

## NOTICE INVITING TENDER

Setting up and management of 3D Designing & printing labs for 10 NDMC Schools for Class VI to XII including supply and installation of 3D Printers, 3D Pens, PLA Filament Spools, Designing Software, Accessibility of Online Digital Resources and Supply of Electronic and Mechanical consumables which may be required for the successful operation of the 3D Printing Labs and providing 3D design and curriculum for 05 years including onsite comprehensive annual maintenance

TENDER No.: D-852/Dir. (Edn.)/2018

Dated: 03/07/2018



EMPOWERING TODAY'S STUDENTS TO  
BECOME THE INNOVATORS OF TOMORROW

EDUCATION DEPARTMENT  
NEW DELHI MUNICIPAL COUNCIL  
PALIKA KENDRA, NEW DELHI-110001

## TABLE OF CONTENTS

<b>Sl. No.</b>	<b>Contents</b>	<b>Page No.</b>
1.	Disclaimer	3-4
2.	<b>CHAPTER-I</b> : Tender/Bid Inviting Notice	5-9
3.	<b>CHAPTER-II</b> : Definition	10-11
4.	<b>CHAPTER-III</b> : Project Profile & Background Information	12-14
5.	<b>CHAPTER-IV</b> : Scope and Objectives of the work/project	15-33
6.	<b>CHAPTER-V</b> : Instructions to Bidder & Eligibility Criteria	34-46
7.	<b>CHAPTER-VI</b> : General Terms & Conditions of the Agreement	47-54
8.	<b>CHAPTER-VII</b> : Special Terms & Conditions of the Agreement	55-57
9.	<b>ANNEXURE-I</b> : Performa for Price Schedule	58-59
10.	<b>ANNEXURE-II</b> : Contract Agreement	60-61
11.	<b>ANNEXURE-III</b> : Integrity Pact Agreement	62-67
12.	<b>ANNEXURE-IV</b> : Bank Guarantee Format	68-69
13.	<b>ANNEXURE-V:</b> <b>Format 1:</b> Technical Bid Form	70
14.	<b>Format 2:</b> Bidder's Profile	71-72
15.	<b>Format 3:</b> Project Experience	73
16.	<b>Format 4:</b> Authorization Letter	74
17.	<b>Format 5:</b> Self-Declaration – No Blacklisting/Clean Track Record	75
18.	<b>Format 6:</b> OEM/Brand-wise Details of Deliverables	76
19.	<b>Format 7:</b> Commitment Letter for support from Principal Manufacture/ OEM	77
20.	<b>Format 8:</b> Authority Letter from Manufacture/OEM	78
21.	<b>Format 9:</b> Undertaking Acceptance regarding Implementation Schedule and Payment Terms	79
22.	<b>Annexure VI</b> : Declaration regarding Consumables	80
23.	<b>Annexure VII</b> : Technical Bid Evaluation Indicative Checklist	81-82
24.	<b>Annexure VIII</b> : List of Schools for Establishing 3D Printing Labs	83

## DISCLAIMER

1. Though adequate care has been taken while preparing the TENDER Document, the Bidders shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within seven days from the date of notification of Tender Document/ Issue of the Tender Document, it shall be considered that the Tender Document is complete in all respects.
2. The information contained in this tender whether subsequently provided to the bidders, ("**Bidder/s**") verbally or in documentary form by New Delhi Municipal Council (henceforth referred to as "**NDMC**" in this document) is provided to Bidders on the terms and conditions set out in this Tender document and any other terms and conditions subject to which such information is provided.
3. New Delhi Municipal Council (NDMC) reserves the right to modify, amend or supplement this Tender Document.
4. While this TENDER Document has been prepared in good faith, neither NDMC nor their 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 Tender Document, even if any loss or damage is caused by any act or omission on their part.
5. The issue of this TENDER document does not imply that NDMC is bound to select a Bidder or to appoint the Selected Bidder (as defined hereinafter) and NDMC reserves the right to reject all or any of the Bidders or Bids without assigning any reason whatsoever.
6. The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, uploading delivery fees, expenses associated with any demonstrations or presentations which may be required by NDMC or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and NDMC shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation for submission of the Bid, regardless of the conduct or outcome of the Selection process.
7. This TENDER is not an agreement or an offer by the NDMC to the prospective Bidders or any other person. The purpose of this Tender is to provide interested parties with information that may be useful to them in the formulation & submission of their Proposals pursuant to this Tender.

8. This TENDER may not be appropriate for all persons, and it is not possible for the NDMC and its employees to consider the objectives, technical expertise and particular needs of each party who reads or uses this Tender. The assumptions, assessments, statements and information contained in this Tender, may not be complete, accurate, adequate or correct. Each Applicant should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments and information contained in this TENDER and obtains independent advice from appropriate sources. Information provided in this Tender to the Applicants may be on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law.
9. The NDMC accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on the law expressed herein.
10. The NDMC and its employees/ advisors make no representation or warranty and shall have no liability to any person including any Applicant under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this Tender or otherwise, including the accuracy, adequacy, correctness, reliability or completeness of the TENDER and any assessment, assumption, statement or information contained therein or deemed to form part of this TENDER or arising in any way in this Selection Process.
11. The NDMC also accepts no liability of any nature whether resulting from negligence or otherwise however caused arising from reliance of any Applicant upon the statements contained in this Tender.
12. The NDMC may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this Tender.

**Place:** New Delhi

**Date:**.....

**TENDER/BID INVITING NOTICE**

1. The Director (Education), New Delhi Municipal Council (NDMC), Palika Kendra, New Delhi, invites on behalf of NDMC, **online tenders** in two bid system, from eligible, reputed Firms/Companies, with sound technical and financial capabilities for **setting up and management of 3D printing and Design tech labs for 10 NDMC Schools for Class VI to XII for 05 years which includes supply of 3D Printers, 3D Pens, PLA Filament Spools, Designing Software, Online portal (Digital Resources) and supply of Electronic and Mechanical consumables which may be required for the successful operation of the 3D Printing Labs , 3D design and Printing curriculum for 5 years including onsite comprehensive maintenance.** The details of the work to be carried out are given under the scope of work in the tender document.
2. The intent of this Tender is to invite proposals from the agencies/Firms/Companies (also referred to as bidders) to enable the NDMC select a Service provider for **Supply, installation, Operation & management of 3D Design Tech Labs for NDMC Schools.**
3. The bidder may submit the duly filled up tender documents online **on or before prescribed date and time mentioned in the Tender Schedule** and the same may be opened at as per the scheduled time on the same day in presence of the representatives of the bidding firms who may desire to attend the proceedings in the **Office of the Director (Education) at Room no. 7014, 7<sup>th</sup> Floor, Palika Kendra, Parliament Street, New Delhi-110001.**
4. The total estimated cost of the project for Setting up and management of 3D printing and Design tech labs for 10 NDMC Schools for Class VI to XII which includes supply of 3D Printers, 3D Pens, PLA Filament Spools, Designing Software, Online portal (Digital Resources), Supply of Electronic and Mechanical consumables which may be required for the successful operation of the 3D Printing Labs for 5 years including onsite comprehensive warranty for 5 years, i.e. approx. Rs. 46,01,900(Rupees Forty Six Lakh one thousand Nine Hundred only) + GST (as applicable) . However, the estimate given as a rough guide for helping preparing the bids.
5. The cost of the tender is Rs. 5000/- (Rs five thousand only), which is non-refundable, along with the Earnest money of Rs. 92,038/- (Rupees Ninety Two Thousand Thirty Eight only) will have to be deposited separately in the form of Demand Draft/Banker's Cheque in favour of the Secretary, NDMC payable at New Delhi.
6. There may be a deviation of +/- 20% of the work, depending upon the developing situation, as mentioned in the Scope of Work of this tender document.

**7. DUE DILIGENCE BY BIDDERS :**

Submission of bid shall be deemed to have been done after careful study and examination of the tender document with full understanding of its implications. The response to this tender should be full and complete in all respects. Failure to furnish all information required by the tender documents not substantially responsive to the tender documents in every respect will be at the bidder's risk and may result in rejection of the bidder's Tender.

**8. DOWNLOADING TENDER DOCUMENTS:** The complete tender document may be obtained from the website [www.ndmc.gov.in](http://www.ndmc.gov.in) or <https://govtprocurement.delhi.gov.in>. The bidder should submit the proposal only in electronic form at <https://govtprocurement.delhi.gov.in> as prescribed in this tender document.

**9. EARNEST MONEY DEPOSIT (EMD)**

**9.1** An EMD of Rs. of Rs. 92,038/- (Rupees Ninety Two Thousand Thirty Eight only) with the cost of tender of Rs. 5000/- to be deposited in the form of treasury challan/Demand Draft/Pay order/Banker's Cheque/deposit at call Receipt/FDR drawn in favour of **"Secretary NDMC" Payable at New Delhi, drawn from any nationalized bank or scheduled bank shall** be scanned and uploaded to the e-tendering website within the period of bid submission or with other technical documents as mentioned in the tender. These receipts of EMD and tender cost shall also be uploaded to the e-tendering website by the intending bidder up-to the specified bid submission date and time.

**9.2** Amount of Earnest Money in the form of treasury challan/Demand Draft/Pay order/Banker's Cheque/deposit at call Receipt/FDR drawn in favour of **"Secretary NDMC" Payable at New Delhi, drawn from any nationalized bank or scheduled bank** will have to be submitted physically in the office of Director (Education) at Room No. 7014, 7th floor NDMC building, Palika Kendra, New Delhi-110001. Director (Education) receiving EMD in original form shall examine the EMD deposited by the bidder and shall issue a receipt of deposition of Earnest money to the bidder. The receipt of the EMD deposited along-with the scanned copy of EMD is also required to be uploaded along-with the technical bid.

**9.3** A part of Earnest Money is acceptable in the form of bank guarantee also. In such case, minimum 50% of the earnest money or Rs. 20 lakh, whichever is less, shall have to be deposited in shape prescribed above, and balance may be deposited in shape of bank guarantee of any scheduled bank having validity for 6 month or more from the last date of receipt of bids which is to be scanned and uploaded by the intended bidders.

**9.4** Failing to upload scanned copy of receipt of EMD and tender cost along-with the technical bid on or before the last date of submission of bids (Tender Due Date) shall lead to non -consideration of bid and its automatic rejection. Scanned copy of the receipt of EMD is mandatory to upload.

- 9.5** Failing to deposit EMD on or before the last date of submission of bids (Tender Due Date) shall lead to non-consideration of bid and its automatic rejection.
- 9.6** As per the GFR Rule 170 regarding the EMD, The Micro and Small Enterprises (MSEs), as defined in MSE procurement Policy issued by the Department of Micro, Small and Medium Enterprises or are registered with the Central Purchase Organization or the concerned Ministry or Department, are not required to submit EMD. If the bidder seeks for exemption, it is required to submit a certified copy of proof for this purpose.
- 9.7** It is also mandatory to deposit the physical copy of the tender cost and EMD / Certified copy of proof for the exemption of the EMD to be submitted in the NDMC as per the address given below:

Office of the Director (Education), NDMC  
Room no 7014, 7<sup>th</sup> Floor,  
New Delhi Municipal Council  
Palika Kendra, New Delhi – 110001  
Phone: 011-23360114,  
Email: [director.education@ndmc.gov.in](mailto:director.education@ndmc.gov.in)

- 9.8** The EMD is refundable not later than 180 days from the Tender Due Date (last date of bid submission), except in the case of the Selected Bidder whose EMD shall be retained till it has provided a Performance Security/ Guarantee. Where a demand draft is provided, its validity shall not be less than 90 (Ninety) days from the Tender Due Date (last date of Bid Submission), for the purposes of encashment by the Authority.
- 9.9** The Bid shall be summarily rejected if it is not accompanied by the EMD.
- 9.10** The EMD of the unsuccessful bidders shall be returned to them after issue of LOA /work Order to the successful bidder. NDMC will not be responsible for any loss or depreciation that may happen thereto while in its possession nor be liable to pay any interest thereon.
- 9.11** The successful bidder's EMD will be returned, without any interest after signing the contract and after furnishing the performance security in accordance with the provisions thereof.
- 9.12** The EMD will be forfeited at the discretion of NDMC on account of one or more of the following reasons:
- i)** The Bidder withdraws its Proposal/bid during the period of proposal validity.
  - ii)** Bidder does not respond to requests for clarification of its proposal.
  - iii)** In case of a successful Bidder, the said Bidder fails-to sign the Agreement in time.
  - iv)** In case it is found that, the bidder/s has furnished misleading/wrong or fraudulent information / documents or information furnished by them is not found to be true, the Earnest Money /PBG of the bidder/s will be forfeited.

## **10. PERFORMANCE SECURITY/GUARANTEE:**

- 10.1** The Performance Security/Bank Guarantee (BG) will be in the form of an account payee Demand Draft, Fixed Deposit Receipt from a Commercial bank, Bank Guarantee from a Commercial bank or online payment in an acceptable form

safeguarding the purchaser's interest in all respects.

- 10.2** The BG shall be valid for a period of 6 months or 180 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations i.e. 180 days after the completion of 5 years of project period.
- 10.3** EMD shall be refunded to the successful bidder on receipt of Performance Security.
- 10.4** The Performance Security/Bank Guarantee (BG) shall be for an amount equal to 10% (Ten per cent) of the total value of the Contract (tendered/bid amount) quoted by the successful bidder and shall be deposited to the NDMC within 15 days from the date of receipt of letter of acceptance.
- 10.5** All charges whatsoever such as premium, commission, etc. with respect to the BG shall be borne by the bidder.
- 10.6** In case the successful bidder fails to submit performance bank guarantee within the time stipulated, the NDMC at its discretion may cancel the Letter of acceptance issued to the successful bidder without giving any notice and may invoke the EMD of such successful bidder.
- 10.7** The extended BG in all the above cases shall be submitted at least 3 months before the expiry of the previous BG, failing which, NDMC reserves the rights to terminate the contract, and forfeit the BG.
- 10.8 Release of Performance Guarantee:** The Performance Bank Guarantee will be released only after meeting all of the following conditions:
- i) After successful implementation of this project.
  - ii) Successful operation and maintenance of all services under this agreement.
  - iii) Payment of all the penalties throughout implementation, operation and maintenance period.
  - iv) At the end of the contract period, Performance Bank Guarantee of successful bidder will be released after successful handing over all the assets and services, including all hardware, software in working conditions. If any deficiency noticed at the time of handing over the successful bidder has to get rectified /replaced the same at his own cost within 15 days otherwise NDMC will get it rectified

## 11. VALIDITY OF THE TENDER BID

The Tender shall be valid for a **period not less than of 90 days from** the Bid Due Date. The validity of bids may be extended by mutual consent of the respective Applicants and the NDMC.

## 12. TENDER SCHEDULE

S. No.	Information related to Bid Process	Details
1.	Publication of Tender/Bid document.	03.07.2018
2.	Tender Document Fee	Rs. 5000/-
3.	Earnest Money Deposit (EMD)	<b>Rs. 92,038/-</b> (Rupees Ninety Two Thousand Thirty Eight only)
4.	Tender Due Date/Last Date of Bid Submission.	20.07.2018 upto 3:00 P.M.



