity.
- Designs approved by school committee, leadership and cultural/arts in-charge.





## 20. Band set


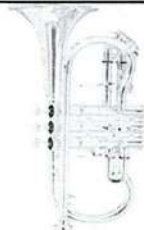


**Scope of work:** Band instruments should be supplied to 836 schools as part of a complete marching and musical band set. The instruments should be selected to support school parades, ceremonial functions, and cultural activities, fostering rhythm, coordination, and musical discipline among students.

**Detail Specifications:**

Sl. No.	Name	Specifications	Image	Qty
1	Brass Trumpet	Keys - B-flat , Material brass , number of Piston / valve 3 , finish Golden/ nickle / chrome plating. Bore size : 12-14 mm outer dia / 12-13 mm inner dia, bell dia : 115-125 mm / barrel diameter : 15-20 mm outer dia / 13-15 mm inner dia , barrel length : 115-118 mm Piston length : 62-65 mm half , 120-126 mm full , length 16-19 inch , width : 5-6 inch , weight 1.200kg - 1.250 Kg Provided with good quality cushioned Box with zip		3
2	Stainless Steel Side Drum with sticks	Drum Material: Stainless Steel, Base -Polyester film of 120 micron, Hooks Material: Brass, Rod material : iron. Accessories:- Belt, a pair of stick depth : 5-6 inch, dia : 12 to 14 inch, Number of iron rods - 8, Weight: 2 to 2.5 kg		8
3	Stainless Steel Bass drum/ PT DRUM with beater	Drum Material: Stainless Steel, Base -Polyester film of 120 micron, Hooks Material: Brass, Rod material : iron. Accessories-; Belt, a pair of beater Depth : 9-12 inch. Dia : 24 to 28 inch, Number of Rods: 8, Weight: 3.5 to 4 Kg		2





4	PT Drum Stand	Adjustable height stand made of Metal material, weight – 1 - 2 Kg or higher. Should be easy to assemble or dissemble		1
5	Stainless Steel Cymbals 8"	Material- Stainless Steel tied with rope, Dia 8 inch, Weight: 150-200 gm		3
6	Stainless Steel Cymbals 10"	Material- Stainless Steel tied with rope, Dia 10 inch, Weight: 200-250 gm		3
7	Major Stick/ Leading Sticks	More than 52 Inches height made of canwood, Steel Round of 11 Inches, upper symbol: 2 Inches made of metal, steel Chain rounded, Weight: 550-650 gm		1

8	Brass Bigul	Made of copper & brass with mouthpiece 12 inches, Bell Dia 2 to 3 inches, Weight- 400 Gram Provided with good quality cushioned Box/Case with zip		3
9	Brass Cornet	Keys - B-flat , Material brass , number of Piston / valve 3 , finish Golden, nickle / chrome plating. Bore size : 10-12mm outer dia / 10-12 mm inner dia bell dia : 5 inch / barrel diameter : 18-20 mm outer dia / 14-16 mm inner dia , length 12-13 inch , width : 5-6 inch , weight 1.250 kg Provided with good quality cushioned Box/Case with zip		3
10	Bansuri-Steel (Flutes)	Material – Mild Steel, Length 12 inches, no. of holes 7, Mouthpiece made up of plastic. Weight: 50-60 gm		6
11	Maracas Small	Made of steel and wood, Maximum of 12-14 inches in circumference measured from the midpoint, stainless steel ball with wooden handle fitting. Weight: 250-350 gm		5

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12	Maracas Big	Made of steel and wood , Maximum of 15-18 inches in circumference measured from the midpoint, stainless steel ball with wooden handle fitting and satin ribbons on the top. Weight: 600- 700 gm		3
13	Virgin Plastic Zheeka/ Jhaal 10 jingles	Virgin Plastic body, 10 Jingles made of stainless steel, length 18 Inches, Width 4 Inches. Weight: 180-220 gm		6
14	Hat	Hat for the band leader (fibre and cotton fabric)		1

- Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission
- Bidder needs to submit the test reports for safety of tools from NABL accredited lab.

## 21. Smart board with interactive learning panel

**Scope of Work:** Smart boards with interactive learning panels should be supplied and installed in 836 schools as per the following specifications. Two sets should be provided in each school.

Each set shall contain below line items -

Sl. No.	Item Details	Qty
1	Interactive Flat Panel 75"	02
2	OPS	02
3	Protective casing for panel	02
4	Web Camera	02
5	1 KVA UPS	02

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.

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**Detailed Specifications:**

Interactive Flat Panel 75"		
Specification Category	Specification Attribute	Details
Panel	Diagonal Size & Resolution	75" or Higher, UHD 3840 × 2160 pixels
	Light life	50,000 hrs or higher
	Brightness	400 Tenders or Higher
Touch screen	Touch technology & Touch Points	Infrared touch, 20 points or Higher
	Touch response time & Accuracy	< 8 ms or faster, ±1.0 mm or better
Inbuilt Configuration	CPU & Speed	Octa Core 2.2 GHz or Higher
	OS	Android 13.0 or later
	Memory RAM	4 GB or Higher
	Memory Storage	64 GB or Higher
Connectivity	I/O Ports	1 x VGA, 3 × HDMI 2.0 IN & 1 × HDMI 2.0 Out port, 1 x DP, USB 2.0 × 2 + 3.0 × 2, USB -B x 2, 1 x USB C port, SPDIF x 1, RS232 x 1, LAN Port x 1
Audio Configuration	Microphone	8 or more
	Speaker, Subwoofer	2 × 16 W Speaker & 1 x 16 W Subwoofer
Built-in	Functionalities	Flicker Free, Low Blue Light
	Connectivity	Bluetooth, WI Fi, NFC
Software	Functionalities	White Boarding, Wireless Screen Sharing, Quick Access Tool
Open Pluggable Specification (OPS)		
Specification Category	Specification Attribute	Details
Processor	Intel®	Core™ i5, 11 <sup>th</sup> Gen or higher
Memory	DDR4	8 GB
Graphics	On Board Intel®	UHD Graphics
Storage	SSD	512 GB
LAN	RJ45	1 x 10/100/1000 Gigabit LAN
I/O Ports	In-built	4 x USB, 1 x Type C, DP/HDMI x 1, AUDIO IN + OUT
WLAN	In-built	802.11bgn+BT
Frame/Housing for Interactive Flat Panel with sliding writing board		



Specification Category	Specification Attribute	Details
Structure	Wall mounted	Double layered structure and 2 Boards – 1 sliding white board with fixed green board (or vice versa)
Locking facility	Equipped	Locking system on sliding frame to keep the interactive display safe
White Board Surface	Material	Metal surface with Coating
Frame	Material	High-quality aluminum
Web Camera		
Video Resolution	Up to 1280 x 720 pixels, Hi-Speed USB 2.0	
UPS		
1 KVA UPS	1 KVA UPS	

## 22. GREEN BOARDS

Scope of work: - Supply of blackboards/ green boards (8 nos. in each school) in 836 schools.

1. **Supply of Boards:** Providing blackboards/ green boards of size 8 feet by 4 feet.
2. **Material Specifications:** Boards must be durable, scratch-resistant, and easy to clean, with smooth writing surfaces to minimize chalk dust.

ITEM	Description
GREEN BOARDS	<b>Frame Material</b> – Anodized aluminium frame <b>Core Material</b> – Honeycomb board <b>Writing Surface</b> – Resin coated steel sheet <b>Size</b> - 8×4 ft

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.

## 23. ECCE Kit

**Scope of work:** ECCE kits should be supplied in 47 schools to support play-based, activity-driven learning for early childhood education. The kits should include age-appropriate toys, learning aids, and manipulatives designed to nurture foundational cognitive, language, motor, and social skills in young children.

### Detailed Specifications:

Sl. No.	Name of the Items	Specifications	QTY
1	Tambourine	Size: Dia 205mm x 45mm with cover and adjustable frame for fitting.	2
2	Big Ball	Material: Foam Ball Size: Dia 160 mm.	2

3	Rope Ladder	Material: Wooden and Jute Stick Size: dia 35 mm x 300mm length, fitted with wooden block and hook 7 multicolored wooden stick, fitted with dia 10mm rope in 300mm distance.	2
4	Building Blocks	Material: Plastic (60+pcs) (Large) 60 x 20 x 23 mm (6 pcs) (Medium) 40 x 20 x 23 mm (8 pcs) (Small) 20 x 9 x 23 mm (2 pcs) 20 x 20 x 23 mm (40 pcs) 24.00 dia mm. (8 pcs)	2
5	Bowling Set	Bowling Pin: Size 150 mm x 50 mm, Set of 6 pins and 1 ball.	2
6	Beads with holes and string	Plastic Beads, size- dia 16 mm with 6mm dia, hole through with 2.7 meter lace, colour white and red beads (qty 100 nos)	2
7	Spinning Top (Chakri)	Material: Wooden/ Plastic, dia 45 mm x 11mm, thick at centre with wooden stick of Length 22 mm, Multicolor.	2
8	Hammering toy	Size: Two wooden/ plastic blocks with sides 100mm x 75mm x 18mm. Both sides fixed from centre with 200mm x 70mm x 18mm bench. Printed shoes with strings, 8 holes dia 6mm and 4 holes on the other side dia 15mm with half slotted pins dia 15 x 60mm. Square wooden hammer 35mmx70mm attached to 130mm handle.	2
9	Lacing Board with 4 strings	Size: 220x220mm square MDF/ plastic board with 4mm thickness with 169 holes dia 6mm String Colour: 4 colour Nylon strings dia 4mm and 100cm length.	2
10	My Feely Bag with Solid Shapes	String Bag made from Red Falali or equivalent cloth with yellow & blue colour embroidery and locking facility in 5 different wooden/ plastic shapes Approx. Dimensions Bag: Base dia 140 mm x 150 mm and height 240 /250 mm	2
11	Cloth Dolls	Set of One Boy and One Girl, Size: Height minimum 300mm	2
12	Puzzles of multi piece.	Cardboard Puzzles in two pieces Puzzles Size: 1.5mm thickness Puzzles Printing: Multicolour Puzzles in 03 pieces; 05 pieces; 06 pieces	2
13	Nesting/Stacking Rings	7 plastic rings stacked on a plastic stand and on a rod of 20 mm dia. 7 rings to be provided with a minimum size of 75-80 mm and maximum of 140-150 mm diameter. Overall height of stacking tower should be 290-300 mm.	2



14	Large Shape Sorter Board with String	Square wooden/ plastic base 158 mm x 158 mm and 10 mm thickness fixed with wooden/ plastic pin dia 10 mm x 40 mm. Number of 1, 2, 3 and 4 holes of dia 10mm in circular, rectangular, triangle and square shaped pieces respectively. String with dia 4mm and 100cm length.	2
15	Junior Abacus: Frame	10 Iron rods fixed with 230mm x 205mm wooden frame. First rod contains one bead and tenth rod contains ten beads in an ascending order. Each rod contains beads of different colors. Dia of each beads is 12 mm.	2
16	Farm Animals (medium Size)	Random 12 animals - 12 Domestic or Farm animals of Medium Size. Material virgin nontoxic Plastic	2
17	Ball	Soft ball which must be light weighted and easily playable by the children of 5-8 years	2
18	Car	Virgin non-toxic plastic Car. Length 8 inch x 5 inch x 4.5 inches & the weight of the car should be minimum 180 gms.	2
19	Kitchen Set	Multicolour A set of 15 items	2
20	Rolling Board and Rolling Pin (Chakla-Belan)	Wooden rolling board dia 145mm X 20mm fixed in the bottom with three legs of 10mm height. Wooden rolling pin of 160mm length, dia 24mm from centre .	2
21	Flute Material: Bamboo	Dia 18/20 mm X 360/400mm length with 6 holes.	2
22	Puppets	Set of two Puppets, 1 Lion and 1 Rabbit	2
23	Damru	Overall size dia 100mm X 110x120/150mm height	2
24	Alphabet Tracing Board	Size: 300mm X 235mm with 5mm thickness with engraved alphabets A to Z of size 35mm x 38mm. Attached wooden pencil with nylon string.	2
25	Folding bag	Flex bag with pockets to store and display the Kit material	2
26	Solid Shapes	Material: Wooden/Plastic solid shapes of 5 types Quantity: 2 pcs of each shape a. Solid Cube Shape- Cube with size 3.5cm b. Solid Sphere Shape- Sphere with size 3.5cm c. Solid Cylinder Shape- Cylinder with size 3.5cm d. Solid Cone Shape- Cone with size 3.5cm e. Solid Pyramid Shape- Pyramid with size 3.5cm 10 pcs Shapes	2
27	Tiles of five types and a tray	a. Hexagon Shaped Tiles- Hexagon 2D shape of thickness 1.5mm. Size of hexagon varies from 2.5cm to 12.5cm b. Circular Shaped Tiles- Circle 2D shape of thickness 1.5mm. Diameter of circle varies from 2.5cm to 12.5cm.	2