5.	Bid validity period	90 days from tender Due Date
6.	Last date for submission for queries for clarification to NDMC	10.07.2018 up-to 5:00P.M.
7.	Pre-Bid meeting	13.07.2018 at 3:00PM
8.	Contact person and email id	Office of the Director (Education), NDMC Room no 7014, 7 <sup>th</sup> Floor, New Delhi Municipal Council Palika Kendra, New Delhi – 110001 Phone: 011-23360114, Email: <a href="mailto:director.education@ndmc.gov.in">director.education@ndmc.gov.in</a>
9.	Opening of Technical Bid – date, time and venue	20.07.2018 AT 3:30 PM Office of the Director (Education), NDMC Room no 7014, 7 <sup>th</sup> Floor, New Delhi Municipal Council Palika Kendra, New Delhi – 110001 Phone: 011-23360114, Email: <a href="mailto:director.education@ndmc.gov.in">director.education@ndmc.gov.in</a>
10.	Presentation before Technical Evaluation Committee	After evaluation of Technical Bids Date shall be intimated accordingly.
11.	Opening price of Financial Bid.	After evaluation of Technical Bids Date shall be intimated accordingly.
12.	Letter of Award (LoA)	After finalizing the bid process Date shall be intimated accordingly
13.	Signing of Agreement	In due course

**13.** NDMC will not be responsible for delay in online submission due to any reason. For this, bidders are to upload the complete bid well advance in time so as to avoid 11th hour issues like slow speed; choking of web site due to heavy load or any other unforeseen problems.

**14.** The procuring entity (NDMC) reserves the complete right to cancel the bid process and reject any or all of the Bids.

**15.** No contractual obligation whatsoever shall arise from the bidding document/ bidding process unless and until a formal contract is signed and executed between the procuring entity and the successful bidder.

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**(R.P. Gupta)**  
**Director (Education)**

**DEFINITIONS**

Following terms used in the document will carry the meaning and interpretations as described below:

1. **“Bid”** shall mean the Financial Bid/Price Bid/Commercial bid submitted by the Bidding Company/Shortlisted Bidder along with all documents /credentials/ attachments, formats, etc., in response to this Tender Document/Bid Document, in accordance with the terms and conditions hereof;
2. **“Bidder/Shortlisted bidder/ Bidding Company” Bidder** means any firm offering the solution(s), service(s) and/ or materials required in the tender call. The word Bidder when used in the pre award period shall be synonymous with bidder and when used after award of the contract shall mean the successful bidder with whom client NDMC signs the contract for rendering of goods and services. Any reference to the Bidder includes Bidding Company including its successors, executors and permitted assigns jointly and severally, as the context may require. Further, Bidding Company shall refer to such single Company that has submitted the response in accordance with the provisions of this Tender Document;
3. **“Company”** shall mean a body corporate incorporated in India under the Companies Act, 1956 or the Companies Act, 2013, as applicable;
4. **“Tender Document/Bidding Document”** shall mean the bidding document issued by NDMC including all Formats & Annexures/ Forms etc. and also including all amendments / clarifications thereof;
5. **“NDMC** shall mean NEW DELHI MUNICIPAL COUNCIL (A body created under the Act of Parliament);
6. **“Selected Bidder or Successful Bidder”** shall mean the shortlisted Bidder whom Letter of Award is issued by NDMC as per the term and conditions of Bid document;
7. **“Tender due date/Last Date of Bid Submission”** shall mean the last date and time for submission of Price Bid and Commercial bid in response to this Bid as specified in Bid Information Sheet including all amendments/Clarifications thereto;
8. **“Authorized Signatory”** shall indicate the employee of the Bidding company who has been authorized through board resolution and/or Power of attorney (if required by NDMC) to sign and submit the bid as per the bidding document and is fully authorized to take decisions including signing and submission of documents as and when any requirement is raised by NDMC during execution of Contract.
9. **“The Government”** means the Government of India.
10. **“The Deliverable”** means the entire all the material/ services, which the Vendor/Selected bidder is required to supply to the NDMC under the Contract.
11. **“LoA”** means Letter of Award;
12. **“Day”** means calendar day;
13. **“Week”** means calendar week; **“Month”** means calendar month; **“Year”** shall mean the Calendar year.
14. **Bid/e-Bid** means formal offer made in pursuance of this tender in electronic format.
15. **Applicable Law** means the Contract shall be interpreted in accordance with the laws of India.

16. **STEM** (Science, Technology, Engineering and Mathematics)
17. **Client** means the NDMC.
18. **Service Provider** means the firm providing the solution under this contract as named in TENDER/ Technical specifications/scope of work.
19. **Contract** means the agreement entered into between the Client (NDMC) and the Service provider (Bidder), as recorded in the Contract Form signed by the parties including all attachments and appendices thereto and all documents incorporated by reference therein.
20. **Contract/Bid Price** means the price payable to the Service Provider under the Contract for the full and proper performance of all its contractual obligations.
21. **Bidder's Representative** means the duly authorized representative of the SP, approved by the Client and responsible for the Service provider's performance under the contract.
22. **Financial Bid** or the Commercial Bid or the Price Bid means the part of offer that provides price schedule and shall have same meaning of contract bid.
23. **"OEM"** means **Original Equipment Manufacturer (OEM)** (A company that makes a part or subsystem that is used in another company's end product.)
24. **Goods and Services** mean the solution(s), service(s), materials or a combination of them in the context of the tender call and specifications.
25. **Go-live date** means as date of acceptance of the installed design tech lab with its every resource tested and validated as mentioned under scope of work.
26. **Performance Security** means on receipt of notification of award from the client, the successful bidder shall furnish the security in accordance with the conditions of contract, in the form acceptable to the Client.
27. **Technically eligible and Technical Bid** means that part of the offer that provides information to facilitate assessment, by NDMC , professional, technical and financial standing of the bidder, conformity to specifications etc.
28. **Products** means all of the equipment, Hardware, Software, supplies and consumable items that the SP is required to install or provide under the contract, plus the associated documentation.
29. **Project Plan** means the document to be developed by the Bidder and approved by the Client/ NDMC, based on the requirements of the Contract and the preliminary project plan included in the Bidder's bid. Should the Project Plan conflict with the Contract in any way; the relevant provisions of the Contract shall prevail in each and every instance.
30. **Specification** means the functional and technical specifications or statement of work, as the case may be.
31. **Tender Call or Invitation for Bids** means the detailed notification seeking end to end solution.
32. **Two Stage Bid/Two Bid System** means the EMD Proof along with Technical Bids and the Financial Bid are submitted separately online only and their evaluation is sequential.

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**BACKGROUND INFORMATION AND PROJECT PROFILE****1. ABOUT NDMC**

NDMC is one of the five urban local bodies (ULB) in National Capital Territory (NCT) of Delhi. The administrative area under the New Delhi Municipal Council comprises of 42.7 sq. km. It is governed by a Council at 13 Members. The Council Members includes the Member of Parliament of New Delhi Parliamentary Constituency, Chief Minister of Delhi and also the Member of Legislative Assembly of Delhi Cantonment Assembly Constituency.

The NDMC region comprises of Lutyen's Delhi and important buildings NDMC is a seat of the head of the Federal Legislature, Executive and the Judiciary such as Rashtrapati Bhawan, Parliament House, Supreme Court, North and South Blocks and the Embassy area. The strategic geo-political location of NDMC and its history is of great significance and hence the efficient functioning of the municipal body is of utmost importance locally and nationally.

NDMC consists of nearly 3% of the area and 2.5 lakh of the resident population of NCT of Delhi. However, an estimated 16-20 lakhs floating population in daytime possesses challenges for managing the civil services in NDMC area. NDMC is one of the few local bodies in the country who is financial self-reliant. It is also a distribution company for water and electricity and its municipal solid waste is 100% scientifically disposed of.

**2. NDMC's TRANSFORMATION INTO A SMART CITY**

**2.1** NDMC has been selected by the Ministry of Urban Development (MoUD), Government of India, as one of the first 20 Smart Cities under the Smart City Mission. The vision for NDMC Smart City has been formulated based on the strategic blueprint and the needs and aspirations articulated through the stakeholder consultations.

**2.2** NDMC has started rendering multiple services through IT based e-governance platforms. NDMC has been one of the first cities to initiate Smart City projects, such as on-line payments for electricity-water bills, property taxes and other online services such as citizen complaint centers, hospital data of birth New Delhi Municipal Council's Smart Parking. NDMC is also taking big strides in moving to mobile platform for rendering citizen services.

**3. SETTING UP OF SMART CLASSROOMS IN NDMC SCHOOLS**

**3.1** New Delhi Municipal Council has 45 schools in its jurisdiction NDMC school have a brand of academic excellence. It has been an endeavor of NDMC to enhance the quality of education and impart useful skills and innovative thinking in the class curriculum so as to make the learning interesting and useful with creativity imbibed in the minds of students

**3.2** Towards this goal recently, NDMC has set-up 433 Smart Classrooms in place of traditional Chalk and Board Classrooms' in 30 NDMC/Navyug schools from classes VI to XII. The initiative is a part of the 'Smart City Project' and will provide NDMC schools a high level of academic environment.

**3.3** Besides actual syllabus teaching, children can take advantage of upgraded technology in learning about socio-political events, leading personalities, culture, heritage, sports, environment and other areas related to child development. Availability of the educational digital contents both in Hindi & English medium in all subjects and their regular up-gradation is an important feature of the project. The educational digital contents of the smart classrooms have been designed to make the syllabus more comprehensive and easy to understand.

**3.4** The standard Smart Classroom consists of White board, Interactive Ultra short throw interactive projector, green board, CPU, UPS, Keyboard, Mouse and Sound system with woofers. CCTV cameras have also been set up in all smart classrooms to make it more useful and sustainable.

#### **4. PROJECT OBJECTIVE OF SETTING UP DESIGN TECHNOLOGY LABS FOR NDMC SCHOOLS**

**4.1** NDMC realizes that 3D printing has the ability to revolutionize the educational landscape by creating the capacity to enable students to follow the motto: If you can think it, you can create it. If you want it, you can make it. 3D printers and 3D printed objects are already used in educational settings. Existing 3D objects in the educational marketplace (e.g. scientific models and counting blocks) can be expensive, difficult to acquire, and may be unsuited for a particular classroom or student. However, 3D technology opens the door to alternative access to concepts and images that may be problematic for people who learn best through tactile exploration. 3D printing as a technology can help make such objects cheaper, easier to find, customizable, and more readily available for student engagement.

**4.2** Realizing the need to create scientific temper and cultivate the spirit of curiosity and innovation among young minds, it is proposed to support establishment of a network of 3D Design Technology and 3D Printing Labs in 10 (Ten ) NDMC Schools as a pilot project. 3D Design Technology Laboratory is a work space where young minds can give shape to their ideas through hands on do-it-yourself mode and learn innovation skills with the help of 3D Printing.

**4.3** The objective of this scheme is to foster curiosity, creativity and imagination in young minds and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing etc. Young children will get a chance to work with tools and equipment to understand what, how and why aspects of STEM (Science, Technology, Engineering and Math).

#### **4.4 BENEFITS OF 3D PRINTING LAB**

Being a future technology, many benefits are envisaged using 3D printing technology to make learning an interactive and meaningful activity for all students and some expected benefits could be as follows:-

1. Provides opportunities to understand the full meaning of a concept
2. Provides valuable tools for creating access for students with disabilities (3D tactile)
3. Provides useful instruments that create concrete examples for all students such as complex shapes, chemical compound, cell structure, machine parts etc.
4. Trains students on new manufacturing techniques to prepare them for a future where 3D printing is more common
5. Creates a fun and satisfying way to go from idea to reality
6. Researchers suggest that student with and without disabilities learn better from physically manipulating objects. This is especially true when they are trying to fully comprehend complex STEM concepts (e.g., anatomical shapes, mathematical manipulative, chemical compounds). This multi-modal access provides learners the opportunity to experience information in a much more meaningful way than text and description alone.

#### **5. PRESENT SCENARIO OF COMPUTER AND IT LABS IN NDMC SCHOOLS**

**5.1** New Delhi Municipal Council (NDMC) runs two types of schools, the Nagar Palika (NP) schools which are also called NDMC schools and Navyug schools. At present there are 34 NDMC schools and 11 Navyug school. Besides these schools, there are three Aided schools and 4 unaided schools under NDMC jurisdiction. The 34 NDMC schools include 13 senior secondary, 7 secondary, 1 Middle, 10 Primary and 3 Nursery schools. The 11 Navyug schools include 7 senior secondary, one secondary and three primary schools. Hereinafter, NDMC Schools will mean Nagar Palika School as well as Navyug Schools.

**5.2** New Delhi Municipal Council has taken a number of initiatives in the past few years to provide IT infrastructure and IT education in NDMC Schools. Computer Education as an awareness Course has been introduced in all NDMC and Navyug Schools and e-library has been set up in 13 schools with all in one desktop kindle tablets and e-library resources.

**5.3** All NDMC schools are equipped with 55” LED Smart TVs, smart classes and Portable LED projectors. Digital contents available on the websites of NCERT, NROER, CBSE, SCERT, and Directorate of Education and from other sources are being used in schools to impart Education as per the syllabus of the classes.

**5.4** All schools have a computer lab with adequate space for 35-40 students with desktop computers of at least core 2 duo configuration available and have printers and net connectivity and also requisite furniture to hold lab classes.

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**SCOPE OF THE WORK/PROJECT & THE TERM OF REFERENCE (ToR)**

**1. ABOUT THE PROJECT OBJECTIVES**

- 1.1** From elementary to university classrooms, 3D printers/additive manufacturing for schools are helping students find new ways engage with and learn material. Whether its home economics or physics, teachers are discovering that 3D printers provide new and novel learning opportunities that increase confidence and engage students' imaginations. In terms of critical thinking, 3D printers for schools are changing the paradigm; empowering students to create physical objects that solve problems using reasoning and logic. It sets the tone for experimentation, success, failure, and learning that transcends paper, video, or white boards through observation and problem solving within the physical world rather than on paper. The 3D printing has been increasingly applied in the educational environment schools, museum and industry.
- 1.2** NDMC is bringing 3D Printing and Design Technology Curriculum to its schools. The objective is to bring a physical experience in the classrooms and help students get involved in experiential learning since an early age. 3D printing a fast growing technology is revolutionizing the prototyping sector/industries. The need to bring the futuristic learning tools through a comprehensive curriculum is a need of the hour and will further help students get ready for the future. This 3D printing and design technology curriculum will be integrated with the school's existing labs and will serve as a ground for innovation and creativity for the students.
- 1.3** These labs will also help the students in the schools to work on various projects and experiment with this technology to build solutions for the future. There is a huge need of curiosity driven teaching mechanisms where students are physically involved in the learning process hence 3D Printing offers a great tool for students to visualize, Design and Create. Educators will be able to discover additional opportunities for conveying complex information particularly around science, technology, engineering and math (STEM) concepts.
- 1.4** This lab will also assist subject teachers to take assistance from the futuristic tools like 3D Printing, Internet of Things (IoT) and Electronics which will help students in better understanding of various STEM topics taught to them in their regular course curriculum.

**2. The clear benefits envisaged in 3D printing in education are:**

- 2.1** It provides teachers with 3 dimensional visual aids that they can use in their classroom particularly in illustrating a hard to grasp concept. 3D printing provides opportunities to understand the full meaning of a concept and concrete example for students.
- 2.2** 3D printers make it easy for teachers to seize the interest of their students compared to just showing the pictorial representations of objects.
- 2.3** It provides valuable tools for creating access of concept for students with disabilities (3D tactile).

- 2.4 It enhances hands-on learning and learning by doing. Using this prototyping technology, students will be able to produce realistic 3 dimensional mini-models. (Great for engineering, architecture, and multi-media arts students).
- 2.5 It provides more room for interactive class activities. In biology, for instance, teachers can create a 3D model of the human heart, head. Skeleton etc. To teach students about the human body.
- 2.6 In school curriculum 3D printing creates fun and satisfying way to go from idea to reality.