		<p>c. Square Shaped Tiles- Square 2D shape of thickness 1.5mm. Length of the square varies from 2.5cm to 12.5cm.</p> <p>d. Triangular Shaped Tiles- Triangle 2D shape of thickness 1.5mm. Size of equilateral triangle varies from 2.5cm to 12.5cm.</p> <p>e. Rectangular Shaped Tiles- Rectangle 2D shape of thickness 1.5mm. Size of rectangle varies from 2.5cm x 1.25cm to 12.5cm to 6.25cm.</p> <p>5 quantities of each shape in 5 different colours made up of durable, non-toxic material. (Qt. 5 x 5. Total 25 pcs)</p>	
28	Doctor Set	Doctor set should consist of 12 items set	2
29	Fruit & Vegetable Set	Including 10 items Viz. Carrot, Brinjal, Tomato, Onion, Banana Apple, capsicum Orange, Chopping Board, Knife. The size of each item should be between 4 cm to 10 cm.	2
30	Wooden Number Tracing Board	Size: 300mm X 235mm with engraved Numbers 1-20 attached wooden pencil with nylon string.	2
31	Fruits & Vegetables Pegboard	MDF (Medium Density fibre board) tray with 10 cut out of different Numbers of size 11 x 11 inches with 7 mm thickness. The cut-outs can be lifted easily by the help of plastic knobs attached to it & these cutouts can be put back on same slots.	2
32	Body Parts Pegboard	MDF (Medium Density fibre board) tray with 10 cut out of different Numbers of size 11 x 11 inches with 5 mm thickness. The cut-outs can be lifted easily by the help of plastic knobs attached to it & these cutouts can be put back on same slots.	2
33	Self-Corrective Relationship Puzzles	Dimensions: Thickness 1.5 mm, overall size 250 mm x 70 mm with different cutting. Total No. of 10 sets each set having two parts with multi-colour design and one side lamination.	2
34	Place Value Card	<p>a. 9 cards (100 to 900) 110 (90+20) mm x 30mm polypropylene plastic sheet of 150 GSM. Numbers 100 to 900 printed with red colour and font size 60 pt. Right end to be semicircular of radius 20 mm.</p> <p>b. 9 cards (10 to 90) - 80mm (60+20) x 30mm polypropylene plastic sheet of 150 GSM, numbers 10 to 90 printed with red color and font size 60 pt. Right end to be semicircular of radius 20 mm.</p> <p>c. 9 cards (1 to 9) - 50mm (30+20) x 30mm thickness polypropylene plastic sheet of 150 GSM, Numbers 1 to 9 printed with red color and font size</p>	2



		60 pt. Right end to be semicircular of radius 20 mm.	
35	Alphabet Flashcard-English	Set of 26 cards of size 6x4 inches on 250 gsm with both side lamination	1
36	Alphabet Flashcard-Hindi	Set of 52 cards of size 6x4 inches on 250 gsm with both side lamination	1
37	Classification Card	Size of the cards – 4.75" x 4.75" No. of Cards – 40 classification cards. Paper for cards – 300 GSM Art Card	1
38	Number Flashcard	Size of the cards - 4.75" x 4.75" No. of cards - 20 Paper for cards – 300 GSM Art Card	1
39	Story sequence Card	Size of the cards - 4.75" x 4.75" No. of Cards - 15. Paper for cards - 300 GSM Art Card	1
40	Color Domino Card	Set of 28 cards on 250 gsm art card of Size 120/124 mm x 60 mm with thermal lamination on both side & printing on one side in two equal parts.	1
41	Memory Card	Size of the cards - 5.5" x 8.5" No. of cards - 10 cards (5 set of 2 cards each) Paper for cards - 300 GSM Art Card	1
42	Sequential Thinking Cards	Size of the cards - 5.5" x 8.5" No. of cards - 16 cards (4 set of 4 cards each) Paper for cards - 300 GSM Art Card	1
43	Color Flashcard	Size of the cards - 4.75" x 4.75" No. of cards - 10 cards Paper for cards - 300 GSM Art Card	1
44	Shape Flashcard	Size of the cards - 4.75" x 4.75" No of cards - 10 cards Paper for cards - 300 GSM Art Card	1
45	Pre- Number Concept Card	Size of the cards - 5.5" x 8.5" No. of cards - 25 cards (5 set of 5 cards each) Paper for cards - 300 GSM Art Card	1
46	What is Missing Card?	Size of the cards - 5.5" x 8.5" No. of cards - 12 Cards 300 GSM Art Card	1

47	Picture Reading Posters- Set of 6	Set of 6 Posters of Size A3, 220 GSM	1
48	Hindi Sound Dominos	Set of 28 cards on 250 GSM art card of Size 120/124 mm x 60 mm with thermal lamination on both sides & printing on one side in two equal parts.	1
49	English Sound Dominos	Set of 28 cards on 250 GSM art card of Size 120/124 mm x 60 mm with thermal lamination on both sides & printing on one side in two equal parts.	1
50	Number Dominos	Set of 28 cards on 250 GSM art card of Size 120/124 mm X60 mm with thermal lamination on both side & printing on one side in two equal parts.	1
51	Charts of different topics	Set contains double side printed charts on 20 topics of size 19x27 inches	10
52	32 pages Hindi story/ rhymes books	Book of 32 pages printed on 80 GSM Inner and 200 GSM outer of size 28 X 21 cm	5
53	32 pages English story/ rhymes books	Book of 32 pages printed on 80 GSM Inner and 200 GSM outer of size 28 X 21 cm	5
54	Activity Book for Balvatika (for drawing & coloring)	Drawing Book of 32 pages printed on 80 GSM Inner and 200 GSM outer of size 28 X 21 cm	30
55	Workbooks (32 pages)	Book of 32 pages printed on 80 GSM Inner and 200 GSM outer of size 28 X 21 cm	30
56	User Manual	Book printed on 80 GSM Inner and 200 GSM outer of size 28 X 21 cm	1

Note:

- Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission
- Bidder needs to submit the test reports for safety of tools from NABL accredited lab.

## 24. Enhancement of School Aesthetics

**Scope of work:** Digital Signage systems with Content Management Software (CMS) should be supplied and installed in 836 schools to enhance visual communication and overall school aesthetics. These digital displays should be used for showcasing school announcements, educational content, student achievements, event updates, and government messages in a dynamic and visually engaging format. In Addition to this, bidder should do necessary electrification and room paintings and paste curiosity enabled wall posters.

Detailed Specifications:



Specification Category	Specification Attribute	Details
Display	Size, Panel & LED	43" or Higher, ADS/IPS & DLED
	Native Resolution	3840 x 2160 (UHD)
	Brightness	Minimum 300cd/m2(nits) or above
	Dynamic Contrast Ratio	900,000:1 or better
	Orientation support	Landscape & Vertical
I/O Ports	Inbuilt	HDMI (3, HDCP 2.2/1.4), RS-232C In (4 Pin Phone-jack), RJ45 (LAN), USB 2.0 (2, Type A) or more , Audio Out, RS-232C Out (4 Pin Phone-jack), Rs232C(4Pin) IN,RJ45-1
Special Features	Wireless Access Point	Support as a virtual router which can be an wireless access point
	Wi-Fi connectivity	Built in
	Background Image	Bootimg logo in image, No signal image
	Sensor	Temperature Sensor, Auto Brightness Sensor,
	Processor (SOC)/Media player	Cortex Quadcore,16 GB built in memory or high, Open source OS ebos/Windows
	WebRTC support, SNMP support, Wake on LAN, Tile Mode support	Required
	Media share	Mirroring/Miracast to for screen share, Beacon
Speakers	In-built	20W (10W x 2)
Certification	BIS, ISO, Safety, EMC	BIS & ISO9001, ISO14001, ISO45001certificate of OEM, CB/UL & FCC Class "A"
	Software Deliverables	With Cloud hosting for 36 Months

Content Management Software (CMS)		Running different types of content (like image, video, feed, etc.) simultaneously on a single display screen, Running live streaming content from HTTP Live Streaming (HLS), MPEG-DASH/MMS and RTP/RTSP
		Manage display remotely i.e disabling and enabling of USB, Wi-Fi, Bluetooth, Screen mirroring, Remotely Mute or unmute volume, resetting or restarting each media player, All Player licenses to be managed centrally; Automatically powering on after interruption in power
		Control and schedule (hour/day/week/month) content playback, support unattended continuous playback, Local Playback: Download and store content locally on the player. Play earlier scheduled content in case of lost network connection
	CMS Server	Cloud based, Central web enabled console to push content to display signage. The user interface must be browser-based to allow all users to access the system from anywhere on the network. Create User management profile by levels

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M



	Content Delivery	Deployment of signage Screen at a particular location and provide it with Unique Identification Number (UIN) for easy reference. Customize delivery of content and scheduling to displays based on specific parameters such as: Grouping of Displays, Individual Display, Day of week, Time of day. Ability to display real- time information (e.g... Emergency messages to specific sites). Ability to power ON/OFF media player in a schedule or as and when required.
	Format Supported	Must have multiple customizable templates available. Add/modify/delete/combine content in any of the file formats which results in audio, video, text format (this includes pdf, ppt, media files, etc),Videos: WMV, MP4, MOV,AVI, MPEG, with all major codecs, support Ticker: Live RSS & Static Text Ticker, Images: JPEG, PNG, BMP, Documents Files: PDF, PPT*,Audio: MP3, Web Pages: http, https Be capable of running live streaming content from HTTP Live Streaming (HLS) , MPEG-DASH/MMS and RTSP

## 25. Teacher ID card

**Scope of work:** Standardized ID cards should be provided for all 12,365 teachers to support identity verification, professional recognition, and ease of access during institutional and administrative activities. Each card should include teacher details, a photo, the school name, and necessary authentication elements such as a QR code or barcode, if applicable:

### DETAIL SPECIFICATIONS

S.No	Description
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VR

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1	PVC ID card with VDP as per the specifications below: Card dimensions: 85x54 mm (W x H) Thickness: 0.75 to 0.80 mm Lanyard: 10 mm lanyard with single color printing made of yarn in PP material; Lanyard will have end user logos Cardholder in pp material
2	Web based Portal shall be provided for capturing and managing teacher details to adds efficiency to the process

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission

## 26. Student ID card

**Scope of work:** Provision of standard student ID cards for all 6,56,365 enrolled students to support identification, school record management, and campus safety. Each ID card will include the student's name, photograph, school name, class, and other relevant details in a durable and school-branded format.

### DETAIL SPECIFICATIONS

S. No.	Description
1	PVC ID card with VDP as per the specifications below: Card dimensions: 85x54 mm (W x H) Thickness: 0.75 to 0.80 mm Lanyard: 10 mm lanyard with single color printing made of yarn in PP material; Lanyard will have end user logos Cardholder in pp material
2	Web based Portal shall be provided for capturing and managing student details to adds efficiency to the process

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.

## 27. CCTV Cameras

**Scope of work:** CCTV surveillance systems should be provided, installed and Maintained in 836 schools to enhance safety, monitoring, and administrative oversight. The system should include essential components for effective indoor and outdoor coverage, ensuring secure data storage and real-time monitoring capability.

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**DETAIL SPECIFICATIONS:**

Item	Description	Quantity
IP/Bullet Cameras	2MP IP Wired Outdoor Bullet Cameras with Night Vision, CMOS Image Sensor, 3.6mm Lens (30Mtr),	5 Nos of Each
NVR	8 Channel Network Video Recorder	1 No
POE Giga Switch	8-Port POE Giga Switch	1 No
Hard Disk Drive (HDD)	1TB	1 No
CAT 6 Cable	As per requirement	
LED Monitor (Optional)	21.5 Inch	1 No
Rack 6U	Good Quality Rack for Mounting Equipment with two-sided mounting Fan	1 No
Conduit/Accessories	Includes cable conduits, clamps, junction boxes, connectors, etc.	

Bidder should submit the Sample.

**28. Olympiad for Class VI to X**

**Scope of Work:** Olympiad examinations in Mathematics and Science should be organized for students of Classes VI to X in 836 schools. The exams should be conducted offline at the school level to encourage academic excellence, competitive spirit, and analytical thinking among students.

The activity should include preparatory material, participation certificates, and recognition for top performers.

**Detailed Specifications:**

The bidder should be responsible for below:

- Development of Exam paper
- Free Olympiad Book should be given to the students
- Sending exam paper to the school along with OMR sheets.
- Checking of answer sheets and preparation of result
- Medals, trophies and certificates should be given to the toppers (top 3)
- Certificates should be given to all the Olympiad participants
- State level awards and certificates are also to the toppers

- Practice book for the subject chosen to be given to the students participating in Olympiad.
- School would provide a nomination list of students for conduction of Olympiad.
- Maximum of 250 children should be able to participate in Olympiad per school.

## 29. Social Science Kit

**Scope of work:** Social Science Kits should be supplied, installed, and supported with training in 836 schools to promote hands-on, activity-based learning. The kits should consist of educational models, instruments, and teaching aids to help students understand key concepts through interactive demonstrations. Basic training should be provided to teachers to ensure effective classroom use and integration into lesson plans.

### Detail Specifications:

The bidder shall supply one set of the below mentioned line items.

Sr. No.	Product/Item	Specifications	Qty
1	Binoculars	Material: Plastic Magnification: Typically, 8x to 12x. Objective Lens Diameter: 4cm	1
2	Solar System (8 Planets), Motorized Model	Material: Plastic Size: 5 X 9.5 X 5 inch Electrical	2
3	Compass	Material: Stainless steel Size: 3.5 inch	2
4	Solar and Lunar eclipse	Material: Plastic Size: 5 X 9.2 X 7 inch Electrical Model	1
5	Day & Night Apparatus, Electrical Model	Material: Plastic Size: 5 X 9 x 8 inch Electrical Model	1
6	Layer of Sun Model	Material: Plastic, wooden base Size: 12 X 8 Inch, Diameter 11 inch	1
7	Earth layer model	Material: Fibre, wooden base 7.5 X 14.8 X 10.5 inch Diameter: 9 inch	1
8	Volcano	Material: Fiber Size: 7 X 7 X 8 inch	1
9	Seismograph Model	Material: Iron and wood Size: 9X16 X14 Inch	1
10	4 seasons models, Electrical Model	Material: Plastic Size: 5 X 9 X 8 inch Electrical Model	2
11	Phases Of the Moon, Electrical Model	Material: Plastic Size: 5 X 9 X 8 inch Electrical Model	1
12	Wind vane	Material: Base-Cast Iron Arrows- MS Sheet Height: 26.5 inch	1



13	Anemometer simple	Material: Plastic and Metal Height 9 inch	1
14	Rain Gauge	Material: Plastic Size: Diameter: 5 inch, Height: 11.5	1
15	Set of Metals (15)	Fixed on round plastic moulded showcase having dia 225mm and depth 27mm. And a plastic disc carrying different type of metals, showcase can be easily locked and unlocked in showcase by press fitting. Overall dimension 225x27mm	2
16	Sun dial	Material: Aluminium Size: 4.5 X 7 X 5	1
17	Earthquake Model	Material: Wooden Base Size: 10.5 X 16 X 4 inch, 2 layers	1
18	Set of Rocks (15)	Fixed on round plastic moulded showcase having dia 225mm and depth 27mm. And a plastic disc carrying different type of rocks, showcase can be easily locked and unlocked in the showcase by press fitting. Overall dimension 225x27mm	2
19	Set of Minerals (15)	Fixed on round plastic molded showcase having dia 225mm and depth 27mm. And a plastic disc carrying different type of minerals, showcase can be easily locked and unlocked in showcase by press fitting. Overall dimension 225x27mm	2
20	DAM Working Model	Material: MS Sheet Base- Wooden 15.5 X 23.5 X 13.5	1
21	Windmill	Material: Plastic 6 X 9 X 12 inch	1
22	Rainwater Harvesting	Material: Plastic, Iron 15 X 24 X 13 inch Working model with a motor	1
23	Layers of Soil	Material: Fibre with detachable magnetic layers Size: 5 X 9.5 X 10	2
24	Charts on various topics	On 300 GSM Laminated paper 19 X 27 inch	20

Note:

- Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission
- Bidder needs to submit the test reports for safety of tools from NABL accredited lab.

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### 30. Financial Literacy

Provision of a Financial Literacy Course for students of Classes VI to XII to build foundational awareness of personal finance, savings, digital payments, budgeting, and responsible money management in 836 schools. The course should include modular video lessons, designed for self-paced learning, and will be uploaded on the school's LMS or digital platform for easy access by students and teachers.

To equip students with essential knowledge and skills in personal finance through a structured, video-based course. The program aims to promote financial awareness, responsible money management, and digital transaction literacy among school students, aligned with 21st-century competency goals in 836 schools. All the videos shall be in both English and Hindi.

The course should be designed for students of **Classes VI to XII**, segmented into three academic levels for age-appropriate content delivery:

**Upper Primary – Classes VI to VIII**

**Secondary – Classes IX to X**

**Senior Secondary – Classes XI to XII**

#### Course Structure

The course should consist of modular video lessons, each focusing on a core area of financial literacy. Each module should be designed to be self-contained, engaging, and aligned with students' learning levels and to be uploaded in the School LMS. Topics include:

- I. Introduction to Money and Savings**
  - a. Understanding money and its evolution
  - b. Importance of saving from an early age
  - c. Differentiating needs and wants
- II. Budgeting and Expense Tracking**
  - a. Basics of income and expenditure
  - b. Creating a personal budget
  - c. Practical exercises in tracking daily expenses
- III. Understanding the Banking System**
  - a. Types of bank accounts and their usage
  - b. How to open and operate a savings account
  - c. Use of ATM cards, passbooks, and mobile banking basics
- IV. Digital Payments and Online Transactions**
  - a) Overview of UPI, digital wallets, and QR code payments



- b) Setting up secure transactions
- c) Cyber safety and precautions for online payments
- V. Loans, Interest, and Insurance**
  - a) Concept of borrowing and lending
  - b) Simple and compound interest explained with real-life examples
  - c) Basic understanding of insurance and its relevance
- VI. Financial Planning and Investment Awareness**
  - a) Concept of short-term and long-term financial goals
  - b) Basics of investment options like fixed deposits and mutual funds
  - c) The power of compounding and starting early
- VII. Responsible Financial Behaviour**
  - a) Avoiding impulsive spending
  - b) Understanding credit traps and debt cycles
  - c) Building habits of mindful and ethical financial decisions

### 31. First Aid Kit

**Scope of Work:** The selected vendor should be responsible for the supply and delivery of First Aid Kits in 836 schools, ensuring that each kit is fully equipped to address minor injuries and basic medical needs. All components should be within valid expiry dates.

The bidder should ensure proper packaging, labelling, and safe transportation. Additionally, basic operational instructions and maintenance guidelines should be provided for school staff responsible for first aid kit management and replenishment.

Sl. No.	List of Item	Qty
1	Medications (to be administered under qualified supervision)	Paracetamol tablets (500 mg) – pack of 10
		2
		ORS (Oral Rehydration Salts) packets
		10
		Antiseptic ointment (e.g., Betadine)
		1
		Antacid tablets (e.g., Digene) – pack of 10
2	Wound Care Supplies	2
		Anti-vomiting medication (e.g., Ondansetron) – pack of 10
		2
		Pain relief gel/ spray (e.g., Diclofenac)
		1
		Glucose Chewable Tablet
		1
2	Wound Care Supplies	Gauze Swab
		5
		Dressing Bandages 5 cm
		2
		Dressing Bandages 10 cm
		2
		Dressing Bandages 15 cm
2	Wound Care Supplies	2
		Crepe Bandage 10 cm
		1
		Adhesive Tape 2.5 cm
2	Wound Care Supplies	1
		Cotton Roll (20 gm)
2	Wound Care Supplies	1
		1

		Tinture Iodine Solution	1
		Antiseptic wipes	1
		Disposable gloves	2
3	Instruments	Scissors (blunt ended)	1
		Tweezers	1
		Digital thermometer	1
		Measuring spoon or cup	1
		Tongue Depressor	1
		Safety pins	1
		Pen Torch	1
4	Additional Items	CPR face shield or mask	1
		Eye wash solution	1
		Burn relief dressing	1
		Instant cold packs	1
		First aid manual	1
5	All the material above to be packed in a sturdy plastic box		

Note:

Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission

## 32. School Magazine

### Scope of Work:

An engaging, educational, and age-appropriate monthly magazine should be developed and printed for students in Classes 1 to 5, 6 to 8, and 9 to 12 respectively, in 836 schools. The magazines should foster curiosity, reading skills, learning, creativity, and joyfulness while aligning with students' academic curriculum and interests. Three separate magazines should be created to cater to the distinct learning levels of each group.

### Detailed specifications of Magazine:

No. of Pages: 48

Magazine Size: 7.75"X10.25"

Complete printing in four colours

Paper for inside on Glazed Newsprint 56 GSM.

Paper for cover 100 GSM Art Paper

Binding: Centre stitch

Bright, colourful illustrations, info graphics, and photos to engage young readers.

Each issue should revolve around a theme to tie content together

### Specification of Content for Magazine:



The magazine should cover the contents from topics (not limited to) as below:

**Class 1 to 5**

**Content**

1. Mission
2. Vision
3. About us
4. Editorial
5. Notes
6. How things work
7. Ganit Gyan
  - a. Interesting facts about Maths
  - b. Fun with Mathematics
8. Whispers of Words
  - a. Cartoons -
  - b. Stories on Environment –
  - c. Poems & Stories-
  - d. Write Story from Picture -
  - e. Inspiring Poems for kids-
9. Brain Booster Zone
  - a. Find differences between two pictures.
  - b. Riddles
  - c. Quiz & Puzzles
10. Little Scientists/Science Junction
  - a. How to think like an Astronaut
  - b. Childhood of Great Scientists
  - c. About Space and Moon
11. Utsav Udaan
  - a. Festivals of India
  - b. Important Event Celebrated Worldwide
12. Learn English words
13. Kindness Corner
  - a. About Moral Values
  - b. Good Habits
14. A Day in my life
15. Creativity Corner (student drawing, art picture)
16. Feedback previous edition

**Class 6 to 8**

## **Content**

1. Mission
2. Vision
3. About us
4. Editorial
5. Notes
6. Little Scientists/Science Junction
  - a. Robotics
  - b. Space & Astronomy
7. Science Spark
  - a. Earth & Environment
  - b. Biology & Life Sciences
  - c. Chemistry in Daily Life
  - d. Physics and Technology
8. Magic of Words
  - a. Public speaking
  - b. English language & Grammar
  - c. Learn Spoken English
9. Kindness Corner
  - a. Moral Values & Life skills
  - b. Skill Development & Activities
10. Cyber Corner
  - a. Computer & Technology
  - b. Artificial Intelligence
11. Knowledge Nest
  - a. Theories and Principles of Maths and Science
  - b. What is Surgical Strike
12. Brain Booster Zone
  - a. Quiz of the Month
  - b. Curiosity Corner
  - c. Journey to the Poles
  - d. Invention of the Wheel
13. Fit & Fun
  - a. Sports & Fitness
  - b. Creativity Corner (student drawing, art picture)
14. Feedback previous edition

## **Class 9 to 12**

### **Content**

1. Mission
2. Vision
3. About us



4. Editorial
5. Notes
6. Master Mind Tips
  - a. Combined Practice Set – JEE/NEET/NTSE
  - b. JEE Pattern-Based Practice Set
  - c. Conquer Exam fear
7. Brain Booster Zone
  - a. Current Affairs & General Knowledge
  - b. Important Static Current GK
  - c. Did you Know/Facts
8. Higher-order thinking problems
9. How to Manage School & Coaching Together
10. How to Manage Stress, Sleep and Screen Time
11. International Science based Awards
12. Knowledge Nest
  - a. Awards & honours
  - b. BPSC
  - c. Civics & Constitution Basics for Students
  - d. Constitution Knowledge
13. Interview Section
14. Leadership of Top Scorers
15. Toppers' Talk
  - a. Career Guidance
  - b. Communication tips
  - c. Counselling tips
16. Creativity Corner (student drawing, art picture)
17. Feedback previous edition

### 33. PM SHRI Selfie Point

The PM SHRI Selfie Point should be visually impactful, student-centric installation designed to capture the spirit of transformation, innovation, and national pride under the Pradhan Mantri Schools for Rising India (PM SHRI) initiative in 836 schools. It should serve as a dedicated space for students, teachers, and visitors to capture memorable moments, fostering a sense of pride and belonging within the school community.

Design and Structure: Vibrant, modern, and student-friendly design reflecting the PM SHRI mission.

Materials: Durable, weather-resistant, and eco-friendly materials suitable for outdoor conditions.

Branding: Prominently display the PM SHRI logo, motivational themes, and school-specific branding if required.

Safety: Ensure sturdy, safe, and child-friendly construction with no sharp edges.

Anchoring: Provide secure installation with proper base support and weatherproof coating.

Bidder should submit the 4 designs for approval and upon approval, bidder should supply the same to school

### 34. Health Devices

**Scope of work:** Supply of Health devices in 836 schools as per below specifications:

**Item List:**

Sl. No.	Item Details	Qty
1	Blood Pressure Monitoring Machine	01
2	Oximeter	01
3	Nebulizer	01
4	BMI Calculator Machine	02
5	Health Monitoring Software	01

**Detailed specifications:**

S. No.	Item Name	Technical Specifications
1	Blood Pressure Monitoring Machine	LCD Digital Display Measurement Method: Oscillometric method Measurement Range: Pressure: 0 to 299 mmHg Pulse: 40 to 180 beats/min Accuracy: Pressure: $\pm 3$ mmHg, Pulse: $\pm 5\%$ of display reading
4	Oximeter	SpO2 and pulse rate measurement, OLED display, auto shut-off, battery operated, and fingertip design.
5	Nebulizer	Compressor-based, suitable for children, noise level $< 60$ dB, medication cup capacity $\sim 10$ ml.
6	BMI Calculator Machine	The BMI Machine Should have the Features: 1. Load cell based weight measurement 2. Ultrasonic based height measurement  <b>Specifications:</b>



		<ol style="list-style-type: none"> <li>1. Design should be using Micro controller</li> <li>2. Measurable Weight upto 150 Kg</li> <li>3. Measurable Height upto 210 cm</li> <li>4. Display -7 Segment Bright Red LED</li> <li>5. Self-Weight - 20 Kg Approx</li> <li>6. Built with rugged Metallic Structure</li> <li>7. Operating Power- 230v / 50hz Ac</li> </ol>
7	Health Monitoring Software	<p>A Health Monitoring System for school to be designed to track and improve the health, nutrition, and overall well-being of children. Here are the key features such a system should include:</p> <ol style="list-style-type: none"> <li>1. Child Health Tracking Growth Monitoring: Height, weight, BMI tracking with automated alerts for malnutrition.</li> <li>2. Digital Record Keeping &amp; Reporting  Cloud-Based Data Storage: Secure and centralized data management. Real-Time Data Entry via Web/Mobile App: Facilitates easy updates by school. Automated Reports &amp; Dashboards</li> </ol>

### 35. Innovative Learning Tools

**Scope of Work:** Provision of Humanoid Robot at 789 schools.

Detailed Specifications:

Sl. No.	Name	Specifications	Qty
1	Humanoid Robot	<ul style="list-style-type: none"> <li>• WMR</li> <li>• Minimum 3 Ft Height</li> <li>• High torque motors</li> <li>• Industry-grade wheels</li> <li>• Fixed hand</li> <li>• Mild steel Body</li> <li>• Powder coated with white and blue color</li> <li>• Wireless Controlled</li> <li>• OCU</li> <li>• Lead Acid Battery</li> <li>• Fixed Head</li> <li>• 12 Facial Expressions</li> <li>• On/Off Switch</li> <li>• Battery Level Indicator</li> <li>• Robot Battery Charger</li> </ul>	03

Note:

- Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.

### 36. Gamified Learning

**Scope of Work:** Lab should equip students with practical skills in interactive learning using game-based platforms, simulation tools, and digital content for hands-on engagement in concept reinforcement and skill development through gamified experiences. No. of Schools – 836.

#### Detailed Specifications:

S.No		Feature	Description
1	Gamified Learning Tool-Qty 1 per school	Chemistry Resource Pack	Explore elements, compounds, and chemical reactions. Conduct virtual experiments using a periodic table and lab tools.
		Custom Blocks for Educators	Special blocks to: Restrict movement, Preserve structures, Designate build zones.
		Lesson Library	Access to 600+ ready-to-teach lessons across subjects: STEM, History, Language Arts, Math, Climate Science, and more.
		AI and Cyber Safety Modules	Lessons on AI literacy, digital citizenship, and cybersecurity.
		3D Exporting	Export student creations for use in Remix 3D or other 3D modeling tools.



Multiplayer Collaboration	Supports up to 30 students in a single world without needing a separate server. Enables cross-platform play across Windows, macOS, iPad, and Chromebook. Ideal for group projects, team-based challenges, and esports programs.
Code Builder	Integrated coding environment supporting: Block-based coding (Make Code), JavaScript, Python. Students can press 'C' in-game to launch the coding interface.
Immersive Reader	Built-in tool that reads text aloud and translates it. Supports language learners and students with reading difficulties.
Classroom Mode	Companion app for teachers to: View a map of the world, Monitor student locations, Teleport students, Use a chat window for communication.
Assessment Tools	Camera and Portfolio tools allow students to document their work. Book & Quill lets students write reflections or reports in-game.
Non-Player Characters (NPCs)	Teachers can create NPCs to: Provide instructions, Share links to external resources, Guide students through lessons.