### **3. SCOPE OF THE WORK**

The broad scope of work is bringing 3D Printing and Design curriculum in NDMC schools and further assisting students to learn futuristic technologies which will further enhance their skills like creativity, problem solving, visualization and critical thinking skills. The broad scope of the work includes the following:

- 3.1 Shall supply necessary hardware and software including 3D printers, 3D pens, PLA filaments, 3D software and other electronic components for successful installation in 10 NDMC schools with comprehensive warranty and maintenance for 05 years as per the specification given in this chapter.
- 3.2 The successful bidder shall undertake installation of the infrastructure of 3D Printers and 3D Design Labs.
- 3.3 All equipment of the 3D Printing Design and Technology Lab shall be delivered and installed at the location/sites of 10 NDMC Schools of New Delhi Municipal Council by the successful bidder. The Bidder shall bear all the costs for the supply, installation and further maintenance under comprehensive warranty at given locations. The list of the 10 schools is given at **Annexure 'VIII'** and the list is tentative and may be changed at the time of award of work.
- 3.4 Provide ten trainers cum mentor at all 3D Printing Labs at the 10 NDMC Schools for a minimum period of three months extendable upto one year, if needed.
- 3.5 shall design & provide 3D designs & printing curriculum suitable for each class/grade.

### **4. DELIVERABLES FOR THE 3D LAB PROJECT**

- 4.1 All supportive and necessary software two per lab which includes 01 COLLAB CAD (Demo version) developed by NIC and other from open source software with licenses (if applicable), hardware and consumables of reputed brand required to successfully set up 3D Printing and design technology lab.
- 4.2 Annual grade/class wise plan, with week-wise lesson plans and a timeline for STEM talks, design competitions etc.
- 4.3 One dedicated faculty/trainer cum mentor per lab for the initial period of 3 months of contract with minimum 75 working days, with requisite academic qualifications having hardware and software skills. If 75 working days are covered in a period which is over 3 months then payment for 3 months will only be made. There may be variation of working days in a month because of holidays etc.
- 4.4 Yearly Calendar defining the quarterly objectives of the content & concepts used. Online portal allowing 3D Model upload, download & sharing and resource sharing, and individual login credentials.



## 5. THE DETAILED DELIVERABLES AND FEATURES REQUIRED

Sr. No.	Deliverables	Features Required
1.	<b>Physical Space Layout of 3D Design Labs</b>	<p>Blueprint &amp; drawing of the 3D Printing and Design Technology Lab.</p> <p>Drawing to clearly showcase all components of the Design Tech Lab, including computing systems, 3D Printers, Raw materials &amp; other logistics, if any.</p>
2.	<b>Dedicated Mentorship &amp; Faculty</b>	<p>One Trainer cum Mentor per school to be made available in the computer Lab for taking up of the 3D Printing Curriculum during school hours and training of teachers, for three months (03 months) as per clause 4.3 above, extendable up-to one year, only in case department desires.</p> <p>Minimum Academic Qualifications of the Mentor/Instructor shall be B.E. Computer Science/Electronics or B. Tech in IT.</p> <p style="text-align: center;"><b>Or</b></p> <p>B. Tech/B.E. in Civil/Electric/Mechanical with CAD as one of the subject</p> <p style="text-align: center;"><b>Or</b></p> <p>Bachelor Degree in Architect.</p> <p>Minimum 3 months experience of handling and operating 3D printing labs. The trainer should have one subject related to CAD in their discipline and should be trained by the company for a month to handle software and then deployed in schools. Successful bidder will be fully responsible for the expected performance of the trainers.</p>
3.	<b>Curriculum Outline &amp; Yearly Calendar (Consultation with NDMC)</b>	<ol style="list-style-type: none"> <li>1. Yearly calendar clearly defining the quarterly objectives of the content &amp; concepts used.</li> <li>2. Grade wise and/or level wise bifurcation of curriculum outline</li> <li>3. Successful bidder should make a program that aligns at-least 50% with NCERT/CBSE topics.</li> <li>4. Progressive Annual Action Plan for every year.</li> <li>5. The trainer cum mentor duty hours shall not be less than 06 hours on a working day of schools.</li> <li>6. Each session/period for a class shall not be less than 01 hour time (or two periods.)</li> </ol>
4.	<b>Directory of Projects</b>	<ol style="list-style-type: none"> <li>1. Grade wise exhaustive list of hands-on 3D Printing projects to be executed as a part of the Design Technology Lab curriculum</li> <li>2. A document highlighting the approach to be taken while implementing the listed projects/activities</li> <li>3. Focus of activities on developing soft skills of participants, if applicable</li> </ol>
5.	<b>Child Assessment Modules</b>	Parameters to evaluate the growth in skills and values of participating students over time; with a

		<p>focus on showcasing the progression</p> <ol style="list-style-type: none"> <li>1.Template for the Growth Analysis Report</li> <li>2.Operational Rhythm to successfully complete child assessments along with a pre-defined frequency of such assessments</li> </ol>
6.	<b>Digital Resources</b>	<p>A document pointing out the strategy of online resource sharing with the participating students in context with the 3D Printing world.</p> <p>Every student is given his/her login credential for sharing and downloading 3D Modeling files and designs.</p>
7.	<b>Design Competitions</b>	<ol style="list-style-type: none"> <li>1. An operational flow graph mentioning the execution rhythm to execute Innovation Challenges on the State &amp; National scale, if applicable.</li> <li>2. Role of faculty in mentorship to students during contests.</li> </ol>
8.	<b>STEM (Science, Technology, Engineering and Mathematics) Talks, Field visits &amp; Conferences</b>	<p>Target industries for field visits</p> <p>Frequency of such Entrepreneurial/Motivational events</p>
9.	<b>Academic Concepts</b>	<p>Exhaustive list of 3D models which can be 3D Printed to explain Academic Concepts, grade wise</p> <p>If applicable, accompanying lesson plans with an activity brief</p>
10.	<b>Integration of Electronics and IoT</b>	<p>The curriculum and the activities plan shall also have working models with integration of Electronics and Internet of Things (IoT) with graded complexities for various level of student.</p>
11.	<b>Sessions and projects for students of 10<sup>th</sup> 11<sup>th</sup> and 12<sup>th</sup></b>	<p>The students of 10<sup>th</sup> and 12<sup>th</sup> class regularly attend regular 3D Printing Lab classes because of board examination preparation, hence, special compact project and curriculum be designed for class 10<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> of at least 20 to 25 hours total duration in the annual/academic session.</p>
12.	<b>Hardware of 3D Printers, consumable materials, software etc.</b>	<p>As per the specification and quantity given in the tender document.</p>
13.	<b>Teacher Program Training</b>	<p>Training before the Printer SET UP and Training to at-least 10 Teachers in a Group – 2 DAYS for 4 Hours Per Day Training 3 Times a Year</p>

**6. LAB DEVELOPMENT ACTIVITIES ENVISAGED ARE AS UNDER:**

- 6.1 Carrying out the task of layout & design for the physical space & equipment for NDMC approval.
- 6.2 Submitting recommendations for construction/modification/refurbishment of the Design Technology Lab.
- 6.3 Hiring of experts in the form of dedicated faculty in charge of handling all

operations & training.

- 6.4 Development of a monthly calendar & freezing schedule of activities and obtaining approval of NDMC for the same.
- 6.5 Initiate the working on prescribed logistics to develop projects by students.
- 6.6 Periodic launch of secondary activities such as industrial visits, lecture series, entrepreneurship talks.

## 7. DESIGNING THE 3D PRINTING CURRICULUM AND ACTIVITIES

The broad/principal guidelines for designing and implementing the curriculum with respect to needs and cognitive capabilities and comprehensibility of the students are sketched as under for consideration for the curriculum finalization.

### 7.1 3D PRINTING FOR MIDDLE CLASSES ( 6th - 8th )

- 7.1.1 Creating an object with a purpose helps set the foundation for elementary and middle school students. 3D printers for middle classes offer the first step for gearing children toward a STEM (Science, Technology, Engineering and Mathematics) oriented future. Basic 3D modeling through visualization using programs such as Tinker CAD have already been utilized by elementary and middle school students, providing a “what you see is what you get” approach to digital modeling.
- 7.1.2 Teachers help set the tempo, allowing students the freedom to explore ways to approach the creation of an object. It applies geometry, reasoning, and an understanding of physical space and proportion. It also helps proliferate a combination of disciplines while helping young students become enthusiastic about choosing a path.
- 7.1.3 From buildings to bridges, 3D printers provide a physical representation of the student’s vision. It helps take them through the product development process, teaching fundamentals in problem solving through iterative design. For younger students, learning basic CAD software and using 3D printers to create houses, landscapes, and objects provide a great way to generate interest. 3D printed objects expose students to concrete examples, which better help conceptualize the importance of size, scale, shape, and thickness.

### 7.2 HIGH SCHOOLS CURRICULUM (9th - 12th )

- 7.2.1 As a student progresses through high school 3D printing continues to advance STEM oriented education and learning. As students are now more comfortable with computer aided design (CAD) and digital modeling, broader paths soon take shape. Not only does the actual 3D printed object yield a viable learning solution, but the *actual process* of 3D printing that object is the catalyst for thinking about chemistry, physics, mechanics, electronics, engineering, and more. A hands-on approach takes place, allowing students to work in project based learning and spur inventive ideas.
- 7.2.2 In high school, foundational courses aim 3D printing as a natural fit to supplement their curriculum. In many cases, the creation of simple objects using 3D printing helps students comprehend concepts that may have been challenging when taught through traditional means.

- 7.2.3** Student projects can be coordinated with 3D printing, combining biological studies with technology. Examine the variation of fossils and develop new ways to represent human cells and organs, or even mimic the internal structures of rare plant species to demonstrate the process of photosynthesis.
- 7.2.4** Through visualization and observation, 3D printing allows users to recreate lattice structures, paraboloids, and complex cubes once only represented in numbers, on graph paper, or a computer screen.
- 7.2.5** From the manufacturing of customized lab-ware to visually represent the molecular-level oxidation of metal, 3D printing is recreating chemistry in the classroom. Today's chemistry classroom can now advance beyond typical lab desks and Bunsen burners. While students are writing in their lab journals, 3D printed molecules are created on the fly for their reference. Each molecule is designed to be interchangeable, yielding numerous permutations for molecular reactions. You can create removable atoms to help students understand various reactions.

**8. SUGGESTIVE CURRICULUM OF 3D PRINTING LAB FOR VARIOUS CLASSES (THE FINAL CURRICULUM WILL BE DECIDED AT THE TIME OF SIGNING OF THE CONTRACT)**

Level	Classes	Curriculum	Technology
Foundation, Advanced and Specification	Middle School	<b>6<sup>TH</sup> CLASS Level I: Visualization</b> <ul style="list-style-type: none"> <li>• Concept of 2D and 3D objects.</li> <li>• Different types of 2D and 3D objects of the Maths curriculum</li> <li>• Elementary idea about 3D printer and 3D printing</li> <li>• Normal Printer versus 3D Printer</li> <li>• 3D Designing on desktops through user friendly apps and 3D Softwares</li> <li>• Experiential Learning through real life objects</li> <li>• Integration with regular subject curriculum</li> <li>• Introducing 3D Printers</li> <li>• Year end student Assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Hands on 3D Printing Machines</li> <li>• Defining different views of designs</li> <li>• Online Portals for predefined resources</li> </ul>
		<b>7<sup>TH</sup> CLASS/ Level II Basic Designing</b> <ul style="list-style-type: none"> <li>• Computer Aided Designing Software</li> <li>• User Defined design features</li> <li>• Enhancing Visualization Skills</li> <li>• 3D Designing on desktops through user friendly apps and 3D Softwares</li> <li>• Project work</li> <li>• Programmable kits in 3D Printing</li> <li>• Hardware expertise</li> <li>• Year end student assessment</li> </ul>	<ul style="list-style-type: none"> <li>• 3D Printer Operation software (Cura)</li> <li>• Defining the Programmable kits</li> <li>• Designing and Drafting</li> </ul>
		<b>8<sup>TH</sup> CLASS/ LEVEL III Parametric Modeling</b> <ul style="list-style-type: none"> <li>• Collaborative Design Toolpalette customization</li> <li>• Academic Enhancement</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial Grade CAD Software</li> <li>• Solid Modeling</li> </ul>

		<ul style="list-style-type: none"> <li>• Understanding Design Thinking</li> <li>• Concept of Assembly of Designs</li> <li>• Year end student assessment</li> </ul>	
	<b>High School and Sr. Secondary</b>	<b>9<sup>TH</sup> CLASS/ Level IV Making functional 3D objects</b> <ul style="list-style-type: none"> <li>• Editing and Repairing of 3D Printing Files</li> <li>• Database Connectivity</li> <li>• Standard Component with link to design tables from database</li> <li>• Producing a fully functional part in a single print</li> <li>• Identify opportunities to apply 3D Printing technology for time and cost savings</li> <li>• Year end student assessment</li> </ul>	<ul style="list-style-type: none"> <li>• 3D Printer Design</li> <li>• Introduction to interfacing of sensors</li> <li>• Re-engineering of readymade designs</li> </ul>
		<b>10<sup>TH</sup> CLASS/LEVEL V 3D Designing in Depth</b> <ul style="list-style-type: none"> <li>• Design and Drafting</li> <li>• Uses of Tolerance (Level of Filament and Nozzle tolerance of Printer)</li> <li>• Analysis of post processing ( How to use Tools to give finishing touch to the object)</li> <li>• Dress up features (chamfer, fillet and others)</li> </ul>	<ul style="list-style-type: none"> <li>• Tuning of 3D printers</li> </ul>
		<b>11<sup>TH</sup> CLASS/ LEVEL VI:</b> <ul style="list-style-type: none"> <li>• Design Mode : Part Design</li> <li>• Creating Part Features</li> <li>• Orthographic and Isometric projection of 3D objects</li> <li>• simulation of models</li> </ul>	<ul style="list-style-type: none"> <li>• Machine handling</li> <li>• Measurement and dimensioning</li> <li>• Simulation software</li> </ul>
		<b>12<sup>TH</sup> CLASS/ LEVEL VII:</b> <ul style="list-style-type: none"> <li>• Assembly Design</li> <li>• Assembly Arrangement and Array</li> <li>• Assembly Clearance and Analysis</li> <li>• Assembly Sequencing and Motion</li> </ul>	<ul style="list-style-type: none"> <li>• Aspects of Manufacturing</li> </ul>

**8.1 \*Note:** Successful bidders can suggest more detailed curriculum and any improvement required in the above mentioned 3D Printing Lab Curriculum for various classes. Curriculum and course content may be modified with the consent of TEC.

The successful bidder will arrange training, both initial and later on refresher training on quarterly basis to the teachers of the schools on usage of supplied 3D printers and 3D pens co-relating the curriculum needs.

## 9. OUTCOME/VALUE OF TEACHING CURRICULUM

### 9.1 Creativity

Through focused software sessions and quarterly projects students will be given an opportunity to exploit their creativity and make anything they can imagine.

## **9.2 Academic Enhancement**

Project Developer firm curriculum lends to enhance the regular academics by creating an experiential learning environment using 3D Printed objects and activities.

## **9.3 Profiling & Reports**

The quarterly projects act as an assessment process for the students where they are evaluated on various parameters through online portals and other competitive and resources.

## **9.4 Problem Solving**

Students are exposed to open ended session and challenges which improves their creative skills.

## **9.5 Visualization**

Project Developer Firm curriculum helps reinforce student visualization power in-line with the design thinking concept.

## **9.6 Skill of Future**

Project Developer Firm adds 3D printing and Designing as a skill in young minds through its curriculum which has huge industrial applications.

## **10. REQUIREMENTS OF CAD SOFTWARE**

**10.1** The software taken should be 3D design software and have one of the following file extensions: .STL, .OBJ, .DAE.

**10.2** The vendor should be able to utilize and incorporate in the curriculum other 3D Modeling Design Software available as open source web application on internet e.g. TinkarCAD, 123 Designs, Auto Desk Fusion 360 (Free Version), Opens CAD, On Shape and other 3D repositories for 3D designs having open source e.g. 3DAGOGO, AUTODESK 123D (Free Downloads) Grab CAD, Google Earth/Sketch Up etc. The student must be exposed to various free resources available online which they can learn and practice.

**10.3** It is also required to the vendor to include 3D Modeling software made by National Informatics Centre; Government of India. The Software is adopted by CBSE since 2010 and has been added into curriculum since then. The software allows students to make and customize designs and enter into the world of 3D printing by engaging their Imagination and creativity.

### **10.4 MANPOWER REQUIREMENT (Trainers cum Mentor) :**

**10.4.1** The successful bidder will be required to provide 10 (ten) trainers (full time) to coordinate, implement and to train teachers regarding the 3D printers installed in NDMC Schools initially for 03 months which may be extended, if need is felt. The resource persons should be bonafide member/employee of the concerned company for 3 months. These trainers will be required initially for three months, as per clause 4.3, in each school. Thereafter, the labs will be operated through in-house TGT/PGT (Computer science) after their training.

**10.4.2** The bidder will be responsible for all the employment terms of these trainers including the service laws i.e. income tax, provident fund, gratuity, pension, LTC, Medical Expenses etc., and will also comply applicable Minimum Wages Act. NDMC shall not be responsible of any act of the trainers and also not be liable for any damages/penalty /payment in any form either legal or otherwise.

**10.4.3** NDMC shall not have any liability including litigation arising due to recruitment, retrenchment, reallocation, salary disbursement or any other service conditions of trainers/any other staff appointed by the bidder. In case of any dispute/litigation arising as a result of the service conditions, the said dispute/litigation will be the exclusive dispute/litigation between the trainers/any other staff appointed by the bidder. The NDMC and Head of the concerned school will have no responsibility or liability in all such matters. The successful bidder shall abide by all the laws/provisions relating to labour laws and hiring of personnel/Management.

#### **10.5 ROLES AND RESPONSIBILITIES OF TRAINER CUM MENTOR:**

**10.5.1** To ensure smooth operation, Designing and Printing of 3D models

**10.5.2** Infrastructure maintenance and upkeepment of Hardware, software and other mechanical and electronic tools & consumables.

**10.5.3** To provide training for handling and using 3D printer equipment to the concerned teachers of the school.

#### **11. MONITORING OF 3D LAB ESTABLISHMENT AND EVALUATION OF 3D PRINTING TEACHING AND SKILLS IMPARTED**

**11.1** The Project Developer firm/successful bidder shall furnish the layout and blueprint with schedule of supply and installation to the NDMC's Project In-charge/Officer, within a week of execution of the Agreement.

**11.2** The Project Developer should also include planning for procurement of material and reflect the same in the program chart so that there is no delay in completion of the Project. The Project Developer firm shall also submit the detailed curriculum level/class wise on quarterly basis to the Project In-charge/officer of NDMC/committee of the Education Department for their endorsement/suggestions. The detail curriculum shall be submitted at least two weeks before it's implemented in the classroom.

**11.3** During the Implementation Period, the Council's Project In-charge or his representative shall inspect the 3D Printing Labs performance once in a fortnight and make a report of such inspection. The defects or deficiencies, if any, with particular reference to the Scope of Work and Specifications & Standards, it shall send a report within 7 days of such inspection to the Project Developer and upon receipt thereof, the Project Developer shall rectify and remedy the defects and the deficiencies, if any, stated in the Inspection Report. However, such inspections or the submission of Inspection Report by Project in-Charge or his representative shall not relieve or absolve the Project Developer of its obligations and liabilities, as per the provisions of the Agreement, in any manner whatsoever.

**11.4** If the Project Developer does not achieve any of the Project Milestones or the Project in-Charge of the Council shall have reasonably determined that the rate of progress of works is such that the Project is not likely to be completed by the Completion Date, it shall notify the Project Developer to this effect, and the Project Developer shall, within 15 (fifteen) days of such notice

**11.5** , by a communication inform the Project In-charge, NDMC in reasonable detail about the steps it proposes to take to expedite progress and the period within which it shall achieve the Project Completion Date.

**12. TECHNICAL SPECIFICATION OF 3D PRINTING LAB HARDWARE, SOFTWARE, ANNUAL MAINTENANCE CONTRACT AND MAN POWER REQUIREMENT:-**

The 3D Printing Lab will be setup as a pilot project in 10 Schools in first phase for which this tender is intended.

**12.1** Following 3D Hardware and Software supply installation, commissioning and maintenance of equipment shall be done by the successful bidder as per the technical specifications mentioned below:

Sr. No	Item/Requirement	Quantity	Minimum Specifications	
1.	3D PRINTERS	01 per Lab	Printing Technology	FDM (Fused Deposition Modelling)
			Resolution (Layer Thickness)	Minimum 0.06 mm (60 microns)
			Minimum feature size	0.6 mm
			Machine Material	Plastic, Wood, Fiber Board & Acrylic
			Operating Temperature Range	15 <sup>0</sup> C - 45 <sup>0</sup> C
			Connectivity	Printing through USB and SD card
			Upper Minimum 3D Build Volume	200 x 200 x 200 (mm)
			Print speed	Should have adjustable speed 75mm - 300mm/second
			Print Head	1
			Connectivity	Wired
			Upper Minimum 3D Print Size	15 X 15 X 18 cm
			Print Resolution	100-300 micron



			Print Choice	Color
			Nozzle Diameter	0.4mm
			Filament Diameter	1.75mm
			Printing color	Color of filament supplied (1 at a time)
			Power Requirements	55W, 100-240V, 1.8A, 50-60Hz
			Printing Material	PLA 1.75mm material, Wood fill
			Display Technology	LCD Screen
			Power Source	AC
			Device Interface	Dial or Touch Screen
			Operating System	Windows, MAC, Linux
			Certificate	BIS Certifications
			Other features	<ul style="list-style-type: none"> <li>▪ Provision of Printing and editing .gcode</li> <li>▪ Capable of STL</li> <li>▪ Capable of multiple file</li> <li>▪ Capable of estimating build time before and</li> <li>▪ STL, PLY, VRML, 3DS, FBX, ZPR.</li> <li>▪ The software should be capable of importing 3d files of models larger than the printer, and slice into component pieces for assembly post printing.</li> <li>▪ The software should be capable of providing and editing color to the parts by shell, surface, or triangle.</li> <li>▪ Compatible on board standalone desktop suitable for operating the system along with the major design software should be included.</li> </ul>
2.	3D PENS	02 per Lab	With Plug and Play feature	
			Filament Diameter	1.75mm, PLA and ABS material

			Voltage Requirement	5V
			Printing Material	PLA
			Safety Features	Unique nozzle protection that prevents skin contact
			Operating System Compatibility	Windows Xp and above
4.	3D Filament Spools	25 kg per Lab per year	Type	PLA
			Diameter	1.75mm
			Certification	ROHS Approved
			Quantity of Each spool	1Kg
			Dimensional Accuracy	$\pm 0.07$ mm
			Density	1.25 g/cm <sup>3</sup>
			Volume	0.80 L
			Length	332.60m
			Extrusion Temperatures	185 <sup>0</sup> C-205 <sup>0</sup> C
5.	Operation and Annual Maintenance including up-gradation of software and supply of electronic and mechanical components and consumables required for 3D Printing	For 05 (five) years from the date of Go-Live	Comprehensive Warranty and Maintenance of all software, hardware and supply of materials required for 3D Printing Projects for Classes including all up-gradation/inclusions in the software and curriculum etc.	
6.	Man Power Requirement	01 trainer cum mentor for each lab for 3 months, as per clause 4.3.	Minimum Academic Qualifications of the Mentor/Instructor shall be B.E. Computer	Minimum 3 months experience and should have one subject related to CAD in their discipline and should be trained by the company for a month to handle software and

			Science/Electronics or B. Tech in IT. <b>Or</b> B. Tech/B.E. in Civil/Electric/Mechanical with CAD as one of the subject <b>Or</b> Bachelor Degree in Architect.	then deployed in schools. Successful bidder will be fully responsible for the expected performance of the trainers.
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**Table A**

**12.2** In addition, following Hardware, Software and Consumables will be needed as per the curriculum for 2<sup>nd</sup> year in 3D Printer labs which will be supplied by the successful bidder:

S.NO.	Component	Name of Component	Unit per lab	Unit for 10 Labs
1.	Mechanical Tools	Screwdriver Set	1	10
		Dremel Post Processing Kit	1	10
		Glue Gun	1	10
		Post-its	20	200
2.	Electronic Assets	Solder Iron	1	10
		Electronic Kits	6	60
		Tablets with Minimum Specification: Size :7 inch, RAM : 2GB, Internal Memory : 16 GB and expandable storage 32 GB or above, Latest android OS with processor : Quad Core , Tempered Glass, Bluetooth, Wi-Fi hotspot, OTG Support, compatible micro USB Keyboard. Battery : 3500 MAH Ear Phone, OTG Cable, Charger and power adapter	6	60
		DC Motors Geared, 1000 RPM 12v	11	110

**Table B**

**12.3** Further, Electronic and Mechanical consumables will be needed in the 2<sup>nd</sup> year onwards to the 5<sup>th</sup> year which will be required to be supplied by the successful bidder under the comprehensive warranty terms:

S.NO.	Component	Name of Component	Quantity per lab	Quantity for 10 labs
1.	Mechanical Consumables	MDF Boards 4mm	5 boards of 8ft x 12ft	50
		Springs	10	100
2.	Electronic Consumables	Batteries 9V	40	400
		LEDs	100	1000
		Connecting Wires		
3.	Stationary	Fevicol	10 Bottles	100
		Double Tape	2 rolls	20
		Cello Tape	2 Packs	20
		Cardboards	200	2000
		Board Markers	10	100

**Table C**

**12.4** The above required hardware and software specifications are very general specification, and are not pertaining to any brand/model. The participating firm may quote higher specification and any brand complying with the safety standards and other IT/Electrical standard/Certification keeping in views the competitive aspects.

**12.5** The item to be supplied should be from original manufacturer and no non-standard item should be quoted. All detail specification with make and model number of the items accompanied by proper leaflets should be clearly mentioned and attached with the offer. In case of proprietary or patented item, necessary certificates in support of the same should be attached. The bidder must submit the Compliance Statement and Deviation Statement of technical specification. In case of imported item, the bidder (if Indian agent) must furnish Authorization letter in the letter head of the principle manufacturer.

Further all equipment/software programs/applications covered under the Project shall be subjected to inspection/testing by Project In-charge or his representative on completion & commissioning.

### **13. UPGRADES/UPDATES AND CHANGES IN THE SOLUTION**

The Service provider will be responsible for all the upgrades, updates, installation of patches and overall maintenance within the scope of the solution.

### **14. PROJECT IMPLEMENTATION SCHEDULE-PERIOD OF EXECUTION AND COMPLETION WORK**

The selected bidder shall be required to execute and complete the work including procurement/installation testing and curriculum finalization within 45 days of the date of execution of the contract agreement signed on the date 'To'. The activity/milestone shall be adhered as under:

<b>Sr. No</b>	<b>Activity/Milestone</b>	<b>Completion Time in days from the date of execution of the contract/agreement</b>
<b>1.</b>	Execution of Contract Agreement	<b>To</b>
<b>2.</b>	Submission of blue print and drawings of design tech 3D lab for 10 schools	<b>To + 7 days</b>
<b>3.</b>	Supply and Installation of hardware and software in 10 schools	<b>To + 15 days</b>
<b>4.</b>	Submission of 3D Printing Lab Curriculum/Syllabus for the first quarter for each class.	<b>To + 20 days</b>
<b>5.</b>	Commencement of the operations and implementation of 3D Printing Curriculum classes in each Lab with final (Go-Live after testing and validation)	<b>To + 35 days</b>
<b>6.</b>	Total Time allowed for Go Live of the 3D Printing Labs in each school	<b>45 Days from the date of Execution of the Contract Agreement</b>

The execution of contract/agreement shall be done within 15 days of the issue of LoA by the NDMC.

## **15. ACCEPTANCE CRITERIA**

- 15.1** NDMC will accept the commissioning and project Go-Live only as described above.
- 15.2** Comprising of representatives/project incharge from NDMC and successful bidder will verify satisfactory performance of 3D printing lab setup along with the developed curriculum.
- 15.3** Any delay on account of NDMC side such as issuance of orders, logistics arrangement at site offices, personnel deployment, power supply, network connectivity and bandwidth etc. should not be considered for acceptance. In case such a delay occurs, the acceptance should be completed for those services where these procedures are not impacting.
- 15.4** For starting of the course curriculum in school around 3D Printing and Design Technology Labs, NDMC shall mutually agree on a detailed plan.
- 15.5** Any delay in go live date/schedule shall attract liquidate damages.

## **16. TECHNICAL SUPPORT BY THE PROJECT FIRM/SUCCESSFUL BIDDER**

- 16.1** Successful bidder shall provide troubleshooting within 24 working hours. Successful bidder will be responsible to provide SPOC (Single point of Contact) and turnaround Time of maximum 24 working hours. During contract period along with onsite technical support available from the bidder office/workplace which shall be the part of the payment condition: no extra payment will made by the NDMC for the technical manpower as it is covered under Comprehensive annual maintenance from the date of Go-Live.

- 16.2** The scope of technical support includes expertise in 3D designing software and 3D Printer hardware for assisting students with their projects in respect to 3D Printing.
- 16.3** The scope of technical support includes onsite technical support available from the bidder's office/workplace during contact period.
- 16.4** The scope of technical support includes assisting students with their projects in 3D designing as well as 3D Printing rectification of errors within the already developed solution, cloud server/database administration, server migration, patching, system upgrades, technical and functional support to NDMC users etc. during the contract period.
- 16.5** To Décor the 3D Printing Lab which make motivates the students to learn 3D printing.
- 16.6** In addition to the above, at-least 2 days of refresher training needs to be conducted by the bidder 3 times in a year for the period of contract in their respective schools. Date, Time of training will be finalized by the Director (Education)/Principals.

## **17. PROJECT DURATION**

The contract period would be initially for 05 years from the date of Go Live of all the design tech labs. **Scope of Work** is extendable for further two years on the basis of performance. The extensions allowed if any shall be at the sole discretion of NDMC and not to be constructed as right of the bidder.

## **18. BIDDER'S RESPONSIBILITIES**

- 18.1** To submit Pre-Qualification documents as required.
- 18.2** To understand the Scope of Work and the expected Outcomes & Deliverables.
- 18.3** To provide necessary collaterals to substantiate TENDER response.
- 18.4** To present the salient features of bid response to facilitate evaluation.
- 18.5** To prepare various deliverables as per requirements for the respective phase.
- 18.6** To deploy the systems as per committed deployment plan/blue print.
- 18.7** To monitor risks and mitigate them continuously.
- 18.8** Submission of the reports to department on project progress on monthly basis.
- 18.9** Deliver the deliverables/equipment as per the contract terms and conditions.
- 18.10** Bidder has to personally inspect the schools where 3D printing Labs proposed

## **19. NDMC'S RESPONSIBILITIES:**

To provide the 3D Printing Lab space in the existing computer Labs of school of NDMC which has Desktop Computers with ink/Laser jet printers, power supply and internet connectivity and necessary furniture.