## 37. Drone Training

**Scope of work:** Supply of drone (Type 1 – 10 kits and Type 2 –10 kits) in 789 schools as per following specifications.

### Detailed Specifications:

S. No.	Product Name	Specifications	Snap
1	Nano Programmable Drone – Type 1 (Without Camera)	<ul style="list-style-type: none"> <li>• Ultralight DIY nano quadcopter drone</li> <li>• Size : 10X10cm motor to motor</li> <li>• All up weight: 50-90 grams</li> <li>• 4 motors, 4 propellers, flight controller with Wi-Fi Receiver</li> <li>• Rechargeable battery and wireless control</li> <li>• Used for basic drone programming and flight control exercises</li> <li>• Block/ Android based programming support for the beginners</li> </ul>	
2	Drone – Type 2	<p>Nano quadcopter drone extension ( with motor, propellers , battery and carbon fibre frame and without flight controller) to convert into a drone with 50 gram of payload and 14 mins of flight time.</p> <ul style="list-style-type: none"> <li>• Dimensions:20X20cms motor to motor</li> <li>• All up weight: 100-150 grams</li> <li>• Flight time: 14 mins</li> <li>• Compatible with 40X40 mm programmable flight controller</li> <li>• Include manual to assemble and fly</li> </ul>	

- Study Material

Activity books with step-by-step instructions for 8 to 10 practical experiments

Covers topics like basic flight mechanics, programming, and real-world applications of drones

- Training & Setup

Online/Offline training content module provided for teachers and students

Installation and demonstration videos of complete drone should be provided

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Note:

Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission

### 38. Mentorship Programme

The School Mentorship Program should be designed to support students' academic, social, and emotional development by training them by trained mentors. The program should aim to create a safe, inclusive, and supportive environment where students can build confidence, improve performance, and develop life skills. No. of Schools - 789

Deliverables:

Sr. No.	Topics to be covered	Qty
1	Quarterly lectures on the topics below: <ul style="list-style-type: none"><li>• Academic Support &amp; Study Techniques</li><li>• Life Skills (Time Management, Communication, Goal Setting)</li><li>• Career Awareness (STEM, vocational, entrepreneurship, government jobs)</li><li>• Socio-emotional Support</li><li>• Exposure to real-world professions and success stories</li></ul>	20
2	Mentorship program handbooks	20
3	Quarterly group activities and workshops physically in the school	4
4	Quarterly and annual progress logs and evaluation reports.	1

### 39. Science and Math Curiosity Programme

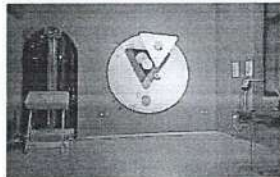




**Scope of Curiosity Lab – Science & Mathematics**



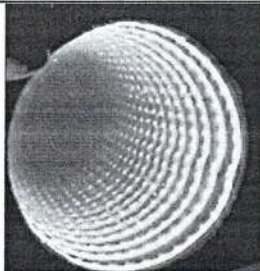
Science Curiosity Labs should be established in 836 schools to provide an interactive, hands-on, and concept-driven learning space where students can explore, question, and discover scientific and mathematical principles. These labs should include educational tools, DIY kits, models, visual aids, puzzles, and challenge-based learning zones that foster curiosity, analytical thinking, and problem-solving skills.

S.no	Tool Name	Specifications	Qty	Image
1	Light and Optics (Dark Room)			





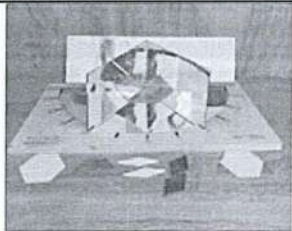




A	Dark Room Infrastructure	Creating a fully enclosed space with no external light leakage. Light blocking fabric curtains should be installed with rods for demonstrating optical experiments.	1 Unit	
B	Light and Optics kit	The Light and Optics Demo Kit should include a laser ray box, an adapter to power the laser ray box, 9 different lens shapes, 1 mirror, 2 arcs, and a manual.	2	
C	Laser optical Tank	Tank should be of 8" Dia x 14" height	1	
D	Colour Shadow	Dimension should be 90mm Dia 500mm depth, come in 3 Colour lights Red, Blue & Green for showing shadow.	1	
2	<b>Illusion and Visual Perception Zone</b>			
A	Funny Mirror	It should include wall-mountable or free-standing mirror. Suitable for regular classroom/lab, use; lightweight and impact-resistant	2	

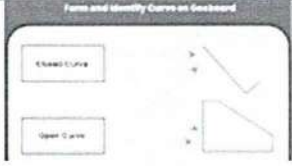
B	Persistence of Vision	The Zoetrope should be made on plastic moulded round container having slots on upper side, after slots 6mm border in container for better result. On bottom of container fixed barring should be there which is easily fixed in plastic moulded piler with plastic fly nut size 22mm Dia 18mm height (Accuracy +- 10%)	1	
C	Parrot in a cage.	This apparatus should feature a base supporting two rods, each connected by rotating discs. These discs can be turned using a wooden handle. A second wooden handle is provided for manoeuvring the entire apparatus. The top of the apparatus should include a card holder. It also comes with laminated square cards that display visual illusions.	1(6 key cards)	
D	Infinity Tunnel	An infinity tunnel model in a physics lab typically should consist of a series of parallel mirrors facing each other with a light source placed at one end. When an object is placed between the mirrors and the light is turned on, multiple reflections occur between the mirrors, creating the illusion of an endless tunnel of light. This phenomenon demonstrates concepts related to optics, such as reflection, refraction, and the behaviour of light waves. It can also serve as a visual representation of principles like infinity, recursion, and the nature of perception. Apparatus Should consist of plastic	2	

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		container having Outer Dia mini 100 mm and inner Dia 100 mm depth of container - 70mm.		
E	Corner Mirror	The corner mirror with math shapes is an educational tool combining a mirror with geometric shapes. It should allow users to explore reflections and symmetry while manipulating the shapes. This interactive learning aid facilitates understanding of spatial relationships, symmetry concepts, and geometric properties in a hands-on and visually engaging manner.	1	
F	Kaleidoscope	It should be made from high-quality, shatter-resistant acrylic, these lightweight mirrors are safe and built to last, making them perfect for entertainment venues or home use Dia-70mm and length of 300mm.	2	
3	<b>Mathematics Zone</b>			
	<b>Puzzle Challenging Zone</b>			
A	Tower of Brahma	Made up of 5mm multi-colour plastic/wooden material packed. Three spokes puzzle with five discs of different diameter. Base size 25cm X 08cm	2	
	Parking Puzzle	It should be made up of 5mm thick multi-colour wooden Size 16cm X 10cm X 2 cm high	2	
B	Pegboard Puzzle	It should be made up of 5mm multi-colour wooden, eleven spokes puzzle with five discs of black and five discs of white	2	

		colour of 1cm diameter and 5mm height. Every disc should have central hole of 1.5 mm diameter. Every Spoke made of wooden. Spoke's height out of base should be 6mm with 2mm diameter. Base size should be 30 cm x 6 cm		
C	Activity Worksheets for theorems	It should include laminated, reusable worksheets aligned to major geometry theorems (e.g., Pythagoras, Triangles, Circles).	1 Set	

Images are indicative.

## 40. Furniture for Students

**Scope of work:** Furniture for students should be supplied in 836 schools as per the following specifications. One hundred (100) student dual desks should be provided for classrooms in each school.

### Detailed Specifications:

S. No.	Description	Qty
1	Dual Desk manufactured in knockdown construction. The overall dimensions of desk will be W 1050mm x D 890mm x H 760/452mm	100

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission

## 41. Lab Equipment (Biology)

**Scope of Work:** Biology lab equipment should be supplied in 179 schools.

### Detailed Specifications:

Sl. No.	Name of Item	Complete Description	Qty
1	Kit Box	12 mm. thick wooden ply outer box size 350mm. x 320 mm x 250mm.depth with door. Inside the box three pocket one side and one for a microscope. locking system and handle in the top. painted in teak colors.	2

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2	Compound Microscope	ISI marked microscope: metal body, overall height approx. 320 mm, base 125 mm x 200 mm. Achromatic good quality lenses. Two Objectives: 10x & 40x. Two Eyepieces: 10x & 15x having coarse & fine adjustment knobs & fixed condenser.	1
3	Glass micro slides	Standard glass item 75mm. x 25mm x 1mm. thick.	2
4	Pasteur Pipette (Dropper)	Low Density Poly Ethylene (LDPE), capacity 03 mL.	2
5	Washing Brush	Soft hairs. Micro test tube brush.	2
6	Razor Blade	Stainless steel. standard size	2
7	Micro Test Tubes	Borosilicate glass, diameter 10 x 45 mm. height with rim,	2
8	Test tube holder	Length 200 mm, to hold the test tubes upto 10 mm dia.	2
9	Beaker 50 mL.	Borosilicate glass, capacity 50 with 10mL graduation.	2
10	Beaker 10 mL.	Borosilicate glass, capacity 10 mL, dia 25mm x 34 mm height	2
11	Magnifying Lens	Aluminum made two folding type first fold attached with convex lens. Folding size 32mm. x 22mm	2
12	Watch glass	Soda glass, diameter 50 mm.	2
13	Needles	Standard, length 110 mm, with plastic handle.	2
14	Forceps	Stainless steel, length 100 mm.	2
15	Blotting paper	Standard quality. In square shape 100 x 100mm.	2
16	Test tube rack	Perspex sheet size 100 mm X 27 mm X 12 mm. 04 holes to hold Micro Test Tubes.	2
17	Wash Bottle	LDPE, capacity 125 mL.	2
18	Surgical Scissor	125 mm, one prong blunt and other pointed, standard.	2

19	Glass rod	Solid glass rod dia 5mm. x 170mm.	2
20	Filter paper	Ordinary. Circular of dia 100 mm	2
21	Measuring Cylinder (10 mL)	High Density Poly Ethylene (HDPE), capacity 10 mL.	2
22	Cotton	Mini cotton role 50g.	2
23	Muslin cloth	Fine cotton cloth 150x150mm. Piece.	2
24	Painting brush	01 number size with Fine hair	2
25	Spring balance	A.B.S, open type, capacity 250 g graduation in steps of 10 g on one side on front face and Newton's on the other side on front face.	2
26	Measuring Pan with Holder	Plastic pan, dish type dia 80mm. with wire holder.	2
27	Laboratory Stand Assembly	G' clamp, 50 mm jaws, maximum opening 40 mm, with two locking screws and holes. HDPE MS rod dia 10 mm x 300 mm long, Boss	2
28	Steel rod Clamp Boss Head	head and laboratory clamp.	2
29	Assembly Boiling tube with cork fitted glass tube	Borosilicate boiling glass tube dia 25mm. x 150mm.length with rim. And assembled cork with bore dia 5mm.x 140mm.length glass tube fitted in the cork bore.	2
30	Tripod		2
31	SPIRIT LAMP		2
32	Test tube 20mL	Borosilicate boiling glass tube dia 25mm. x 150mm.length with rim.	2
33	W- Tube	Borosilicate glass, 2 mm thick x 8 mm dia having length of arm 75 mm with wide mouth in one arm.	2
34	Thread	Small real cotton thread	2
35	Petridish	Borosilicate dia 90mm. x 16mm. depth.	2



36	Cover glasses	Microscopic cover glass 18mm.	2
37	Thermometer (F0)	Specification: Small, durable glass or digital thermometer  Size: 15–20 cm length Typical Use: Suitable for experiments involving temperature measurements.	4
38	pH Paper (Acid & Base Both) (2 to 11)	Specification: Standard pH paper strips for measuring acidity and basicity.  Size: Each strip is typically 7x7 cm  Typical Use: Used in acid-base titrations, testing liquids, or soil testing.	4
39	Sieve Set	Specification: Set of sieves with varying mesh sizes (typically 10 cm to 20 cm in diameter). Size: Diameters of 10 cm, 15 cm, and 20 cm for common laboratory use.  Typical Use: For separating mixtures, such as in soil studies or when working with powders.	2
40	Reagent Stand	Specification: Sturdy, adjustable stand for holding glassware and chemical reagents.  Size: Approximately 30 cm in height  Typical Use: Holds test tubes, flasks, and other laboratory apparatus during experiments.	2
41	Light Binocular Microscope	Specification: Binocular microscope with adjustable magnification of 40x to 400x.  Size: Compact body with an arm length of 25–30 cm.  Typical Use: For biological studies such as cell examination, studying tissue samples, and microorganisms.	2
42	T.S. Blastula Mammalian	Specification: Transverse section of a mammalian blastula (a developing embryo).	4

		Size: Mounted on a standard glass microscope slide (7.5 x 2.5 cm). Typical Use: For studying early embryonic development in mammals.	
43	Leech	Specification: Preserved leech specimen for dissection or anatomy study.  Size: Typically around 5–10 cm in length, preserved in formalin. Typical Use: Used for studying the anatomy of invertebrates, including body structure and	4
44	Prawn	Specification: Preserved prawn specimen, typically dissected for anatomical study. Size: Length around 8–12 cm, preserved and mounted on a slide.  Typical Use: Used for studying arthropod anatomy, including its exoskeleton and organ systems.	4
45	Octopus	Specification: Preserved octopus specimen, typically dissected for studying morphology. Size: Average size is 10–15 cm, preserved in formalin or alcohol.  Typical Use: Used for morphological studies, including the study of its limbs, nervous system, and overall body structure.	4
46	T.S. Testes of Grasshoppers	Specification: Transverse section of testes from grasshopper. Size: Mounted on a standard glass slide (7.5 x 2.5 cm).  Typical Use: For studying reproductive organs and comparing them with other organisms.	4
47	T.S. Testes of Mice	Specification: Transverse section of testes from a mouse. Size: Mounted on a standard glass slide. Typical Use: Used to compare mammalian reproductive structures.	4