## **20. PAYMENT TERMS**

- 20.1** The firm will be legally bound to execute and complete the work order (LOA) for **setting up and management of 3D printing and Design tech labs for 10 NDMC Schools for Class VI to XII for 05 years which includes supply of 3D Printers, 3D Pens, PLA Filament Spools, Designing Software, Online portal (Digital Resources) and supply of Electronic and Mechanical consumables which may be required**

**for the successful operation of the 3D Printing Labs , 3D design and Printing curriculum for 5 years including onsite comprehensive maintenance** within 45 Days of the date of execution of contract work and subject to delivery time mentioned under scope of work. In case the firm (selected bidder) fails to execute the order either in full or in part within the stipulated period, the NDMC reserves the right to forfeit the Earnest Money / Security Deposit / Bank Guarantee deposited by the firm after expiry of the extended period if granted.

- 20.2** The hardware payment shall be made after the installation, operation and commissioning of equipment and completion of first training in the schools within 03 months of receipt of the invoice by department after ascertaining the performance of the labs and quality of the material and satisfactory certification by the concerned HoS.
- 20.3** The quarterly basis payment for the engagement of the trainer cum mentor, 3D Filament Spool and AMC cost. At the time of payment, applicable taxes will be deducted at source.
- 20.4** The invoice amount would be paid after the evaluation of performance and after deducting penalties, if any.

## **21. PERFORMANCE SECURITY/GUARANTEE:**

- 21.1** The Performance Security/Bank Guarantee (BG) will be in the form of an account payee Demand Draft, Fixed Deposit Receipt from a Commercial bank, Bank Guarantee from a Commercial bank or online payment in an acceptable form safeguarding the purchaser's interest in all respects.
- 21.2** The BG shall be valid for a period of 6 months or 180 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. (05 years of the contract period)
- 21.3** EMD shall be refunded to the successful bidder on receipt of Performance Security.
- 21.4** The Performance Security/Bank Guarantee (BG) shall be for an amount equal to 10% (Ten per cent) of the total value of the Contract (tendered/bid amount) quoted by the successful bidder and shall be deposited to the NDMC within 15 days from the date of receipt of letter of acceptance.
- 21.5** All charges whatsoever such as premium, commission, etc. with respect to the BG shall be borne by the bidder.
- 21.6** In case the successful bidder fails to submit performance bank guarantee within the time stipulated, the NDMC at its discretion may cancel the Letter of acceptance issued to the successful bidder without giving any notice and may invoke the EMD of such successful bidder.
- 21.7** The extended BG in all the above cases shall be submitted at least 3 months before the expiry of the previous BG, failing which, NDMC reserves the rights to terminate the contract, and forfeit the BG.
- 21.8 Release of Performance Guarantee:** The Performance Bank Guarantee will be released only after meeting all of the following conditions:
- 1.** After successful implementation of this project.
  - 2.** Successful operation and maintenance of all services under this agreement.
  - 3.** Payment of all the penalties throughout implementation, operation and

maintenance period.

4. At the end of the contract period, Performance Bank Guarantee of successful bidder will be released after successful handing over all the assets and services, including all hardware, software in working conditions. If any deficiency noticed at the time of handing over the successful bidder has to get rectified /replaced the same at his own cost within 15 days otherwise NDMC will get it rectified

**22. DISCOUNTS, LEVIES, FREIGHT ETC.**

The Bidders are informed that discount, if any, should be merged with the quoted prices. Discount of any type, indicated separately, will not be taken into account for evaluation purposes. The Bidders should also take into account all levies, freight, insurance etc. The price quoted should be inclusive of all levies, freight, insurance, octroi, and levies etc. if any type, indicated separately, will not be taken into account for evaluation purposes. NDMC shall be liable to payable applicable taxes on the quoted prices.

**23. PRICES**

Price mentioned in the Letter of Award shall be firm and not subject to escalations the execution of the complete order and its subsequent amendments accepted by the Successful Bidder. NDMC shall not be liable to the firm/selected bidder any additional cost arising due to use of any third party license or hardware cost. NDMC shall not be liable for any claim whatsoever for any use of software/hardware tools deployed by the firm for, **setting up and management of Design Tech Labs for 10 NDMC Schools.**

**24. COMPREHENSIVE ANNUAL MAINTENANCE (AMC):**

- 24.1 The period of onsite comprehensive maintenance will be 05 years, and will start from the date of successful commissioning & functioning of the project. (Go-Live date) Amount of Comprehensive warranty will be paid for succeeding 05 (five) from the go-live date.
- 24.2 Comprehensive annual maintenance includes the supply of mechanical consumables, Electronic consumables and stationery which are requiring for next 4 consecutive years.
- 24.3 During the AMC period of the products given by the successful bidder, the bidder shall give warranty that goods to be supplied shall be new and free from all defects and faults in material, workmanship, and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards for materials of the type ordered and shall perform in full conformity with the specifications and drawings. The bidder shall be responsible for any defects that may develop under the conditions provided by the bidder and under proper use, arising from faulty materials, design or workmanship such as corrosion of the equipment, inadequate contact protection, deficiencies in circuit design and or otherwise and shall remedy such defects at his own cost when called upon to do so by the tenderer.
- 24.4 If it becomes necessary for the bidder to replace or renew any defective portion/portions of the equipment under this clause, the provisions of the clause shall apply to the portion/portions of equipment's replaced or renewed or until the end of the above-mentioned period of sixty months, whichever may be later. If any defect is not remedied within 24 hours, than the penalty will be laid as per penalty clause. The Purchaser may proceed to get the work done at



the Supplier's risk and expenses, but without prejudice to any other rights which the Purchaser may have against the Supplier in respect of such defects.

**24.5** Replacement under warranty clause shall be made by the Supplier free of all charges at site including freight, insurance and other incidental charges.

**24.6** Under the comprehensive maintenance, the bidder has to manage and maintain in working condition of 3D printing lab in 10 Schools covering hardware, software, filament spools, Mechanical and Electrical consumable which is necessary infrastructure to correlate with curriculum for the entire contract period.

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**BID CONDITIONS AND INSTRUCTIONS TO BIDDERS**

**1. ONLINE PROPOSAL/BID SUBMISSION**

- 1.1** The bidder is responsible for registration of the e-procurement portal (**[www.govtprocurement.delhi.gov.in](http://www.govtprocurement.delhi.gov.in)**) at their own cost. The bidders are advised to go through the e-procurement guidelines and instructions, as provided on the e-procurement website. Bidders should have valid class II Digital Signature Certificate (DSC) obtained from certifying Authorities.
- 1.2** The Bidder shall provide all the information sought under this TENDER document , NDMC would evaluate only those TENDERS that are received in the specified forms / formats / annexure/ appendices and complete in all respects and with the submission date and time. The TENDERS shall be submitted online only.
- 1.3** Bidders should note the Proposal Due Date (PDD) – last date of submission of the bid, as specified in the TENDER schedule, for submission of TENDERS. Except as specifically provided in this TENDER, no supplementary material will be entertained by NDMC, and that evaluation will be carried out only on the basis of documents submitted on line by the closing time of the TENDER due date. Bidders may be asked to provide additional material information or documents or technical presentations subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected.

**2. WHILE SUBMITTING THE BID, IT MAY BE NOTED THAT:**

- 2.1** In case, the day of bid submission is declared Holiday by Government of India, the next working day will be treated as day for submission of bids. There will be no change in the timings.
- 2.2** Ambiguous bids will be out rightly rejected.
- 2.3** NDMC will **NOT** be responsible for any delay on the part of the vendor in submission of the TENDER bids.
- 2.4** The offers submitted by telegram/ fax/ E-mail/Through Post in physical form except the physical copy of the EMD, etc. shall **NOT** be considered. No correspondence will be entertained on this matter.
- 2.5** Conditional TENDERS shall **NOT** be accepted on any ground and shall be rejected straightway.
- 2.6** Applicant should know that the bid shall get disqualified if applicant gives price details in the technical documents.
- 2.7** When deemed necessary, NDMC may seek clarifications on any aspect of their bid from the agency. However, that would not entitle the agency to change or cause any change in the substance of the TENDER submitted or price quoted. This would also not mean that their quote has been accepted.
- 2.8** No enquiry shall be made by the bidder during the course of evaluation of the TENDER, after opening of bid, till final decision is conveyed to the successful bidder. However, the Committee/its authorized representative and office of NDMC can make any enquiry/seek clarification from the bidders, which the bidders must furnish within the stipulated time else bid of such defaulting bidders will be rejected.

- 2.9** The documents asked to be uploaded along-with the technical bid. Financial/Price bid shall be included in technical bid. If done so, same shall be rejected without any notice.
- 2.10** The bidder shall upload the information as per the formats given in Annexure to this tender (Annexure –II to Annexure-VII (including format))

**3. THE MODE OF TENDER IS ONLINE AND SHALL BE TWO BID/STAGES SYSTEM:**

- 3.1** Under this process, the Bid shall be invited and examined under two stages:
- a. **Technical bid**
  - b. **Financial Bid**
- 3.2** Eligibility and pre-qualification of the Bidder will be first examined based on the details submitted under the Technical Bid with respect to basic eligibility and technical qualification evaluation criteria for technical bid stipulated in this TENDER. The Financial Bid under the second stage shall be opened of only those shortlisted Bidders who are Technical Bids are responsive for the eligibility and have scored minimum qualifying marks in the Evaluation Criteria as prescribed in this TENDER. The sole criterion for selection of the Project Developer is the lowest Financial Quote by a bidder who has been shortlisted based on their Technical Bid.
- 3.3** The bidder has to technically qualify in terms of the basic minimum eligibility criteria for which the documents asked are required to be uploaded and to be produced if demanded. Further to qualify technically, the bidder firm has also to score a minimum of 70% out of 100 under the Evaluation Criteria. The bidders who technically qualify under the evaluation criteria will only be eligible for financial bid opening. The lowest price bid shall be declared as L1/lowest bid for consideration of Award of Work.

**4. THE BIDDER SHALL SUBMIT THE PROPOSALS ONLINE AS DESCRIBED BELOW:**

- 4.1** The Technical bid shall not include any financial information relating to the financial tender. Incase financial bid is given/uploaded with technical bid documents it shall be summarily rejected.
- 4.2** The proposals submitted should have all pages numbered. It should also have an index giving page wise information of documents. Proposal that are incomplete or not in prescribed format will be summarily rejected.
- 4.3** The Bidder is allowed to submit only one proposal against this TENDER.
- 4.4** Documents in support of eligibility must be enclosed with the TENDER. Offers without satisfying eligibility conditions will be out rightly rejected and no correspondence in this regard will be entertained.
- 4.5** Bidders shall be deemed to have understood and agreed that no explanation or justification for any aspect of the Selection Process will be given and that NDMC's decisions are without any right of appeal whatsoever.
- 4.6** Applicants are encouraged to inform themselves fully about the assignment and the local conditions before submitting the Proposal.
- 4.7** Broad description of the objectives, scope of services, deliverables, and other requirements relating to this Contract are specified in this TENDER.
- 4.8** Any entity which has been barred by any agency of the Central Government, any State Government, any Statutory bodies, or any public sector undertaking, as the

case may be, from participating in any project, and the bar subsists as on the date of the Proposal, would not be eligible to submit a Proposal either by itself or through its Associate.

- 4.9** The NDMC shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to TENDER or the Selection Process, including any error or mistake therein or in any information or data given by the NDMC.

**5. ELIGIBILITY AND QUALIFICATION CRITERIA FOR THE FIRMS**

- 5.1** The basic eligibility criteria must strictly be fulfilled by the Bidder. The Bidder must submit documentary evidences in support of their claim for fulfilling the criteria. The bids received without the documentary evidences shall be rejected summarily. Non-compliance of any condition shall lead to disqualification in Technical Bid.

**5.2 BASIC ELIGIBILITY CONDITIONS FOR PRE-QUALIFICATION is as per the following table:**

Sl. NO.	Basic Requirement	Specific Requirement	Documents Required As part of the Technical Bid
1.	General Requirement of the bidder firm	i) The Bidder shall be a company or firm. In case of company, it shall be registered and incorporated in India under the (Indian) Companies Act 1956/2013 ii) The bidder should bean Educational Technology Services Company Or A 3D Printer company dealing with 3D printers, 3D printing services with experience of setting up 3D printing labs and training in School and Colleges. Or A bidding company should be registered with Niti Ayog for Atal Tinkering Labs And dealing with supply & installation of 3D printers and setting up Design Technology for Computerlabs/skill centers/ Tinkering Labs iii) Bidder should be in operations in India <u>for a</u>	Supporting documents required. The Bidder shall <b>enclose with its bid, certificate(s) from its statutory Auditors stating its total revenues</b> from developing software applications fees during the 1 (one) financial year preceding the last date of bid submission of the bid. In the event that the Bidder does not have a statutory Auditor, it shall provide the requisite certificate(s) from the firm of Chartered Accountants that ordinarily audits the annual accounts of the Bidder.

		<p><b><u>minimum of 1 (ONE) year</u></b> at least (period counted up-to the last date of submission of bid).</p> <p>iv) The Bidder must have at least one office in India which has been operational for the last one or more year.</p> <p>v) Average Annual Revenue/turnover from setting up and operating of design tech lab/ 3D Printing lab in schools or colleges with a dedicated faculty <b>in the last one financial year (up to the last date of the bid submission) should be minimum of Rs23,00,950</b></p> <p>vi) Bidder should be OEM / authorized dealer of OEM 3D Printers which is being in operation from last 1 year.</p>	
2.	Tax /GST Registration	<p>The Bidder should have a registered number of</p> <p>a. GST where his business is located.</p> <p>b. Income Tax PAN</p>	Copies of relevant(s) Certificates of Registration.
3	Track Record	Bidder should not be black-listed by any Central / State Government / Public Sector Undertaking in India.	Declaration Regarding Clean Track in the format as per Annexure
4.	Experience	<p>Bidder should have experience of successfully executing/in progress 3D Printing and Design Technology labs in educational institutes, Government/semi Government Departments/Private Educational institutions/ skills centers of with a dedicated trainer faculty in last one year preceding the last date of submission of bid document, as per the following:</p> <p>1. One similar works costing not less than the amount equal to <i>(80% of the work ) i.e. Rs. 36,81,520/- or 8 labs*</i></p>	Copy of satisfactory completion report to be attached

		<p style="text-align: center;"><b>or</b></p> <p><b>Two similar works each costing not less than the amount equal to (60% of Estimated Cost) i.e. Rs. 27,61,140/- or 6 Labs*</b></p> <p style="text-align: center;"><b>or</b></p> <p>Three similar works each costing not less than the amount equal to <u>(40% of Estimated Cost) i.e. Rs. 18,40,760/- or 4 Labs *</u></p>	
5	HR availability	The bidder must have at least 10 professionals with minimum of 50% technical professional which, includes mechanical, computer science, electrical engineers on its payroll since last 4 months.	<p>HR Details and Certificate as per the format.</p> <p>Minimum Academic Qualifications of the Mentor/Instructor shall be B.E. Computer Science/Electronics or B. Tech in IT.</p> <p style="text-align: center;"><b>Or</b></p> <p>B. Tech/B.E. in Civil/Electric/Mechanical with CAD as one of the subject</p> <p style="text-align: center;"><b>Or</b></p> <p>Bachelor Degree in Architect.</p>
6	Bank Solvency	The Bidder should submit Bank Solvency Certificate for a minimum amount of Rs. 18,40,760/- (Eighteen Lakh forty thousand Seven Hundred Sixty only) i.e. 40% of the estimated cost, issued on or after 1 <sup>st</sup> January, 2018 by a Scheduled Bank.	The Bank solvency certificate may be got verified from the Bank concerned.
7.	Integrity Pact	The bidder should submit duly signed, witnessed and stamped Integrity Pact which is placed at annexure - III	<p>The bidder may duly sign, witnessed and stamped the Integrity Pact.</p> <p>(If bid is not accompanied by Integrity Pact duly signed, witnessed and stamped by the bidder shall be considered to be a non-responsive bid and shall be rejected straightway.)</p>

**\*similar work related to for setting up and management of 3D printing and Design tech labs for 10 NDMC Schools for Class VI to XII for 05 years which includes supply of 3D Printers, 3D Pens, PLA Filament Spools, Designing Software, Online portal (Digital**

Resources) and supply of Electronic and Mechanical consumables which may be required for the successful operation of the 3D Printing Labs , 3D design and Printing curriculum for 5 years including onsite comprehensive maintenance

**NOTE: Necessary documents have to be submitted to the satisfaction of the Council in the formats/forms as per the Annexure-I to Annexure-V and Annexure VII along with all formats (1 to 9) of Annexure-V. The annexure has to be submitted only online with the Technical Bid.**

**5.3** Misrepresentation/ improper response by the Bidder may lead to the disqualification. If such disqualification / rejection occurs after the tenders have been opened and the highest ranking Bidder gets disqualified / rejected, then NDMC reserves the right to consider the firm with the next lowest price bid, or take any other measure as may be deemed fit in the sole discretion of NDMC, including annulment of the bid process.

## **6. CLARIFICATIONS TO QUERIES**

**6.1** For any other query relating to technical specifications, the bidders may contact **the Deputy Education Officer (Computers), NDMC/Education Department at Room No.1005, 10<sup>th</sup> Floor, NDMC Building, Palika Kendra, Sansad Marg New Delhi – 110001.**

**6.2** Bidders requiring any clarification on the tender may send their queries to NDMC in writing through email so as to reach before the pre-bid meeting date.

**6.3** NDMC shall endeavor to respond to the queries within the period specified therein. NDMC will post the reply to all such queries on e-tendering portal website.

**6.4** NDMC reserves the right not to respond to any query or provide any clarifications, in its sole discretion, and nothing in this clause.

## **7. Pre-Bid Meeting**

**7.1** The Pre-bid meeting shall take place on 13.07.2018 at 3:00 pm in the Council Room, NDMC building, Palika Kendra New Delhi-110001 under the Chairmanship of Secretary, NDMC. Any change in venue, date and time, if any, will be informed through a notice on the NDMC website. Vendors are requested to visit the NDMC website i.e. [www.ndmc.gov.in](http://www.ndmc.gov.in) regularly.

**7.2** Bidders are requested to give detailed suggestions of bid document in written at the time of pre-bid meeting.

**7.3** The queries, addressed to Director(Education), may be submitted in the form of hardcopy in the office of the Director (Education) or on **email** - [director.education@ndmc.gov.in](mailto:director.education@ndmc.gov.in), with cc to [coordinator.education@ndmcmil.gov.in](mailto:coordinator.education@ndmcmil.gov.in) before 48 hours of the time fixed for the pre-bid meeting after which no query shall be taken into account. Any corrigendum, if required, will be uploaded on NDMC website and e-tendering portal after the pre-bid meeting date.

**8. AMENDMENT TO TENDER DOCUMENT**

At any time prior to the deadline for submission of Tender, NDMC may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the tender document by the issuance of Addendum/ Amendment and posting it on e-tendering portal. In order to give the Bidders a reasonable time for taking an amendment into account, or for any other reason, NDMC may, in its sole discretion, extend the last date of bid submission.

**9. NON-TRANSFERABLE BID**

Neither the contract nor any rights granted under the contract may be sold, leased/sublet, assigned, or otherwise transferred, in whole or in part, by the Bidder, and any such attempted sale, lease, assignment or otherwise transfer shall be void and of no effect. The vendor shall not subcontract or permit anyone other than its personnel to perform any of the work, service or other performance required of the vendor under the contract.

**10. DEVIATIONS**

The bidder should clearly read and understand all the terms and conditions, specifications, etc. mentioned in the original tender documents. If the bidder has any observations, the same may be intimated before the pre-bid meet. Bidders are advised not to make any corrections, additions or alterations in the original tender documents. If this condition is not complied with, tender is liable to be rejected.

**11. LAST DATE OF SUBMISSION OF BID**

The bid duly filled must be received by NDMC at the address specified not later than the date and time mentioned in the Tender Schedule. Bid received later than the deadline prescribed for submission of tender by NDMC will be rejected.

**11. WITHDRAWAL OF BID**

No Tender can be withdrawn after submission and during Bid validity period. Submission of a bid by a bidder implies that he had read the entire tender document including amendments if any, visited the site and has made himself aware of the scope of Work to be executed and other factors having any bearing on the execution of the Work.

**12. CLARIFICATION OF THE BID**

To assist the examination, evaluation and comparison of the Bids, NDMC may at its discretion ask the bidders for any clarifications as considered essential. All such correspondence shall be in writing and no change in price or substance of the tender shall be sought or permitted. The above clarification for submission of the details shall form part of the tender and shall be binding on the bidder.

**13. CANVASSING**

No bidder is permitted to canvass to NDMC on any matter relating to this tender. Any bidder found doing so may be disqualified and his bid may be rejected.



**14. RIGHT TO ACCEPT ANY BID OR REJECT ALL BIDS**

NDMC reserves the right to accept, negotiate, cancel or reject any bid or to annul and reject all bids at any time prior to the award of the contract without incurring any liability to the affected bidders or any obligation to inform affected bidder, the grounds of such action. If the bidder, as individual or as a partner of partnership firm, expires after the submission of his bid but before award of services, the NDMC shall deem such bid as invalid.

**15. PROCESS OF SUBMISSION OF BID DOCUMENTS 15.1** Bidders shall submit the technical tender online at <https://govtprocurement.delhi.gov.in> on or before tender due date/last date of bid submission. Bidders should have valid class II Digital Signature Certificate (DSC) obtained from certifying Authorities.

**15.2** The Technical bid shall not include any financial information relating to the Financial Tender. In case financial bid is given with technical bid documents it shall be summarily rejected.

**15.3** The Bidder shall provide all the information sought under this tender document, NDMC would evaluate only those Tenders that are received in the specified forms/formats/annexures/appendices and complete in all respects and within the submission date and time. The tenders shall be submitted online only.

**15.4** The format/documents /figures shall be typed or written in indelible ink and signed by the authorized signatory of the Bidder and then uploaded on the <https://govtprocurement.delhi.gov.in>. All the alterations, omissions, additions, or any other amendments made to the Tender shall be initialed by the person(s) signing the Tender. The Tenders must be signed by the authorized signatory ("Authorized Signatory").

**15.5** Bidders should note the tender due date (last date of submission of the bid), as specified in the tender schedule, for submission of Tenders. Except as specifically provided in this tender, no supplementary material will be entertained by NDMC, and that evaluation will be carried out only on the basis of Documents submitted online by the closing time of tender due date. Bidders may be asked to provide additional material information or documents or technical presentations subsequent to the date of submission, and unsolicited material if submitted will be summarily rejected.

**16. BID EVALUATION PROCESS**

**16.1.** NDMC shall open the Technical bid on the tender due date as specified in Tender Schedule in the presence of the Bidders who choose to attend. The Technical bid shall be opened first.

**16.2** After the technical evaluation, NDMC shall invite qualified Bidders for opening of their Financial Tenders. A date, time and venue will be notified to all Bidders for announcing the result of evaluation and opening of Financial Tenders. Before opening of the Financial Tenders, the list of pre-qualified Bidders along with their Technical Scores as per the evaluation criteria will be read out.

**17. TECHNICAL EVALUATION COMMITTEE (TEC)**

The bid evaluation committee constituted by NDMC shall evaluate the bids. This may involve the representations from field and/or other department's experts.

The decision of the Technical Evaluation Committee (TEC) in the evaluation of the Technical and Commercial bids shall be final.

## **18. PRE-QUALIFICATION EVALUATION**

Pre - qualification bid documentation shall be evaluated as under:

- 18.1** The evaluation committee will check if the bidder has deposited the EMD along with the Technical Proposal and the same are found to be in order.
- 18.2** The documentation furnished by the bidder will be examined prima facie to see if the firm's capacity, skill base and other Bidder attributes as claimed therein are consistent with the needs of this project.
- 18.3** NDMC may ask bidder(s) for additional information, and/or arrange discussions with their professional, technical resource to verify claims made in bid documentation. If the bidder fails to submit the additional supporting documents, the bid shall be rejected.
- 18.4** TEST OF RESPONSIVENESS: The initial criteria of fulfilling the basic eligibility and experience of similar class/nature of works completed and financial turn over etc. As given above under eligibility criteria will first be scrutinized and the applicant's eligibility for the work shall be determined.
- 18.5** NDMC shall determine whether each bid is of acceptable quality, is generally complete and is substantially responsive to the bidding documents. For purposes of this determination, a substantially responsive bid is one that conforms to all the terms, conditions and specifications of the bidding documents without material deviations, objections, conditionality or reservation. If a bid is not substantially responsive, it shall be rejected by the NDMC. In case of tenders containing any conditions or deviations or reservations about contents of tender document, NDMC may ask for withdrawal of such conditions/deviations/reservations. If the bidder does not withdraw such conditions/deviations/ reservations, the tender shall be treated as non-responsive. NDMC decision regarding responsiveness or non- responsiveness of a tender shall be final and binding.
- 18.6** NDMC reserves the right to verify all statements, information and documents, submitted by NDMC in response to the tender. The lack of such verification by NDMC shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of NDMC there under.
- 18.7** In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof, that one or more of the eligibility conditions have not been met by the Bidder or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet issued LOA and if the Selected Bidder has already been issued the LOA or has entered into the Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this tender, be liable to be terminated, by a communication in writing by NDMC without NDMC being liable in any manner whatsoever to the Selected Bidder.

## 19. CRITERIA FOR EVALUATION OF TECHNICAL BID

The applicants qualifying the initial criteria of basic eligibility (pre-qualification) as set out in **clause above** will be evaluated further for the following criteria by scoring method on the basis of details furnished by them:

	<b>Attributes</b>	<b>Evaluation Marks</b>
<b>1.</b>	Financial strength	<b>( Maximum 10 marks)</b>
	Average annual turnover in last 3 (three) Financial year and must be certified by Chartered Account.	1. Between 23 Lakh to 35 Lakh : <b>05 Marks</b> 2. Between 36 Lakh to 47 Lakh: <b>7 Marks</b> 3. More than 47 Lakh : <b>10 Marks</b>
<b>2.</b>	Experience in similar nature of work of setting up 3D Printing and Design Technology labs with dedicated faculty in schools	<b>(Maximum 30 marks)</b> (i) 01 to 03 3D Printing and Design Technology labs successfully deployed in government/ government aided/ Privately owned schools/Educational Institute/Skill Centers: <b>10 Marks</b>  (ii) 04 to 08 3D Printing and Design Technology labs successfully deployed in at-least 02 (two) government aided/ Privately owned schools/Educational Institute/Skill Centers: <b>15 Marks</b>  (iii) More than 08 3D Printing and Design Technology labs successfully deployed in at least 03 (three) government aided/ Privately owned schools/Educational Institute/Skill Centers: <b>30 marks</b>
<b>3.</b>	OEM or Authorized OEM	1) If Bidder is OEM of the 3D Printer : 10 Marks 2) If Bidder is the authorized supplier of 3D Printers and related equipment : 5 Marks
<b>4.</b>	Events, Exhibitions and Industry Competitions	Participated in International Industry/ Academic Exhibition hosted and supported by MHRD/CII/ASSOCHAM/ Industry Association in Delhi or Mumbai Conducted National Level Competitions : 10 Marks Conducted State Level Competitions : 05 Marks
<b>5.</b>	Staff on payroll Availability of Technical Staff on the payroll of the Firm (Please upload the organization details duly certified by the Authorized Signatory of the firm)	<b>Max. (10 marks)</b> Upto 5 persons: <b>5 marks</b>  Between 5-7 persons: <b>7 marks</b>  More than 7 persons: <b>10 marks</b>

<b>6.</b>	Academic Content Experience and Hardware specifications, presentation and a write-up to be submitted for the evaluation	<b>Max. Marks : 30 Marks</b>
	(i) Extent of STEM Projects	<b>Maximum Marks – 15 Marks</b> If 3D Printing projects are progressive in age & values as well as come along with specific lesson plans- <b>15 marks</b>  If 3D Printing projects follow pre-defined lesson plans only- <b>10 marks</b>
	(ii) Assessments	<b>Max. Marks -10 Marks</b> If assessment is individual specific, with clear depiction of skill progression over the year- <b>10 marks</b>  If assessment to be done is individual specific OR portrays skill progression over year- <b>5 marks</b>
	(iii) Academic Enhancement	<b>Max. Marks-05 Marks</b> If Subject related models are accompanied with classroom execution plans- <b>5 marks</b>  List of Class wise subject related 3D models only- <b>2 marks</b>
<b>Total Marks</b>		<b>100</b>

**Note:**

1. The write-up/presentation copy of the evaluation item at Sr. No. (5) of the table above to be submitted by the bidder after presentation and shall become part of the technical bid of the bidder.
2. Presentation: Each bidder has to make a presentation to the bid Evaluation Committee at a date, time and venue as informed by NDMC. The Technical presentation must inter-alia - include the following:
  - 2.1 Understanding of the Project Requirements
  - 2.2 Highlights of the Proposed Solution
  - 2.3 Proposed Approach & Methodology
  - 2.4 Detailed Project Plan with class wise 3D Printing and Design activity curriculum
  - 2.5 Coverage of individual Modules in Proposed Application
  - 2.6 Proposed architecture
  - 2.7 Proposed team composition
  - 2.8 Live Demo of the Solution for Proof of Concept.
  - 2.9 Digital survey deployment/ action plan, methodology, data fidelity while conducting the survey, MIS/Progress dashboard.
3. Technical bid evaluation will be done on the scale of 1 to 100 points. The Bidders qualifying Technical Stage with **70%** or more will be considered as technically responsive bid and shall be considered for the opening of Price/Financial bid.
4. Bidder is required to submit necessary credentials/ documentary proof of Purchase Order/ Agreement, detailing Scope of Work, Timelines, project experience certificate etc. or relevant documents in support each of above parameters.

5. Technical bid evaluation will be done by a Technical Evaluation Committee (TEC) constituted by NDMC.
6. TEC will go through all the documents submitted by the Bidder to do the technical evaluation. TEC will also be free to do reference checks with the client(s) of the Bidder as per the details provided by the Bidder. In addition, TEC may seek clarifications from the Bidder during the presentation session of the Bidder. The decision of TEC will be final.