48	T.S. Ovary of Grasshoppers	Specification: Transverse section of ovary from a grasshopper. Size: Mounted on a standard glass slide.  Typical Use: For studying female reproductive anatomy of invertebrates.	4
49	T.S. Ovary of Mice	Specification: Transverse section of ovary from a mouse. Size: Mounted on a standard glass slide.  Typical Use: Used to study the ovary structure of mammals.	4
50	T.S. Blastula Mammalian	Specification: Transverse section of a mammalian blastula.  Size: Mounted on a standard glass slide. Typical Use: For studying embryonic development in mammals.	4
51	Different Stages of Mitosis & Meiosis Slide	Specification: Slide showing various stages of mitosis and meiosis. Size: Mounted on a standard glass slide. Typical Use: Used for studying cell division processes in biology classes.	4
52	Blood Corpuscles	Specification: Prepared slide showing different types of blood corpuscles (red and white blood cells, platelets).  Size: Mounted on a standard glass slide.  Typical Use: For studying the structure and types of blood cells under a microscope	4
53	Skeleton	Human skeletal system should be made of plastic of 2 ft height	2
54	Symbiotic association	Root of nodules of leguminous plant	2
55	Flash card modles	Homologus and analogous organ	2
56	Brain	Human brain 3D model should be fixed on a stable base of 240 x 240mm.	2

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✓

57	Heart	The model should have a plastic base measuring 4 x 4 inches, with a metallic rod that supports a detailed structure of the heart. It should illustrate the heart's internal anatomy, including its four chambers: the right atrium, right ventricle, left atrium, and left ventricle. The model also demonstrates how blood flows through these chambers and valves.	2
58	Excretory system	Excretory system should be on a base of size 30 x 12 inch	2
59	Human Nervous System	Human Nervous system should be fixed on wooden base with key card pasted on base of dimensions 36 x 12 inch	2
60	Plants & animal kingdom	Should Provide the Information	2
61	Eye model	A human eye model should be mounted on a plastic base of size 6"x 6" and should represent the internal structures of the human eye, including the lens, retina, and optic nerve.	2
62	Ear model	This model should have three different parts: the outer ear, the middle ear, and the inner ear mounted on a plastic base measuring 9.5 x 5.5. Height of the model should be at least 5.5 inches. The human ear model should demonstrate the anatomy of the ear and how it detects sound waves and converts them into electrical signals for the brain.	2
63	Mendelian chart	As per Room Size	2






## 42. Lab Equipment (Chemistry)

**Scope of Work:** Chemistry lab equipment should be supplied in 185 schools.

Detailed Specifications:

Sl. No.	Name of Item	Complete Description	Qty
1	Micro Test Tube	Borosilicate glass, diameter 10 x 45 mm height with rim	2
2	Test Tube Holder	Length 200 mm, to hold the test tubes upto 10 mm dia.	2
3	Test Tube Stand	Perspex sheet size, 100mm x 27mm x 12 mm height with four blind holes to hold micro test tubes dia 10mm.	2
4	Dropper with Rubber Bulb	Rubber bulb with 32mm x dia 6 mm. Glass tube, overall dropper size 125 mm.	2
5	Glass Rod and Stirring	Glass rod Dia 4 mm x 100 mm in length	2
6	Spatula	Overall size 104mm spoon size 9 x 7 mm. Stainless steel	2
7	Beaker (10 mL)	Borosilicate 10 mL with rim. dia 25mm x 34mm height.	2
8	Funnel	Borosilicate top dia. 40 mm.	2
9	Dry Cell Holder	Cell holder for 4 'D' type cells. Box outer size 135 mm x 75 mm x 35 mm. height with cover.	2
10	Torch Bulb with Holder	Screw type bulb holder with 3 V	2
11	Beaker (50 mL)	Borosilicate glass, capacity 50 mL with 10mL graduation.	2
12	Measuring Cylinder (10 mL)	Height density polyethylene (HDPE) capacity 10 mL	2
13	W- Tube	Borosilicate glass, 2 mm thick x 8 mm dia having length of arm 75 mm with wide mouth in one arm. ass	2
14	Tripod		2
15	Spirit Lamp		2
16	Laboratory Stand	MS rod Dia 10 mm x 375 mm long with base attach with G-clamp and Boss Head.	2
17	Litmus Paper	Red and Blue colors.	2
18	Watch Glass	Soda glass, Dia 50 mm x 2 mm thick.	2
19	China Dish	Bowl, outer diameter 70 mm / 75mm.	2
20	Magnet	Size 75 mm x 12 mm x 08 mm, red colour N and S pole mentioned Alnico.	2
21	Thermometer (Laboratory)	Glass, alcohol filled, -10° C to 110° C, graduation 1° C with card board/plastic cover and cotton at both ends.	2
22	pH Paper	pH 1-11, paper box containing, 10 booklets	2
23	Metals (Zn, Cu, Fe,	Strips, dimension 80 mm x 5 mm, x 1mm.	2
24	Emery Paper and Sand paper	A4 size sheet of each	2
25	Iron Nails	Length 50 mm	2
26	Fe- Filings and Zn dust	Packed in plastic container .	2
27	Filter paper	Ordinary. Circular of dia 100 mm	2
28	Micro Test Tube Brush	Plastic, Soft Hair, 120mm in length.	2
29	Dispensing Bottle	Low density poly ethylene, capacity 15mL dia 30mm. with screw cap and nozzle.	2

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30	Vials	Low density poly ethylene, 55mm. height x dia 15 mm.	2
31	Double mouthed flask	Borosilicate. Thickness 1.5 mm with one mouth dia 26 mm x 25 mm height (with rim) and outer dia of nozzle 06mm to 08 mm x 28 mm length. Bulb outer dia 50 mm with overall length 110 mm. As per sample	2
32	Measuring Cylinder	Plastic, transparent with built in base, 100 mL graduation (min 1 mL), marking with 10 to 100mL.	2
33	PIPETTE 25ML (BOROSILICATE)	Material: Borosilicate glass, Graduation: 0.1 ml	2
34	MEASURING CYLINDER 200ML	Material: Glass/Plastic, Graduation: 1 ml/0.5 ml	20
35	REAGENT BOTTLE 500ML	Material: Glass, Narrow neck, Stopper	20
36	CHROMATOGRAPHY PAPER	Material: High-quality cellulose paper	2
37	CHROMATOGRAPHY CHAMBER	Material: Glass/Plastic, Capacity: 500 ml–1 L	10
38	MORTAR & PESTLE	Material: Ceramic/Glass, Size: 50–200 ml	4
39	BUNSON BURNER/SPRITE LAMP	Material: Metal (Brass), Fuel: Gas	10
40	SPRITE	Material: Glass/Metal, Fuel: Alcohol	1LTR
41	TEST TUBE (BOROSILICATE)	Material: Borosilicate glass, Capacity: 10–100 ml	200
42	TOUNGE	Material: Stainless Steel	20
43	CHEMICAL BALANCE (ELECTRONIC)	Type: Electronic, Capacity: 2 kg, L.C. 0.1gm (100mg).	2
44	CONICAL FLASK 250ML	Material: Borosilicate glass, Volume: 250 ml	2
45	IGNITION TUBE	Material: Borosilicate glass	2
46	PH CHART	Type: Paper or digital	2
47	BURRETE 100ML (BOROSILICATE) WITH GLASS STOPPER	Material: Borosilicate glass, Capacity: 100 ml	10
48	THERMOSTATE	Type: Analog/Digital	4
49	DROPPER	Material: Glass/Plastic, Capacity: 1–3 ml	20
50	dil- Hydrochloric acid	Concentration: 0.1 M–6 M	500ML
51	conc- Hydrochloric acid	Concentration: ~12 M	500ML
52	dil- Sulphuric acid	Concentration: 0.1 M–6 M	500ML
53	conc- Sulphuric acid	Concentration: ~18 M	500ML
54	dil- Nitric acid	Concentration: 0.1 M–6 M	500ML
55	conc- Nitric acid	Concentration: ~14 M	500ML
56	Acetic acid	Concentration: 99–100%	500ML
57	Oxalic acid	Solid or aqueous solutions	500 G
58	Sodium hydroxide	Concentration: 0.1 M–6 M	500 G



59	Ammonium hydroxide	Concentration: 0.1 M–6 M	500ML
60	Potassium hydroxide	Concentration: 0.1 M–6 M	500 G
61	Ammonium acetate	Solid or aqueous solution	500 G
62	Ammonium chloride	Solid or aqueous solution	500 G
63	Ammonium carbonate	Solid	500 G
64	Ammonium molybdate	Solid	25G
65	Ammonium oxalate	Solid	500G
66	Ammonium sulphate	Solid	500G
67	Barium chloride	Solid or aqueous solution	500G
68	Bromine water	Concentration: ~0.2 M	500ML
69	Chlorine water	Concentration: Saturated solution	500ML
70	Copper sulphate	Solid or aqueous solution	250GM
71	Dimethyl glyoxime	Solid	50GM
72	Disodium hydrogen phosphate	Solid	500GM
73	Ferric chloride	Solid or aqueous solution	500GM
74	Iodine solution	Concentration: ~0.1 M	125ML
75	Lead acetate	Solid or aqueous solution	250GM
76	Lime water	Saturated solution of calcium hydroxide	500ML
77	Litmus solution (blue)	pH indicator	125ML
78	Litmus solution(red)	pH indicator	125ML
79	Methyl orange	Concentration: 0.1%	500ML
80	Potassium chromate	Solid or aqueous solution	250ML
81	Potassium dichromate	Solid or aqueous solution	500ML
82	Potassium ferrocyanide	Solid or aqueous solution	250GM
83	Potassium iodide	Solid or aqueous solution	100ML
84	Potassium permanganate	Solid or aqueous solution	250GM
85	Potassium thiocyanate	Solid or aqueous solution	125ML
86	Phenolphthalein	Concentration: 1%	125ML
87	Silver nitrate	Solid or aqueous solution	125ML
88	Starch solution	Concentration: ~1%	125ML
89	Sodium carbonate	Solid or aqueous solution	500GM
90	Sodium bicarbonate	Solid or aqueous solution	500GM
91	Sodium nitropruside	Solid or aqueous solution	50GM
92	Zinc dust	Fine powder	100GM
93	Copper turning	Solid	100GM
94	Ferrous sulphate	Solid or aqueous solution	500GM
95	Nessler's reagent	Prepared solution	100ML
96	Potassium nitrate	Solid	500GM

97	Calcium carbide	Solid	100GM
98	Ethanol	Concentration: 70–100%	250ML
99	Ferric chloride	Solid or aqueous solution	500GM
100	Sodium hydrogen carbonate	Solid or aqueous solution	500GM
101	Sodium nitrate	Solid	120GM
102	$\beta$ - Naphthol	Solid	50GM
10	Ceric ammonium nitrate	Solid or aqueous solution	50GM
104	2,4-DNP reagent	Prepared solution	50GM
105	Fehling's solution A	Prepared solution	500ML
106	Fehling's solution B	Prepared solution	250ML
107	Schiff's reagent	Prepared solution	125ML
108	Acetone	Liquid, Concentration: Pure	500ML
109	Tollen's reagent	Prepared solution	75ML
110	Molisch's reagent	Prepared solution	125ML
111	Iodine solution	Concentration: ~0.1 M	250ML
112	Glucose	Solid or aqueous solution	250ML
113	$\alpha$ - Naphthol	Solid	50GM
114	Benedict's solution	Prepared solution	500ML
115	Starch solution	Concentration: ~1%	125ML

### 43. Lab Equipment (Physics)

**Scope of Work:** Physics lab equipment should be supplied in 190 schools.

Detailed Specifications:

Sl. No.	Physics Tools	Specification	QTY
1	Cone Run Uphill	The set should include a wooden cone of Dia 3 inches, V shape wooden stand with dimensions 5x18 inch. The "Cone Runs Uphill" apparatus demonstrates the concept of the centre of mass. The conical shape of the double cone causes it to sink toward the wider end of the V-shaped rails, creating the illusion that it rolls uphill, even though its centre of mass is moving downward.	2
2	Wave Dynamic Model	The kit should include high-quality materials such as a wooden base, plastic balls with steel hooks, and string lengths for varied wave properties. Must have safety features and be easy to set up for repeated use.	1

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3	Reflection Physics Kit	This apparatus designed to demonstrate the reflection of light in a plane mirror. The setup should include a plane mirror mounted on a stable base, an adjustable light source, and a protractor or angle measuring device. The mirror's surface is precisely aligned to ensure accurate reflections. The light source allows for controlled incidence angles, and the protractor measures the angle of incidence and reflection.	1
4	Play with colour shadow	It should contain three laser lights, wires, and a power supply board, measuring 6 x 6 x 3 inches. This apparatus demonstrates how objects can cast shadows with varying colours based on the light they block.	1
5	Newton Cradle	Newton's Cradle Apparatus should consist of a wooden base measuring 6 x 6 x 1 inches, and a horizontal metal stand from which small balls with a diameter of 18 mm are suspended by strings, resembling a pendulum setup.	1
6	Fleming Left Hand Rule	This apparatus should feature a transformer-like setup with a vertical rod 6.5x5x7 inch and inbuilt power supply for easy use. Fleming's Left-Hand Rule tells the direction of the force exerted on a current-carrying conductor in a magnetic field. By using the rule, you can determine how the force acts on the conductor: your forefinger indicates the direction of the magnetic field, your middle finger shows the direction of the current, and your thumb points in the direction of the force or motion experienced by the conductor	1
7	Fleming Right Hand Rule	This apparatus should feature a transformer-like setup with a vertical rod 6.5x5x7 and inbuilt power supply for easy use. Fleming's right-hand rule describes the direction of force on a current-carrying conductor in a magnetic field: Point your thumb in the direction of the current, your index finger in the direction of the magnetic field, and your middle finger will show the direction of the resulting force.	1