## **20. FINANCIAL/PRICE BID EVALUATION**

- 20.1 The Financial Tender shall be submitted online and digitally signed in the formats at **ANNEXURE-I**(the “**Financial PROPOSAL/FINANCIAL BID/PRICE BID**”) clearly indicating the total cost of the Work-, in Indian Rupees. In the event of a difference between the arithmetic total and the total shown in the Financial Tender, the lower of the two shall prevail. Financial Bid comprising of the Price Bid to be uploaded on e-Tender Portal Govt. of GNCT Delhi in the prescribed format.
- 20.2 The financial bid of the only technically eligible and qualified firm/ bidder shall be opened. The bidders who technically qualify will only be eligible for financial bid opening. The lowest price bid shall be declared as L1/lowest bid for consideration of Award of Work.
- 20.3 While submitting the Financial Tender, the Bidder shall ensure the following:
  - i) The total amount indicated in the Financial Bid/Price Bid shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the Financial Tender, it shall be considered non-responsive and liable to be rejected.
  - ii) All applicable taxes/levies rates shall be mentioned separately in the financial bid and calculated as per applicable laws. All payments to firm shall be subject to deduction of taxes at source as per Applicable Laws. It is the responsibility of the Bidder to clearly identify the basic cost of items associated with any services and the rates of GST as applicable and submit the total cost in the Financial Bid.
  - iii) Prices quoted will be firm for the entire period of Contract Five (05) years.
  - iv) The Price bid shall also include incidental charges, if any and no separate charges shall be paid by NDMC other than those quoted in the Financial /Price bid.

## **21. CONTRACT FINALIZATION AND AWARD CRITERIA**

- 21.1 The sole criteria for selection of the Project Developer are **the lowest Financial Quote (L-1 Bidder)** of all the bidders who have been shortlisted based on their Technical Bid. In the event of more than one bidder quote the same financial price (Bid Price), NDMC may call those bidders (limited to only such bidders) for negotiation/ resubmission of the financial Bid. In such a case, firm that offers the lowest Bid Price will be the selected Project Developer. The term “Lowest Bidder” shall mean the Bidder whose Bid Price is the lowest.
- 21.2 NDMC notify the selected bidder, through a Letter of Award (LoA), that its bid has been accepted. The letter of award will be accompanied by the proforma for contract, incorporating all agreements between the parties.

**21.3** Within 15 days (two weeks) from the issue of the Letter of Award (LoA), the successful Bidder shall sign and date the contract and return it to NDMC and the selected bidder will initiate the execution of the work as specified in the agreement. Failing which the LOA/Work order will be liable for cancellation.

**22. PREPARATION, SUBMISSION AND EVALUATION OF PROPOSALS**

- 22.1** The firms shall bear all costs associated with the preparation and submission of its proposal, including any site visits, field investigations, data collection, analysis, sample presentation, etc. The NDMC shall not be responsible or liable for any such costs incurred.
- 22.2** Adherence to formats, wherever prescribed, is required. Non-adherence to formats might be a ground for declaring a proposal non-responsive.
- 22.3** All communication and information shall be provided in writing and in English language only.
- 22.4** The Bidding documents include any addenda/addendum issued subsequent to this TENDER Document, will be deemed to form part of the Bidding Documents.
- 22.5** The Bid shall be summarily rejected if it is not accompanied by the Bid Security/EMD.
- 22.6** Bidders are advised to examine the Project in greater detail, and to carry out, at their cost, such studies as may be required for submitting their respective Bids for award of the License including implementation and operation of the Project.

**23. RIGHT OF NDMC TO REJECT A BID**

NDMC reserves the right to reject any or all of the responses to Tender Document or cancel the Tender Document without assigning any reasons whatsoever and without any liability.

**24. BIDDER TO INFORM HIMSELF**

The bidder shall be deemed to have satisfied himself about the detailed job content, the conditions and circumstances affecting the contract prices and the possibility of executing the works as shown and described in this tender.

**25. SUBMISSION OF INTEGRITY PACT**

As per CVC guidelines every bidder has to submit the attached signed Integrity Pact format with technical bid, without signed Integrity Pact the bid will be rejected.  
**(Format of Integrity Pact as Annexure-III)**

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**GENERAL TERMS AND CONDITION OF THE AGREEMENT**

**1. AWARD OF WORK**

After selection, a Letter of Award (the “LOA”) for **setting up and management of 3D printing and Design tech labs for 10 NDMC Schools for Class VI to XII for 05 years which includes supply of 3D Printers, 3D Pens, PLA Filament Spools, Designing Software, Online portal (Digital Resources) and supply of Electronic and Mechanical consumables which may be required for the successful operation of the 3D Printing Labs , 3D design and Printing curriculum for 5 years including onsite comprehensive maintenance** Shall be issued, in duplicate, by NDMC to the Selected Bidder and the Selected Bidder shall, within 07 (Seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof.

**2. EXECUTION OF AGREEMENT**

After acknowledgement of the LOA as aforesaid by the Selected Bidder, it shall execute the Agreement within 15 days of the issue of LOA as prescribed in this tender(**Annexure-II**) after furnishing the Performance Security in the form of Bank Guarantee, on a non-judicial stamp paper of Rs. 50/- as per the prescribed format provided by NDMC. Failure to execute the contract is liable to result the rejection of the work order

**3. COMMENCEMENT OF THE WORK**

The selected bidder shall commence the work at NDMC as per the Project Schedule mentioned under the Scope of Work at para 15 (Chapter IV) in the Tender Document. If the selected bidder fails to either sign the Agreement or commence the work as specified herein, the Bid Security of the selected Bidder shall be forfeited.

**4. EXTENSION OF COMPLETION PERIOD:**

In case the supply and installation (Go-Live) of design tech lab as mentioned in the tender document is not successfully deployed within **45 Days from the date of Execution of the Contract Agreement** then an extension of 30 days may be granted subject to recovery of liquated damages @ 0.5% per week of the total value of the project quoted by the bidder (Contract Value). The failure on part of bidder to deploy successfully the design tech lab as described in the tender even after the expiry of the 30 days extension, shall lead to cancellation of the work order, contract agreement and forfeiture of performance security.

**5. LIQUIDATED DAMAGES**

If the supplier fails to deliver any or all the services or perform the services within the time period specified in the contract or leaves the job incomplete or refuses to complete the work or takes more time than the schedule fixed, the NDMC shall without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, (not by way of penalty) a sum equivalent to

0.5% (half) percent of the price of the delayed software or unperformed service for each and every week (part of a week being treated as a full week) of delay until actual delivery or performance, up to a maximum deduction of 10% (Ten percent) of the total contract price.

**6. APPLICATION STANDARDS**

The software/ services supplied under this contract shall conform to the standards mentioned in the technical specifications and when no applicable standard is mentioned to the authoritative standards, such standard shall be latest issued by the concerned authorities.

**7. INSPECTION AND TESTS**

The NDMC shall have the right to inspect and/or test the conformity to the Contract Specification.

Should the system fail to conform to the specification, the Purchaser- NDMC may reject them and the supplier shall either replace the rejected system or make all alterations necessary to meet specification requirements free of cost to the Purchaser.

**8. PROPRIETARY RIGHTS**

The Bidder/Supplier shall indemnify the Purchaser/ NDMC against all third party claims of infringement of patent, copyright, trademark, license or industrial design rights and other intellectual property rights, material piracy arising from use of the goods or any part thereof in the Purchaser’s country.

**9. SERVICE LEVEL STANDARD AND PENALTIES DEDUCTION**

S. No.	Service Level	Performance Standard	Penalty to be imposed
1	Functional Hardware availability and functionality of printers, 3D Pens and other hardware & 3D Design software	During all sessions/periods in which 3D Printing is scheduled	Each instance of non-functionality/non-availability during the period/session/class attributable on part of Project firm shall lead to penalty of Rs. 1000/- per day per Lab that will be deductible from the Performance Guarantee
2	Attendance of trainer cum mentor	100% Attendance during all sessions/periods for every class as per the schedule submitted by the Project Firm. The trainer cum mentor duty hours shall not be less than	Absence for each session/class with result in penalty of Rs. 500/- + proportional amount of one day salary.



		07 hours in all school days. Each session/period for a class shall not be less than 01 hour time	
3	3D Printing PLA Material and other accessories availability	100% availability during all sessions mentioned as per the schedule submitted by the Project Firm	Non-availability of 3D Printing material during the mentioned session shall results in penalty of Rs. 1000/- per day per Lab
4	Submission of Class wise quarterly curriculum Evaluation report of Students	Submission of quarterly curriculum for each class level and session shall be 2 weeks before the commencement of sessions	Every delay of week leads to Rs. 2,500/- per week penalty
5	Child assessment modules	To be submitted within 2 weeks of the end of quarterly curriculum period.	Every delay of week leads to Rs. 2,500/- per week penalty.
6	Year-end report	By 30 <sup>th</sup> April 2018 and 30 <sup>th</sup> April 2019	Every weeks delay shall lead to fine of Rs. 5,000/- per week.

**Note:** The report shall be submitted by the Project Firm to the Officer/In-charge of Education Department appointed by NDMC and to the Principal of the School concerned with due acknowledgement from the recipient. All penalties will be deducted from the payments due/Performance Guarantee deposited with NDMC.

The pre-condition breaches/service level agreements shall be deducted from the quarterly payments due. Penalties on account of breaches of SLA shall not be limited to the maximum copy of liquidated damages and may exceed beyond that on account of breaks.

“If the successful bidder fails to perform as per the agreement, a penalty of **Rs. 5000/- (Five Thousand)**per day per class will be imposed and the continuance of nonperformance for more than 20 classes continuously for 3 or more days, in such circumstances, NDMC rescue the right to cancel the contract and forfeit the Bank guarantee/Performance Security. “

#### **10. MERGER & ACQUISITION OF THE VENDOR WITH ANOTHER COMPANY**

In the event the Vendor's company of the concerned division of the company is taken over/ bought over by another company, all obligations and execution responsibilities under the agreement with NDMC, shall be passed on for compliance by the new company in the negotiation for their transfer.

**11. ASSIGNMENT**

The supplier shall not assign, in whole or in part its obligations to perform under this contract, except with the Purchaser’s prior written consent.

**12. AMENDMENTS**

No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties.

**13. WAIVER**

Failure or delay on the part of the Supplier or NDMC to exercise right or power hereunder shall not operate as a waiver thereof.

**14. APPLICABLE LAW**

This Contract including the Contract Documents shall be governed by and construed in accordance with the laws of India and the New Delhi Courts only shall have jurisdiction in this regard.

**15. SUB-LETTING OF CONTRACT**

The contractor shall not sublet, transfer or assign the contract or any part thereof without the written permission of the NDMC, in the event of the contractor contravening this condition, the NDMC, shall be entitled to place the contract elsewhere on the contractor’s account and at his risk and the contractor shall be liable for any losses or damage which the contractor may sustain in consequence or arising out of such replacing the contract. The AMC and the providing the trainer cum mentor shall be the responsibility of the successful bidder cum project developer.

**16. TERMINATION FOR DEFAULT**

The NDMC reserves the right to cancel the contract of the selected bidder and recover expenditure incurred by the NDMC on the following circumstances:

- 16.1** The selected bidder commits a breach of any of the terms and conditions of the bid/contract.
- 16.2** The bidder goes into liquidation voluntarily or otherwise
- 16.3** The progress regarding execution of the contract, made by the selected bidder is found to be unsatisfactory.
- 16.4** If deductions on account of liquidated Damages exceeds more than 10% of the total contract price.
- 16.5** If the Bidder, in the judgment of the Tendering Authority has engaged in corrupt or fraudulent practices in competing for or in executing the Contract. For the purpose of this clause:
  - 16.5.1** “Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
  - 16.5.2** “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a Contract to the detriment of the Tendering Authority, and includes collusive practice among BIDDERS (prior to or after bid submission) designed to establish bid prices at artificial

noncompetitive levels and deprive the Tendering Authority of the benefits of free and open competition.

**16.6** After the award of the contract, if the selected bidder does not perform satisfactorily or delays execution of the contract even after grant of extension, the NDMC reserves the right to get the balance contract executed by another party of its choice by giving one month's notice for the same. In this event, the selected bidder is bound to make good the additional expenditure, which the NDMC may have to incur to carry out bidding process for the execution of the balance of the contract. This clause is applicable, if for any reason, the contract is cancelled.

**16.7** NDMC reserves the right to recover any dues payable by the selected bidder from any amount outstanding to the credit of the selected bidder, including the pending bills and/or invoking Bank Guarantee, if any, under this contract or any other contract/order.

## **17. CONSEQUENCES OF TERMINATION**

In Circumstances mentioned above the Tendering Authority may forfeit the security deposit /Guarantee.

## **18. FORCE MAJEURE**

**18.1** Notwithstanding the provisions of tender, the Successful Bidder shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

**18.2** For purpose of this clause, "Force majeure" means an event beyond the control of the Successful Bidder and not involving the Successful Bidder's fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes etc. Whether a "Force majeure" situation exists or not, shall be decided by NDMC and its decision shall be final and binding on the Successful Bidder and all other concerned.

**18.3** In the event that the Successful Bidder is not able to perform his obligations under this contract on account of force majeure, he will be relieved of his obligation force majeure period. In the event that such force majeure extends beyond six months, NDMC has the right to terminate the contract in which case, the PBG shall be refunded to him.

**18.4** If a force majeure situation arises, the Successful Bidder shall notify NDMC in writing promptly, not later than 14 days from the date such situation arises. The Successful Bidder shall notify NDMC not later than 3 days of cessation of force majeure conditions. After examining the cases, NDMC shall decide and grant suitable additional time for the completion of the Work, if required s during the force majeure period. In the event that such force majeure extends beyond six months, NDMC has the right to terminate the contract in which case, the PBG shall be refunded to him.

**18.5** If a force majeure situation arises, the Successful Bidder shall notify NDMC in writing promptly, not later than 14 days from the date such situation arises. The Successful Bidder shall notify NDMC not later than 3 days of cessation of force majeure conditions. After examining the cases, NDMC shall decide and grant suitable additional time for the completion of the Work, if required.

## **19. NOTICES ON DEFAULT**

Any notice given by one party to the other pursuant to this contract shall be sent to the other party in writing or by email and confirmed in writing to the other party's last recorded address. A notice shall be effective when delivered or tendered to other party whichever is earlier. A period of 15 (Fifteen) days shall be given to respond to the Notice.

## **20. DISPUTE RESOLUTION AND ARBITRATION**

**20.1** In case of any disagreement or dispute having arisen between the purchaser and contractor under or in connection with the contract, the same shall be resolved by making all endeavors amicably through direct informal negotiation.

However, if the parties are unable to resolve the disputes amicably, the same shall be submitted for resolution in accordance with the rules of Delhi International Arbitration Centre (DIAC).

**20.2** The award of the sole Arbitrator shall be final and binding on all the parties. The arbitration proceedings shall be governed by Indian Arbitration and Conciliation Act 1996 as amended from time to time.

**20.3** The cost of Arbitration shall be borne by the respective parties in equal proportions. During the pendency of the arbitration proceeding and currency of contract, neither party shall be entitled to suspend the work/service to which the dispute relates on account of the arbitration and payment to the Architectural Consultant shall continue to be made in terms of the contract. Arbitration proceedings will be held at New Delhi only.

## **21. JURISDICTION OF COURT**

The courts at New Delhi shall have the exclusive jurisdiction to try all disputes, if any, arising out of this agreement between the parties. Successful Bidder's Obligations:

## **22. LEGAL OWNERSHIP**

Successful bidder shall indemnify NDMC for any software Patent/IPR related issue and it is the responsibility of Successful bidder to comply with the rules and procedure relating to the ownership or patent rights/IPR. NDMC shall not be made party to any dispute/litigation arising out of use of third party licenses by the selected firm. The Successful Bidder is obliged to work closely with NDMC's staff, act within its own authority and abide by directives issued by NDMC.

The Successful Bidder will abide by the statutory norms/Govt. rules prevalent in India and will free NDMC from all demands or responsibilities the cause of which is the Successful Bidder's negligence. The Successful Bidder will pay all indemnities arising from such incidents and will not hold NDMC responsible or obligated.