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8	Hydro Dynamics	Hydrodynamics works by using the energy of moving or falling water to turn a turbine, which then drives a generator to produce electricity. This tool should consist of a wooden/plastic base (8.5 x 6.5 inches), two wooden/plastic poles, a 250 mL plastic beaker, a metallic turbine, a pipe, and a voltage output monitoring device.	2
9	Newton's 2nd Law	This tool should consist of a metallic rod with a spring wound around it attached to the plastic base (9 x 3 inches) and a plastic slider to push the spring. Newton's Second Law Apparatus is designed to demonstrate newton second law of motion which states that how the motion of an object is affected by forces.	1
10	Induced Current	The apparatus features a plastic base should be of 4 x 3 x 1 inches with a coil of insulated copper wire wound on a cylinder with terminals, two LED bulbs, and magnets indicating the north and south poles. This apparatus demonstrates the concept of induced current in a conductor due to a changing magnetic field. Induced current occurs when a conductor is exposed to a varying magnetic field, as described by Faraday's Law of Induction	1
11	Demagnetizing and Magnetizing Coil	The Demagnetizing and Magnetizing Coil apparatus should feature a solenoid wound with insulated copper wire and should mounted on a base (11.5 x 6 x 0.5 inches). It includes a switch and a metallic rod. Magnetizing coils generate a magnetic field through an electric current, aligning the magnetic domains within ferromagnetic materials to magnetize them. These coils are essential in devices such as transformers, electric motors, and magnetic recording equipment. Conversely, demagnetizing coils use alternating current (AC) to reduce or eliminate the magnetism of materials.	1

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12	Electric Bell	The Electromagnet and Magnetic Effects Apparatus should consist of a wooden base measuring 12 x 5 cm, which supports a standing wooden block measuring 20 x 12 cm. This block holds a coil of wire and a magnet, forming an electric circuit to demonstrate electromagnetism and the magnetic effects of current. When current flows through the coil, it generates a magnetic field, turning the coil into an electromagnet. The setup allows for experimentation with magnetic field strength, the interaction between electric currents and magnets, and the visualization of concepts such as electromagnetic induction and the relationship between current and magnetic fields.	1
13	Visual Illusion	This apparatus should feature a metallic base (5 x 5 x 13 inches) supporting two metallic rods, each connected by three rotating discs. These discs can be turned using a wooden handle. A second wooden handle is provided for manoeuvring the entire apparatus. The top of the apparatus includes a card holder. It also comes with laminated square cards that display visual illusions.	1
14	Electric Motor	The electric motor converts electrical energy into mechanical energy through electromagnetic principles. It should consist of a copper wire, a metallic case, a plastic base (4.5 x 4.5 x 4 inches) and a fan.	1
15	Ampere Law	It should include heavy brass/steel wire, one large compass, and three small compasses. To demonstrate Ampere's Rule, arrange the compasses around the wire, connect the wire to a power supply, and turn it on. The electric current will cause the compass needles to change direction.	1
16	Battery eliminator	It should be of size: 7.5 x 5 x 6 inches	1

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17	Ohm's law apparatus	For demonstration of Ohm's law. This completely self-contained apparatus has all the necessary components for performing experiments. It should have 4mm socket terminals provided for connecting the resistance. On varying the flow of current using the knobs provided the corresponding voltage reading can be had from the voltmeter. Circuit diagram should be printed on top of the enclosure operates on 220V AC. Plastic moulded box dimension – 240X165X37mm.	1
18	PN Junction Apparatus	Instrument should comprise of two DC Regulated Power Supplies 0-2VDC & 0-100 VDC, two dual range meters for voltage & current measurement, PN Junction Diodes mounted behind the panel, connections of Supplies, Meters & Diodes brought out at 4 mm Sockets. Plastic moulded box dimension -: 240X165X37mm	1
19	Newton's coloured disc	It should be mounted on stand with driving wheel, belt and handle export quality, The Newton color disk, also known as Newton's disk or Newton's color wheel, is an optical demonstration tool that illustrates the concept of color mixing and the nature of white light	1
20	Parallelogram apparatus	Parallelogram Law Apparatus consisting of a baseboard, pulleys on clamps, and hangers with slotted weights. Constructed with durable, rust-resistant materials suitable for repeated educational use.	1
21	Resonance Apparatus	All metal should be fitted on heavy cast iron base with two levelling screws. Pipe Dia 1". Resonance apparatus is used to study various phenomena such as the resonance of strings and air columns, the resonance in mechanical systems, and the behaviour of oscillating systems under different conditions	1
22	Spring Constant	The apparatus should consist of a spiral spring about 25mm in diameter and 10cm long. The upper end of the spring	2

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		is suspended from chuck nut and lower and is provided with small pointer which moves over a vertical wooden meter scale. The lower end is also provided with hook for carrying weights. All this setup is provided on a heavy metal base and with weights.	
23	Resistance box 500 ohm	Accurately calibrated Resistance Coils should be enclosed in a teak wood polished case with Heavy Bakelite top and rectangular brass blocks. 22X10X11 cm, A typical resistance box, should include the 500-ohm version, consists of a set of resistors that can be connected in series or parallel, allowing the user to select the desired resistance by adjusting switches or dials. These resistors are often precision-built to ensure that the resistance values are accurate and stable over time. The resistance values are usually marked on the box, and the user can choose specific values by flipping switches that connect various resistors together in the circuit.	2
24	Rheostat 12"	Slide wire rheostats are in a variety of resistance & different current carrying capacities 31 x 10 x 6 cm, rheostat is a type of variable resistor should be designed to adjust the resistance in an electrical circuit, allowing users to control the flow of current. It is commonly used in both educational and experimental settings for demonstrating and studying the relationship between voltage, current, and resistance in electrical circuits.	2
25	Vernier Callipers	Typically ranges from 0 mm to 150 mm (6 inches), though larger callipers can measure up to 300 mm, 600 mm, or more. Should be durable and resistant to rust and wear. Lightweight but less durable (for lower precision applications), Vernier callipers are precision measuring instruments used to measure the length, width, depth, and internal and external dimensions of an object with high accuracy.	2

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26	Screw Gauge	Brass Body should be with steel screw of 0.5 mm pitch, thimble with ratchet stop, range 0 to 25 mm, reading to 0.01 mm, in plastic pouch, a screw gauge is a highly accurate and reliable tool used for measuring small dimensions such as the diameter or thickness of objects. With its finely threaded screw and precise scales, it provides measurements with great accuracy, often to the nearest hundredth of a millimetre.	2
27	Spheres set of 6	Laboratory Grade should have set of six metal spheres or pendulum bobs. List of Metals should include: one piece each of brass, aluminium, copper, zinc, iron, and lead.	2
28	Prism	Glass prism, A prism is a transparent optical object, should be typically made of glass, with flat, polished surfaces that are angled to each other. The most common type of prism is the triangular prism, which has two triangular bases and three rectangular sides	2
29	Half meter scales	Should be made in good quality wood, 1/2 meter, graduated in centimetres and millimetres, one edge reading 0 to 50	5
30	Meter scales	A meter scale should have 100 divisions, with each division being 10 centimetres. Each centimetre is further divided into 10-millimetre units. A meter scale can measure the length and distance of different items up to 1 millimetre material wooden.	5
31	Galvanometer	For D. C. measurements, Scale 35-0-35. For D.C. use only, with a permanent magnet, spring-controlled movement, jewelled bearings, hard polished pivots, and knife edge pointer. Each meter should be mounted on a plastic/acrylic stand with color-coded terminals	2
32	Voltmeter	The word 'voltmeter' is an abbreviation for the word 'voltmeter meter' Volt, A voltmeter is an essential instrument used to measure the electrical potential difference, or	2

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		voltage, between two points in an electrical circuit	
33	Ammeter	An ammeter is an instrument for measuring the current flowing through a live circuit. The word 'ammeter' is an abbreviation for the word 'ampere meter' 5 amp,	2
34	Plug keys 1 Way	One way copper plug key switch should include two, 4mm terminals, and one removable plug (with plastic guard). Fitted on a sturdy base. Useful in classroom physics experiments and provides an interesting way to complete a circuit in electrical demonstrations. Base measures 3" x 2".	2
35	Plug keys 2 way	Two-way copper plug key switch should include two, 4mm terminals, and one removable plug (with plastic guard). Fitted on a sturdy base. Useful in classroom physics experiments and provides an interesting way to complete a circuit in electrical demonstrations. Base measures 4" x 2".	2
36	Concave lens	20FL, A concave lens, also known as a diverging lens, is a type of optical lens that should be thinner at the centre than at the edges. It is characterized by its ability to diverge light rays that pass through it, causing them to spread apart.	5
37	Convex lens	20FL, A convex lens, also known as a converging lens, is an optical lens that should be thicker at the centre than at the edges. It is designed to converge (bring together) light rays that pass through it. Convex lenses are typically made of transparent materials like glass or plastic and are widely used in optical instruments such as eyeglasses, microscopes, cameras, and telescopes.	5
38	Concave mirror	Concave mirrors reflect light inward to one focal light. Therefore, they are mostly used to focus light. A concave mirror should show different image types depending on the distance between the mirror and the object, A concave mirror is a curved mirror that has an inward-curved reflecting	5

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		surface, resembling the shape of a spoon.	
39	Convex mirror	Convex mirrors always form virtual, erect, and diminished images, regardless of the object's position. They are commonly used in applications requiring a wide field of view, such as rear-view mirrors and security mirrors. A convex mirror should be a type of curved mirror whose reflecting surface is outwardly curved, resembling the shape of the exterior of a sphere.	5
40	Plane mirror	A plane mirror is a mirror should be flat (planar) reflective surface, smooth mirror with a reflective surface that forms images by the reflection of light. The surface of a plane mirror should typically made of glass or another transparent material that has been coated with a highly reflective material, such as silver or aluminium, to create a clear, sharp reflection.	5
41	Glass slab	A transparent glass slab with a ray of light falling on it makes a normal shift in optics. The surface of the glass, as well as all materials, is not perfectly flat and smooth; 100 x 60 x 18mm, a glass slab is a fundamental tool in optics and physics, providing a simple yet effective way to explore the behaviour of light as it passes through different media.	2
42	Magnet kit	A magnet kit should be collection of various types of magnets and related tools designed to help demonstrate and explore the principles of magnetism in physics. These kits are commonly used in educational settings, such as schools or science labs, to help students understand magnetic fields, forces, and the behaviour of magnetic materials.	1
43	Commutators	A commutator should be a rotary electrical switch in certain types of electric motors and electrical generators that periodically reverses the current direction between the rotor and the external circuit. It consists of a cylinder composed of multiple metal	1

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		contact segments on the rotating armature of the machine.	
44	Drawing board	12"x18" wooden, the drawing board in a physics lab should be typically made of smooth, durable materials like wood, drawing board is often part of the setup when creating technical diagrams or schematics for experiments in mechanics, optics, electromagnetism, and other branches of physics.	1
45	Slotted weight	100 g	2
46	V - stand (lens holder)	A V-stand (lens holder) should be a wooden stand designed to securely hold lenses for optical experiments. It has an overall size of 50x65x110 mm, making it stable and durable. The stand is ideal for supporting convex or concave lenses during refraction and focal length studies. Its wooden construction ensures minimal interference with optical observations.	2
47	Plano convex lens	A Plano convex lens should be a transparent glass lens with one flat and one convex surface. It is primarily used to focus or converge light beams in optical instruments. The lens is made of high-quality glass, ensuring clarity and minimal aberration. It plays a crucial role in experiments related to focal length and image formation.	1
48	Semi-circular glass slab	A semi-circular glass slab should be a transparent optical component made of high-quality glass. It is used in experiments involving refraction, total internal reflection, and light deviation. The curved surface allows controlled bending of light rays, making it essential for studying critical angles. Its glass construction ensures durability and accuracy in optical studies.	2
49	Lens holder	A lens holder should be a plastic stand designed to securely hold optical lenses in position. It has an overall size of 120x35x75 mm, making it compact and easy to use. The holder provides a stable base for lenses used in refraction and reflection experiments. Its plastic	4

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		material is lightweight yet sturdy for regular lab use.	
50	Periscope	A periscope is an optical instrument should be made of plastic with a diameter of 30 mm and a length of 265 mm. It allows users to observe objects beyond their direct line of sight using mirrors or prisms. It is commonly used in physics experiments to demonstrate light reflection and image formation. The plastic body makes it lightweight and easy to handle.	1
51	Kaleidoscope	A kaleidoscope is an optical device should be made of plastic with a 42 mm diameter and 210 mm length. It contains multiple mirrors that create symmetrical patterns when viewed through one end. It is used in physics experiments to study multiple reflections and symmetrical image formations. Its durable plastic construction ensures long-term usability.	2
52	Clamps	A universal clamp a laboratory tool should be made with a metal rod of 9 mm diameter. It is used to hold various lab equipment, such as test tubes, burettes, or thermometers, during experiments. The clamp provides a secure grip, preventing accidental movement or spillage. Its durable metal construction ensures longevity in laboratory settings.	5
53	Electric Generator Model	An electric generator model is a dynamo model should be fixed on a plastic base measuring 220 x 140 x 150 mm. It demonstrates the conversion of mechanical energy into electrical energy through electromagnetic induction. The model should include coils, magnets, and a rotating handle for manual operation. It is widely used in physics experiments to study electricity generation.	1

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54	Magnetic compass big	A magnetic compass (big) is a navigation and measurement tool should be with a 70 mm diameter. It contains a magnetic needle that aligns with Earth's magnetic field, indicating direction. It is used in experiments related to magnetism and Earth's geomagnetic field. The large size enhances readability for precise measurements.	2
55	Copper wire 24 gauge	A copper wire (24 gauge) is a conductive wire should wound on a plastic reel. It is commonly used in electrical circuits, resistance experiments, and electromagnetism demonstrations. The thin gauge allows flexibility while maintaining conductivity. The plastic reel helps in easy storage and handling.	10m
56	Iron fillings powder	An iron fillings powder should come in a 250 g pack, used primarily for visualizing magnetic field lines. It is sprinkled around magnets to observe the pattern of magnetic force. The fine particles react instantly to magnetic fields, making it a useful tool in magnetism studies. The sealed pack ensures safe storage and easy application.	1
57	Series combination of resistors (set)	A series combination of resistors set should be a circuit with LEDs fixed on a plastic base measuring 185 x 120 mm. It should demonstrate how resistors connected in series share voltage and affect current flow. The built-in battery holder and connection leads allow easy setup. It is essential for understanding Ohm's Law and electrical resistance concepts.	1
58	Parallel combination of resistors (set)	A parallel combination of resistors set should be a circuit with LEDs mounted on a plastic base of 185 x 120 mm. It illustrates how resistors in parallel provide alternative current paths, reducing overall resistance. The setup includes a battery holder and connecting leads for easy experimentation. It is crucial for	1

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		studying current distribution and circuit behaviour.	
59	Multimeters	A digital multimeter is an electronic measuring tool used for physics and home laboratory applications. It should have a compact size, measuring 5 inches tall, 2.75 inches wide, and 1 inch long. The device includes testing leads for measuring voltage, current, and resistance. It is a versatile tool for diagnosing electrical components.	1
60	Copper plate (electroplating)	A copper plate (electroplating set) consists of a plastic container with an outer diameter of 105 mm, an inner diameter of 100 mm, and a depth of 70 mm. It comes with copper and aluminium electrodes for electrolysis experiments. The setup demonstrates the process of water decomposition into oxygen and hydrogen gas using electric current. A plastic cap holds the electrodes in place, ensuring accuracy.	1
61	Calorimeter	A wooden calorimeter is a heat measurement device with a 95 mm square block. It is used in experiments related to heat transfer, specific heat capacity, and thermal equilibrium. The insulated wooden construction minimizes external heat loss. It is an essential tool in thermodynamics studies.	2
62	Clinical thermometer	A clinical thermometer is a device used to measure the temperature of the human body.	2
63	Celsius thermometer	A Celsius thermometer, also known as a laboratory thermometer, is used to measure temperatures in scientific experiments and general environments.	1
64	Helical Spring (Slinky)	A helical spring (Slinky) is a flexible coil with a 2-inch diameter that can expand up to 10 meters. It is used in physics experiments to demonstrate wave motion, oscillations, and elasticity. The spring provides a visual representation of transverse and longitudinal waves. Its durable metal	2

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		construction ensures long-lasting performance.	
65	Tuning Fork (Box)	Tuning fork (box) is a metal instrument used to produce a fixed sound frequency when struck. It is commonly used in physics experiments related to sound waves, resonance, and vibrations. The tuning fork should come in a protective box for safe storage. Its accurately calibrated prongs ensure consistent frequency output.	1
66	Gold leaf electroscope	Electroscope with Metal Frame	1
67	AC DC Dynamo	An AC-DC dynamo is an electrical generator model should be fixed on a plastic base of 220x140x150 mm. It illustrates the principles of alternating and direct current generation. The model includes a hand crank for manual operation. It is widely used in physics laboratories for electromagnetism demonstrations.	1
68	Inclined plane	A wooden inclined plane is a physics apparatus should be of 4-inch base, used to study motion, friction, and mechanical advantage. It demonstrates the effects of inclined surfaces on rolling or sliding objects. The smooth wooden surface reduces unwanted resistance. It is essential in mechanics experiments.	2
69	Battery holders	A battery holder is a compact device designed to hold two battery cells securely. It ensures proper electrical connections in circuit experiments. The holder prevents accidental disconnections during testing. Its durable plastic construction makes it a reliable lab tool.	2
70	Overflow jar	An overflow jar is a plastic container should be of diameter 50 mm and a height of 120 mm. It is used in fluid mechanics experiments to measure displaced liquid volume. The container allows accurate water displacement studies. The plastic material makes it lightweight and durable.	10

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71	Electric switches	An electric switch is an open model designed to help students understand how a switch operates. It should be mounted on a plastic base of size 75x50mm. The switch demonstrates the basic principle of opening and closing an electrical circuit. It is widely used in physics experiments related to electricity and circuits.	250g
72	Spring balance	A tubular spring balance should be of 1-inch diameter and 6-inch length. It is used to measure force or weight in Newtons or grams. The balance consists of a calibrated spring inside a transparent casing. It is commonly used in physics experiments to study force, mass, and Hooke's law.	1
73	Optical Fibre Model	An S-type acrylic optical Fiber model designed with a laser light system. It helps demonstrate how optical Fibers transmit light through total internal reflection. The model should be of 8 inches in length and is widely used in physics and telecommunications studies.	1
74	Electronic weighing machine	A digital weight machine used for precise measurement of mass. It is commonly used in physics and chemistry experiments requiring accurate weight calculations. The machine features an easy-to-read digital display and a stable weighing platform.	1
75	Spirit lamp	A round spirit lamp should be of 3-inch diameter used as a heat source in laboratories. It is fuelled by alcohol and produces a steady flame for heating chemical solutions and conducting experiments. The lamp comes with a metal lid to extinguish the flame safely.	1
76	Lactometer	A lactometer is a hydrometer designed to measure the purity and density of milk. It should consist of a cylindrical glass tube with a weighted bottom to ensure proper floating. The scale on the lactometer indicates the specific gravity of milk. It is widely used in dairy industries and laboratories for milk quality analysis.	1



77	Pascals law apparatus	A hydraulic press model demonstrating Pascal's law, which states that pressure applied to a confined fluid is transmitted equally in all directions. It should consist of two different-sized plastic syringes fixed on a base of size 6"x4". This apparatus is used in fluid mechanics experiments.	4
78	Cells 1.5 v	A cell (1.5V) is a small, portable energy source used in basic electrical circuits. It should provide a steady voltage output of 1.5 volts, suitable for powering small devices and experimental setups. The cell has two terminals, positive and negative, for easy circuit connections. It is commonly used in school physics experiments.	4
79	Cells 9V	A cell (9V) is a rectangular battery that supplies a stable voltage of 9 volts for circuit applications. It is used in electrical experiments, multimeters, and small electronic devices. The battery features snap connectors for secure and easy attachment. It provides a long-lasting power source for various scientific applications.	6
80	Rechargeable Cells	A rechargeable cell is a reusable energy source that can be charged multiple times. It is available in different voltage ratings, commonly 1.2V or 9V, depending on the application. Rechargeable cells are environmentally friendly as they reduce battery waste. They are used in physics experiments and electronic projects requiring a sustainable power source.	1
81	Human eye model	A human eye model should be mounted on a plastic base of size 6"x6". It represents the internal structures of the human eye, including the lens, retina, and optic nerve. This model is used in biology studies to explain vision and eye anatomy.	1
82	Lattice crystal structure of NaCl	Demonstrating the crystal structure of sodium chloride (NaCl). This model should come with transparent casing and helps students understand the arrangement of ions in a cubic lattice.	2

83	Rectangular glass plates	A rectangular glass plate is a transparent optical component used in reflection and refraction experiments. Should be made of high-quality glass with smooth, polished edges. The plate helps demonstrate the principles of light transmission and angle measurement. It is an essential tool in optics studies.	2
84	Cylinders (for vernier callipers)	A cylindrical metal rod should be of 12mm diameter and 35mm length. It is used with Vernier callipers to demonstrate precision measurement techniques. This helps in physics experiments related to length and diameter measurement.	1
85	Weighing box (physical balance)	A physical weight box containing different weights ranging from 10g to 100g. It is used for calibration and accurate mass measurement in physics and chemistry experiments. The weights are made of durable metal for precision.	4
86	Split cork	A split cork should be of size 7 No, used for holding glass tubes, thermometers, or other cylindrical objects in place. It provides a secure grip and prevents breakage during experiments. Commonly used in physics and chemistry labs.	1
87	Cotton thread	A cotton thread is a fine, flexible fibre used in pendulum experiments and force demonstrations. It is lightweight and does not significantly affect the motion of objects. The thread is used in various physics experiments, including tension and rotational motion studies. It is an essential lab supply for mechanical experiments.	2
88	Stop watches	A stopwatch is a digital or analog timing device used for measuring time intervals accurately. It has a start, stop, and reset function for precise time recording. The stopwatch is essential in experiments involving motion, speed, and reaction time. Its portable design makes it convenient for use in physics laboratories.	5



89	Quill tubes	A quill tube is a small glass tube should be measuring about 5 inches in length. It is used in physics and chemistry experiments for gas collection and fluid transfer. The tube's thin structure allows easy observation of liquid movement. Its transparent material ensures clear visibility during experiments.	1
90	Strong Thread (nylon)	A nylon thread reel used in force and motion experiments. It is stronger than cotton thread and provides durability for repeated use. Commonly used in physics demonstrations.	4
91	Thin mirror strip (Concurrent forces)	Should be of 1"X 4" in size.	1
92	Specific gravity bottle (50ML)	A small glass bottle with a fixed volume of 50ml, used to determine the specific gravity of liquids. It features a stopper with a capillary hole for accurate measurement. Commonly used in chemistry labs for density calculations.	2
93	Capillary Tubes (surface tension)	Thin glass tubes used to study surface tension and capillary action of liquids. These tubes help demonstrate how liquids rise in narrow spaces due to cohesive and adhesive forces.	1
94	Spirit level	A plastic spirit level used to determine horizontal alignment. It should contain a liquid-filled tube with an air bubble that indicates whether a surface is level. It is widely used in physics experiments related to equilibrium.	4
95	Cork to hold capillary tube	A small cork designed to hold capillary tubes securely in place during experiments. It prevents breakage and ensures stability while measuring liquid behaviour.	1
96	Drawing pins (boxes)	A box of metal drawing pins used to fix paper, charts, or sheets to surfaces for experiments and presentations. These are commonly used in physics and general lab work	2
97	Rubber Hammers	A rubber hammer should be of 10-inch length used in experiments requiring controlled force application. It is used in physics for impact and resonance	1

		studies. The rubber head prevents damage to delicate surfaces.	
98	Connecting Wires	A set of connecting wires should be with banana plugs on both ends Used for creating electrical circuits and making secure connections in experiment	1
99	High Resistance	A high resistance component is an electrical resistor with a large resistance value, housed in a plastic box should be of 90x90 mm. It is used in electrical circuits to limit current flow and study Ohm's Law. The resistor provides a stable resistance for experimental accuracy. It is a fundamental component in electronics and circuit analysis.	1
100	Meter Bridge Set	A meter bridge set is a wooden apparatus should be of 4 inches by 1 meter, used in electrical experiments to determine resistance using the Wheatstone bridge principle. It includes a metal wire, scale markings, and connecting terminals. The setup is essential for studying resistance variation and circuit balancing. Its sturdy wooden frame ensures durability.	2
101	Transistor Set	A transistor set is a circuit board mounted with NPN and PNP transistors, fixed on a plastic base of 6x4 inches. It is used to study transistor characteristics, amplification, and switching properties. The setup helps in understanding semiconductor behaviour. It is an essential tool in electronics and circuit analysis.	1
103	Right-Hand and Left-Hand Rules	45cm x 60cm, should hanging chart with metal sticks at top and bottom, 300 GSM Laminated Paper, Multicolour printing.	1
104	Electromagnetic Spectrum	45cm x 60cm, should be hanging chart with metal sticks at top and bottom, 300 GSM Laminated Paper, Multicolour printing.	1
105	Friction: Types and Examples	45cm x 60cm, should be hanging chart with metal sticks at top and bottom,	1



		300 GSM Laminated Paper, Multicolour printing.	
106	Circular Motion	45cm x 60cm, should be hanging chart with metal sticks at top and bottom, 300 GSM Laminated Paper, Multicolour printing.	1
107	Calendar of scientist	45cm x 60cm, should be hanging chart with metal sticks at top and bottom, 300 GSM Laminated Paper, Multicolour printing.	1
108	Dispersion of Light (Prism)	45cm x 60cm, should be hanging chart with metal sticks at top and bottom, 300 GSM Laminated Paper, Multicolour printing.	1
109	Human Eye and Defects of Vision	45cm x 60cm, should be hanging chart with metal sticks at top and bottom, 300 GSM Laminated Paper, Multicolour printing.	1
110	Vector and Scalar Quantities	45cm x 60cm, should be hanging chart with metal sticks at top and bottom, 300 GSM Laminated Paper, Multicolour printing.	1
111	Magnetic Field Lines Around Bar Magnet	45cm x 60cm, should be hanging chart with metal sticks at top and bottom, 300 GSM Laminated Paper, Multicolour printing.	1

#### 44. Science lab establishment with all equipment's (Physics)

**Scope of Work:** Supply of Physics lab along with previously mentioned equipment (Section no 43) in 599 schools with test benches of 2 as presented below in each school with chairs.

Sl. No.	Item Name	Qty	Unit
1	Modular Island Workbench consisting of 4 NOS 16/6 Amp Electrical switches and sockets with SS top. Material of construction: Made of pipe frame structure cross section 30*30*1.2 mm for pipe frame with CRCA Material. Interior & Exterior Finish with 60-70 microns Powder - coated finish.  Table Dimension- 1800*1200*900mm Reagent rack - 900*300*600mm CRC Sheet-20 Gauge	2	SET

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2	Laboratory Stool without back: Made in Powder coated MS, SS Table top for the Seat, Round Ring for Leg Rest, 360 Degree Revolving & Lift for Up-Down Movement.	15	Pcs
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#### 45. Science lab establishment with all equipment's (Chemistry)

**Scope of Work:** Chemistry labs should be established in 604 schools with all necessary equipment as mentioned in previous related section ( section no : 42) along with Testing Tables and chairs as presented below.

Sl. No.	Item Name	Qty	Unit
1	Modular Island Workbench is without base cabinets with 1 double tier reagent rack consisting of 16/6 Amp electrical switches and sockets with SS Table Top  Material of construction: Made of pipe frame structure cross section 30*30 * 1.2 mm for pipe frame with CRCA material. Interior & Exterior Finish with 60-70 microns powder - coated finish.  Table Dimension - 1800*1200*900mm Reagent rack - 900*300*600mm CRC Sheet 22 Gauge	2	SET
2	Supply and installation of wash basin	2	Pcs
3	Laboratory Stool without back: Made in Powder coated MS, SS Table top for the Seat, Round Ring for Leg Rest, 360 Degree Revolving & Lift for Up-Down Movement.	10	Pcs

#### 46. Science lab establishment with all equipment's (Biology)

**Scope of Work:** Biology labs should be established, equipped with all necessary equipment as mentioned in previous section ( section no 41) and the facilities in each schools with 2 units on a single Table as presented below.

Detailed Specifications:

Sl. No.	Item Name	Qty	Unit
1	Modular Island Workbench is without base cabinets with 1 double tier reagent rack consisting of 16/6 Amp electrical switches and sockets with SS Table Top  Material of construction: Made of pipe frame structure cross section 30*30 * 1.2 mm for pipe frame with CRCA material. Interior & Exterior Finish with 60-70 microns powder - coated finish.  Table Dimension - 1800*1200*900mm Reagent rack - 900*300*600mm	2	SET



	CRCA Sheet 22 Guage		
2	Laboratory Stool without back: Made in Powder coated MS, SS Table top for the Seat, Round Ring for Leg Rest, 360 Degree Revolving & Lift for Up-Down Movement.	15	Pcs

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission

#### 47. Dedicated furniture for library

**Scope of work:** Library furniture should be supplied in 511 schools.

Sr. No.	ITEM	Qty
1	Computer table	10
2	Chair	20
3	Book Shelves	1
4	Storage Unit	2
5	News paper Table	2

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.

#### 48. Colourful sorting dustbins

**Scope of Work:** Colourful sorting dustbins painted with interesting characters for waste segregation should be supplied in 836 schools. Ten (10) dustbins should be provided per school.

##### DETAIL SPECIFICATIONS

S. No.	Description	Specifications
1	Capacity	50-60 L
2	Material	PPCP
3	Wheel Material	Solid Rubber
4	Total Weight	5 Kg

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission.

#### 49. Sanitary Pads

**Scope of Work:-** High-quality sanitary pads suitable for adolescent girls should be provided, ensuring adequate absorbency and comfort for regular to heavy flow.

- Ensure pads meet safety standards, using hypoallergenic, chemical-free materials.
- Provide hygienically sealed packaging with clear labelling.

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ITEM	Specs
Sanitary Pad	Total 12 packs in a year. Each pack of 5 pads.

Note: Bidder shall need to submit the samples for all above line items (1 unit each) on or before tender submission

Note: specifications may vary +/- 10% variation (applicable from S.no 1 to 49)

## **50. Computer Instructor:**

### **50.1. Scope of work:**

- i. The bidder/agency should deploy one computer instructor per school in all **836 schools**.
- ii. The Service Level Agreement with the successful agency/bidder will be signed with Bihar Education Project Council, Patna and on behalf of the BEPC, Patna, for the day to day execution of the contract.
- iii. Minimum educational qualification: Bachelor's degree in Computer Science, Information Technology, or a related field, or a Diploma in Computer Engineering/IT with at least 2 years of relevant experience.
- iv. Proficiency in operating systems (Windows 11 Professional, Linux), open-source office software, and basic networking.
- v. Fluency in English and Hindi for communication and training purposes.

### **50.2. Experience:**

- i. At least 1-2 years of experience in teaching computer education or managing ICT infrastructure in educational institutions or similar settings.
- ii. Experience in handling hardware troubleshooting, software installation, and basic network configuration is preferred.

### **50.3. Minimum Salary & other conditions for Computer instructor:**

- i. The minimum gross wages/salary and related statutory compliance of computer instructor shall be as per the minimum wages act applicable in the State.
- ii. The bidder shall ensure compliance with all applicable laws, local and Central, including all labour laws like ESI, EPF, Minimum Wages Act,





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Bihar Shops & Establishments Act, Contract Labour (Regulation and abolition) Act 1970, Payment of Bonus Act etc. and shall keep BEPC indemnified and harmless in case of any action for violation by the bidder of any of the applicable laws. For all purposes the persons deployed will be employees of the bidder and they will have no relation whatsoever with BEPC. The bidder shall be responsible for furnishing all such information/documents to BEPC in this regard as may be required by it from time to time. Furthermore, the bidder shall be responsible to furnish self-attested copies of all returns/challans filed by the bidder in the office of ESI, EPF, Minimum Wages Act, Contract Labour etc. on monthly basis to the BEPC, in case, the bidder fails to submit or not willing to submit the copies of returns, BEPC shall be entitled to stop the payments till the submissions of the returns.

- iii. Computer Instructor is allowed to take 16 leave per year. In case the resource is absent for more than 10 days in any month, the bidder needs to arrange an alternative resource failing which a penalty of Rs. 250/- per working day would be levied on the bidder for each day exceeding 10 days the Vocational trainer is absent.

**50.4. Responsibilities of Computer Instructor:**

- i. Ensure the effective installation, commissioning, and maintenance of digital hardware, software, and peripherals supplies.
- ii. Provide computer education services and training to students and teachers.
- iii. Monitor and manage the operational efficiency.
- iv. Support the integration of digital resources and e-content as provided by the Department.
- v. Maintain a web-based online project monitoring system for tracking usage and performance.

## **51. Vocational Trainer:**

### **51.1. Scope of work:**

- i. The Bidder/Agency should deploy Vocational trainer in the ratio of 1:5, one vocational trainer shall monitor 5 schools.
- ii. Total no of 158 Vocational trainers are to be deployed.
- iii. Vocational trainer should cover the allotted schools minimum 2 times in the week.
- iv. The Service Level Agreement with the successful agency/bidder will be signed with Bihar Education Project Council, Patna and on behalf of the BEPC, Patna, for the day to day execution of the contract.
- v. The minimum qualification of the Vocational trainer should be Graduation with at least 1 year Diploma Course in ITI/Computer/IT and good communication skills.

### **51.2. Minimum Salary & other conditions for Vocational trainer:**

- i. The minimum gross wages/salary and related statutory compliance of Vocational trainer shall be as per the minimum wages act applicable in the State.
- ii. The bidder shall ensure compliance with all applicable laws, local and Central, including all labour laws like ESI, EPF, Minimum Wages Act, Bihar Shops & Establishments Act, Contract Labour (Regulation and abolition) Act 1970, Payment of Bonus Act etc. and shall keep BEPC indemnified and harmless in case of any action for violation by the bidder of any of the applicable laws. For all purposes the persons deployed will be employees of the bidder and they will have no relation whatsoever with BEPC. The bidder shall be responsible for furnishing all such information/documents to BEPC in this regard as may be required by it from time to time. Furthermore, the bidder shall be responsible to furnish self-attested copies of all returns/challans filed by the bidder in the office of ESI, EPF, Minimum Wages Act, Contract Labour etc. on monthly basis to the BEPC, in case, the bidder fails to submit or not willing to submit the copies of returns, BEPC shall be entitled to stop the payments till the submissions of the returns.

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- iii. Vocational Trainer is allowed to take 16 leave per year. In case the resource is absent for more than 10 days in any month, the bidder needs to arrange an alternative resource failing which a penalty of Rs. 250/- per working day would be levied on the bidder for each day exceeding 10 days the Vocational trainer is absent.

51.3. **Responsibilities of Vocational Trainer:**

- i. **Program Oversight and Monitoring:** supervise the implementation of vocational education programs across 5 designated schools, ensuring adherence to curriculum, schedule, and training quality.
- ii. **Trainer Coordination:** regularly coordinate with school-level Vocational teachers to track lesson completion, classroom delivery standards, and daily attendance.
- iii. **Quality Assurance:** Conduct periodic classroom observations, review training material usage, and verify skill lab functionality to ensure consistency and quality across all schools.
- iv. **Assessment and Evaluation Support:** Facilitate the organization of formative and summative assessments and ensure standardized evaluation practices across the cluster.
- v. **Reporting and Documentation:** Maintain consolidated reports for all assigned schools, including trainer performance, student participation, assessment records, and placement data.
- vi. **Industry Linkage Facilitation:** Identify and coordinate with local industries for guest sessions, field visits, internships, and placement opportunities for students from all five schools.
- vii. **Capacity Building:** Organize refresher training, knowledge-sharing sessions, and handholding support for school-level vocational teachers.
- viii. **Stakeholder Engagement:** Liaise with school principals, nodal officers, and local education authorities to ensure administrative and logistical support for the vocational program.
- ix. **Compliance and Audit Readiness:** Ensure that all documentation, lab setup, safety protocols, and operational norms are audit-ready and comply with the guidelines.

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- x. **Student Mentorship and Outreach:** Interact with students during school visits to resolve grievances, motivate participation, and identify high-performing students for competitions or advanced opportunities.

## **52. Vocational Teachers:**

### **52.1. Scope of work:**

- i. The Bidder/Agency will have to deploy 2 Vocational teachers per school for the respective trades deployed in 789 schools.
- ii. The Service Level Agreement with the successful agency/bidder will be signed with Bihar Education Project Council, Patna and on behalf of the BEPC, Patna, for the day to day execution of the contract.
- iii. The minimum qualification of the Vocational teacher should be Graduation with at least 1 year Diploma Course in ITI/Computer/IT and good communication skills.

### **52.2. Minimum Salary & other conditions for Vocational teacher:**

- i. The minimum gross wages/salary and related statutory compliance of Vocational trainer shall be as per the minimum wages act applicable in the State.
- ii. The bidder shall ensure compliance with all applicable laws, local and Central, including all labour laws like ESI, EPF, Minimum Wages Act, Bihar Shops & Establishments Act, Contract Labour (Regulation and abolition) Act 1970, Payment of Bonus Act etc. and shall keep BEPC indemnified and harmless in case of any action for violation by the bidder of any of the applicable laws. For all purposes the persons deployed will be employees of the bidder and they will have no relation whatsoever with BEPC. The bidder shall be responsible for furnishing all such information/documents to BEPC in this regard as may be required by it from time to time. Furthermore, the bidder shall be responsible to furnish self-attested copies of all returns/challans filed by the bidder in the office of ESI, EPF, Minimum Wages Act, Contract Labour etc. on monthly basis to the BEPC, in case, the bidder fails to



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submit or not willing to submit the copies of returns, BEPC shall be entitled to stop the payments till the submissions of the returns.

- iii. Vocational teacher is allowed to take 16 leave per year. In case the resource is absent for more than 10 days in any month, the bidder needs to arrange an alternative resource failing which a penalty of Rs. 250/- per working day would be levied on the bidder for each day exceeding 10 days the Vocational trainer is absent.

### 52.3. Responsibilities of Vocational teacher:

Sr. No.	Primary Function	Description
1	Program Implementation & Oversight	Manage daily operations of vocational programs, monitor classes, and ensure equipment/lab functionality.
2	Collaboration	Coordinate guest lectures.
3	Student Guidance	Counsel students on vocational careers, further studies, and opportunities.
4	Monitoring & Reporting	Track student progress, lab usage, and report performance to school and agency authorities.
5	Support & Outreach Activities	Lead initiatives to promote vocational awareness and guide students through skill education pathways.
6	Quality Assurance	Maintain training standards, suggest improvements, and ensure high-quality vocational delivery.

### 53. Inventory Management System

- i. Supplier Portal Features
- ii. Suppliers shall mark materials as “Dispatched” to the department.
- iii. Suppliers shall enter shipment details, including the type and quantity of each line item/equipment dispatched.
- iv. Department Portal Features
- v. Departments should be able to acknowledge receipt of goods by marking them as “Received from Supplier.”
- vi. Departments shall issue line item /equipment to schools by recording:




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- vii. School Name
- viii. Type of Instruments
- ix. Quantity Issued
- x. School Portal Features
- xi. Schools should confirm receipt of equipment by marking them as "Received from Department."
- xii. System-Level Features
- xiii. Maintain a Master List of Schools.
- xiv. Maintain a Master List of Equipment.
- xv. Enable User Account Creation for:
- xvi. Schools
- xvii. Department Users
- xviii. Suppliers
- xix. Generate a variety of reports, including:
- xx. School-wise stock reports showing the quantity of equipment available.
- xxi. Dispatch reports summarizing the type and number of equipment shipped by various stakeholders within a defined time period.
- xxii. Vendor-level dispatch reports showing instruments marked as "Dispatched" by suppliers.
- xxiii. Pending receipt reports identifying instruments marked as "Dispatched" by vendors but not yet received by the department.
- xxiv. Issue reports showing items issued to schools by the department.

#### **54. Distribution tracking software:**

The scope of work should include the design and development of an application for tracking and tracing the movement of shipment batches from the headquarters/State Level to various districts and across the entire value chain up to the school level.

The application should have the following features: -

- a) Each batch shipment will be assigned a unique QR Code/Bar Code
- b) Each batch will have certain fields assigned to it like date of dispatch, source/origin point, destination point, transit route with all interim locations tagged onto the same.

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- c) Provision shall be made for all transit points (like district, block, school etc.) to update the information contained in the database (like "received", "dispatched", "cancelled", "delayed" etc.) by scanning the QR Code/Bar Code on the batch shipment. This updation shall be made upon receipt and dispatch of shipment respectively with an option to enter remarks (to input certain important information pertaining to the state of receipt, dispatch, delay etc.)
- d) Provision shall be made to track the shipment by all concerned stakeholders like "Dept. HQRS", "District Level Officer", "Block Level Officer" and "School" to track the journey of the batch shipment through their respective logins in the mobile application. A graphical seek-bar on the UI can be provided pictorially depicting (representational) the complete route highlighting the areas covered/remaining towards the final destination.
- e) Provision will be made for the administrator to manually update the status of the shipment in case any stakeholder in the value chain is unable to update the information due to technical glitches.
- f) Provision for the administrator to define the different masters like "Shipment Status", "Shipment Size/Category", "locations" (for entering "Place of Origin" & "Place of Delivery"), mechanism for defining the transit route, estimated time of delivery etc.
- g) Provision for the administrator to define roles in the system with access rights & privileges and assigning them to different users.
- h) Provision for the administrator to define the various users or optionally, users can download the application from the Android play-store and register themselves using some authentication mechanism.
- i) Provision for the administrator to view/download/print certain pre-defined reports like no. of shipments delivered in a particular time-period, no. of shipments pending to be delivered, no. of shipments which have overrun their estimated time of delivery etc.
- j) Provision for sending different application-based alerts and notifications to all stakeholders upon triggering of key events like "package received", "package dispatched" etc.