### **23. SUCCESSFUL BIDDER LIABILITY**

Successful Bidder hereby accepts full responsibility and indemnifies NDMC and shall hold NDMC harmless from all acts of omissions and commissions on the part of the Successful Bidder, his agents, his sub-contractors and employees in execution of the work. The Successful Bidder also agrees to defend and hereby undertakes to indemnify NDMC and also hold him harmless from any and all claims arising out of or in connection with the performance of the work under the Letter of Award.

### **24. INDEMNITY AND INSURANCE**

The bidder shall indemnify and make harmless the owner or the Officers, their agents or employees from and against all losses and all claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against him or the owner by reason or any act or commission of the said bidder, his agents or employees in the execution of the work. An indemnity bond to this effect will be submitted by the bidder before start of work.

### **25. NO UNAUTHORIZED CODE**

The supplier shall not supply or install any software that the purchaser is not licensed to use, unless the product is activated by a required license key (if required). The supplier shall also certify that all their products and updates as supplied to the purchaser shall be free from viruses, worms, Trojans, spy-ware etc.

### **26. CONFIDENTIALITY OF NDMC DATA**

The Successful Bidder will treat as confidential all data and information about NDMC, obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of NDMC.

### **27. GOVERNING LANGUAGE**

The contract shall be written in English language, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

### **28. LIMITATION OF LIABILITY**

**28.1** The aggregate liability of the Successful Bidder to NDMC, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price/Value provided, however, that this limitation shall not apply to any liability for damages arising from: Willful misconduct, or Indemnification against third party claims; or Gross Negligence.

**28.2** Neither party shall be liable to the other for any special, indirect, incidental, consequential (including loss of profit or revenue), exemplary or punitive damages whether in contract, tort or other theories of law, even if such party has been advised of the possibility of such damages.

**29. TAXES AND DUTIES**

**29.1** The successful bidder shall be responsible for all the statutory taxes, statutory dues, local levies, service taxes, GST, etc to be paid to Government /statutory bodies/authorities etc. for the services rendered by it. There will be no tax liability upon the NDMC whatsoever on any account.

**29.2** The successful bidder indemnifies NDMC from any claims so that may arise from the statutory authorities in connection with the License.

**29.3.** The successful bidder should ensure enforcement of applicable laws including Labour Law, Minimum Wages Laws etc. and at no point of time should the NDMC be drawn into litigation on these counts.

**30. COMPLIANCE WITH LABOUR LAWS**

The Concessionaire shall abide by and comply with all the Applicable Laws and statutory requirements, including Minimum Wages Act 1948, Payment of Wages Act 1936, Contract Labour (Regulation & Abolition) Act 1970, Employees’ Provident Funds and Miscellaneous Provisions Act 1952 etc.

**31. INTERPRETATION OF THE CLAUSES**

In case of any ambiguity in the interpretation of any of the clauses in Tender Document or the Contract Document, the Tendering Authority’s interpretation of the clauses shall be final and binding on all parties

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**SPECIAL CONDITIONS OF CONTRACT**

1. No commitment of any kind, contractual or otherwise shall exist unless and until a formal written contract has been executed by or on behalf of NDMC. The NDMC may cancel this tender or contract at any time prior to a formal written contract being executed by or on behalf of NDMC.
2. **Risk Purchase**  
In case of breach of any of the conditions of the agreement or delay in supply or failure to implement at bidder's own quoted rates, NDMC may at its option, take any or all of the actions detailed below:-
  - 2.1 Implement / Purchase from elsewhere on bidder's Risk or Account the entire or the remaining items and services.
  - 2.2 Forfeit either wholly or the part of the service charges/ security deposits.
  - 2.3 Taking of such other action against the bidder including legal action for breach of contract.
  - 2.4 Levy of penalties or with-held payment to the extent of services not provided.
3. The bidder should give complete details of 3D printer infrastructure which will be delivered in schools which should be duly supported by documentary evidence from the heads of concerned schools.
4. The bidder should submit a partnership deed in case of a partnership firm, memorandum and article of association and certificate of registration in case of Private/Public limited company or registered society.
5. If L1 bidder refuses to accept the work order within 07 days from the date of issue of work order from NDMC, the offer will be treated as withdrawn and the bidder's EMD will be forfeited, besides, debarring and blacklisting the bidder for at least three years, for further dealings with NDMC.
6. In case L1 bidder fails unable to deliver the project within delivery period or further in any specified period due to applicability of force majeure condition specified in Section V, the work order/contract with L1 bidder will be terminated and no payment for any leftover/partial work will be paid by NDMC. In such case, NDMC may ask L2 bidder to execute the remaining work by matching the price of L1 bidder and undertaking by prospector bidders must be submitted in this regard in their technical bid.
7. The Technical Evaluation Committee and also competent authority will have the right to inspect the centres of the bidder already in operation for verification purposes mentioned in the Technical Bid.
8. The bidder should give complete details of curriculum delivered in schools which should be duly supported by documentary evidence.
9. The implementation schedule specified in the contract shall be strictly adhered to.
10. The trainer provided by the successful bidder shall work under the overall control & supervision of the Director (Education), NDMC. The number of trainer and the

period of work may vary as per the requirement.

- 11.** Neither party can assign its rights or delegate its obligations under this Agreement without the prior written consent of the other party.
- 12.** Services of the successful bidder regarding up gradation, grievance against complaint will be evaluated after every three months and report will be placed before the Competent Authority, NDMC for information.
- 13.** The Earnest Money Deposit in respect of unsuccessful bidders will be refunded after the award of the work to the successful bidder.
- 14.** No equipment shall be removed from the school premises by the successful bidder without the concurrence of the school Principal/Head in writing including for purposes of replacement of spares, etc.
- 15.** Safety, security, maintenance & insurance of the equipment and infrastructure installed at the school shall be responsibility of successful bidder during the implementation of the project. Thereafter, it will be the responsibility of the concerned HoS..
- 16.** NDMC reserves the right to change any terms and condition before award of last date of bid-submission.
- 17.** The successful bidder shall not change the legal entity of the company during the contract period without the permission of NDMC. The bidder will submit the declaration (on affidavit) in this regard. If this is violated at any point of time during the currency of the contract, NDMC reserves the right to cancel the agreement and the entire infrastructure installed in the School will become the property of the NDMC and no payment due of any kind will be made to the bidder.
- 18.** Any claim for remission on the basis of loss/harm to business interest on extraneous / unforeseen conditions / reasons whatsoever, shall be summarily rejected by the NDMC without any kind of response to the successful bidder & the successful bidder shall not be entitled to make any claim / remission on that account.
- 19.** The bidder must conduct survey of the existing processes and make independent evaluation of the scope of work. No bidder can hold the NDMC responsible for non understanding / misunderstanding the scope of work. Bidders are free to visit the said school sites to understand the technicalities for implementation of above project.
- 20.** Any equipment including hardware/ software's/ infrastructure once installed will become the property of NDMC.
- 21.** The bidders have to accept all technical/financial terms & conditions mentioned in the bid document. No conditional bid will be accepted. NDMC however, reserves the right to reject any or all of the offers. The successful Bidder will provide onsite comprehensive warranty and support to 30 NDMC schools, under NDMC within 24 hours of placing of complaint of fault in the installed equipment / software provided by the bidder. Comprehensive warranty will also include cost of consumables like wires, batteries of UPS, Lamp of the Projector and any part of computer and server etc.



- 22.** The Bidder shall bear all the cost and expenses associated with onsite warranty support to 10 NDMC Schools under NDMC.
- 23.** If any technical/operational defects are found in the 3D Printer, 3D Pens and software at any point of time (during the period of contract), the same will have to be rectified/replaced free of cost by the bidder. The bidder is also bound to make the necessary modification in the curriculum as per the feedback received from the teachers throughout the contract period.
- 24.** All equipments once installed in 3D printing Labs will not be taken away by the bidder in any case. NDMC has ownership rights on the entire infrastructure supplied and installed in the Classroom and Server which is placed in Computer Lab of the School.
- 25.** The successful bidder shall be liable and responsible for any loss of life and / or physical harm and any type of misconduct to the students and Schools staff on account of negligence on the part of employees of the successful bidder during the installation and maintenance of the 3D printing Labs. (The employees of the bidder should be of the high integrity and moral value).
- 26.** In case of additional requirement of any components of 3D design and printing Lab including consumables by the NDMC, the project firm/successful bidder shall supply the same on pro-rata basis at the prices quoted in the price bid or at the market rate whichever is lesser.
- 27.** Support services from the selected agency/firm/company would be required to 3D printing Labs items on regular basis to NDMC on all working days between 09:00 Hrs to 17:30 Hrs. No separate charges for delivery of goods would be paid by the office.
- 28.** The successful bidder shall not cause any damage to the NDMC property i.e. NDMC school either by himself or through his employees. The successful bidder shall repair immediately, at his own cost, the damages that may have been caused to the school wall / boundary / gate / advertisements etc. as a result of negligence during the establishment of 3. The decision of NDMC will be final and binding upon the successful bidder with regard to liability and quantum of damages to be paid by him.
- 29.** The bidder should have substantial presence in NCR. In case bidder has no presence in NCR, bidder shall furnish an undertaking that an office shall be opened in NCR, with comprehensive support services including sufficient personnel within a month of selection as Successful Bidder.
- 30.** The Successful bidder shall not cause any interference/hindrance to any activity of the Council or any government authority at the School Site in regards to the laying of pipe/conduit/cable etc. and it shall be the responsibility of the Successful bidder to pursue the matter regarding its repair with the concerned authority so that no inconvenience is caused to the Public.

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**FINANCIAL/PRICE BID SCHEDULE****(Commercial/Financial Bid Format to be submitted online through e Tendering Portal only)****Table – I**

1	2	3	4	5
Sr. No.	Item/Requirement	Units for 10 Labs	Basic Rate per unit (INR) (Excluding Taxes)	Total Basic Price(INR) (Excluding Taxes)
01	3D PRINTERS	10		
02	3D PENS	20		
03	Man Power Requirement (1 trainer cum mentor for each lab for 3 months)	30		
<b>Total cost for setting up of 10 labs (A)</b>				

**Table II**

1	2	3	4	5
Sr. No.	Item/Requirement	Quantity	Basis Rate for 1 3D Printing Labs (INR) (Excluding Taxes)	Total Amount for 5 year in 10 labs (INR) (Excluding Taxes)
1	Comprehensive Annual Maintenance for operation and management of 3D design and printing Labs including maintenance of Hardware and Software including supply of electronic and mechanical consumables and stationery required for 3D Printing Project are to be submitted along with tender document, indicating the list of items and quantity per lab per year) as per the Annexure-VI	50		
2	3D Filament Spools for 05 years for 10 labs	1250 kg		
<b>Total Cost for next 5 years (B)</b>				

**Table – III**

1.	2.	3.	4.	5.	6.
S.NO.	Component	Name of Component	Unit for 10 Labs	Basic Price (INR) (Excluding Taxes)	Total Amount for 10 Labs in (INR) (Excluding Taxes)
1.	Mechanical Tools	Screwdriver Set	10		
		Dremel Post Processing Kit	10		
		Glue Gun	10		
		Post-its	200		
3.	Electronic Assets	Solder Iron	10		

		Electronic Kits	60		
		Tablets	60		
		DC Motors Geared, 1000 RPM 12v	110		
	<b>Total Cost for Mechanical Tools and Electronic Assets (C)</b>				

**Note:** *The Lowest Price Bid (L-1 Bidder) shall be declared as lowest bid for consideration of award of work which shall be computed as per the combined grand total of items in table I,II and III (A of column 5 + B of column 5 + C of column 6) excluding taxes. Taxes as applicable shall be paid extra and hence to be excluded in the price bid quoted by bidder.*

**Authorized Signature**

**Name and Designation of Signatory:**.....

**Name of Firm:**.....

**Address:**.....

.....

.....

**CONTRACT AGREEMENT**

This Agreement is made on this between M/s **Firm name.....** having its registered office at **Address of the Firm** through its **Designated Officer with name.....**, (hereinafter called the Supplier which expression shall mean and include its successor, assignees and nominees) of the one part and New Delhi Municipal Council (NDMC), Palika Kendra, Sansad Marg, New Delhi through its Director (Education) Shri .....(hereinafter called the Council) of the other part.

Whereas the Council under consideration of the offer made for made pursuant to the NIT No..... agreed to allow the Supplier Firm to execute the work of **setting up and management of 3D printing and Design tech labs for 10 NDMC Schools for Class VI to XII for 05 years which includes supply of 3D Printers, 3D Pens, PLA Filament Spools, Designing Software, Online portal (Digital Resources) and supply of Electronic and Mechanical consumables which may be required for the successful operation of the 3D Printing Labs , 3D design and Printing curriculum for 5 years including onsite comprehensive maintenance.**

vide work/supply order no. **Work order no. with date.....** as per the terms and condition of the bid document.

Whereas each of the documents mentioned herein has been signed by and on behalf of the parties hereto called for purposes of identification and shall be treated as part of this agreement. Now it is hereby agreed by and between the parties as follows:

The Supplier Firm (The successful bidder who has been issued the letter of Award (LoA dated.....) shall upon and conditions shown in the NIT and the work/supply order and any other correspondence exchanged between the parties, annexed here to and which form part of this agreement, execute and complete the work so shown and described in the above said documents.

The Supplier shall deposit a Cash Security/Bank Guarantee equal to 10% of the approximate value of the work/supply ordered. The earnest money deposited shall be adjusted towards security money.

That the goods/services which shall be confirming with the quality and specifications given in the work/supply order and sample shown to, shall be delivered to the officer In-charge, IT Department, NDMC, New Delhi free of charge.

That the /services goods shall be delivered strictly within the period specified in the work/supply order/tender and the time is the essence of the contract. If the supplier fails to deliver the services or any installment thereof within the period fixed for such deliveries, the Council shall have the right to arrange the supply from elsewhere in the risk and cost of the supplier. However, in cases of genuine difficulty, extension of time

may be allowed by the Council shall recover from the Supplier as liquidated damages and not by way of penalty a sum equivalent to half percent (0.5 %) of the price of any store which the supplier fails to deliver within the specified **Delivery Period (as per work order)/tender T&C** .....of the expiry of the prescribed delivery period of the undelivered goods for every 07 seven days or part thereof. The liquidated damages in any case will not exceed 10% of the contract price or undelivered portion of supply.

That in case the goods/service ordered do not conform with the quality and specifications given in the work/supply order and not delivered within the stipulated period, Director (Education), NDMC shall have the right to reject all or any part of the goods/services so offered and whose decision in this respect shall be final and binding. The rejected goods shall be taken back by the supplier firm at their cost. In case, the supplier firm does not remove the rejected goods then the Council under no circumstances will be responsible for their loss, deterioration or destruction.

That in case the Supplier is not willing to execute the order or breaches any terms and conditions of the contract/agreement, Council may not only forfeit part or whole of security deposited, but shall have the option to purchase the same from another source/supplier and recover the difference in the price actually paid and that payable to the tenderer / quotationer firm. That in the event of any dispute arising between the parties, the same shall be referred to the sole arbitration of the Chairperson, NDMC or any officer appointed by him or her in this behalf, whose decision shall be final and binding on the parties.

The Terms and conditions of the Bid/tender documents have been agreed upon by both the parties and signed and added to this agreement.

In witness whereof the parties have hereunto set and subscribed the hands and seals on the date, month and year first above written.

**For and on behalf of Council  
Director (Education)**

**Witness: For and on behalf of Tenderer / Quotation Firm**

**1.**

**2.**

**(Signature and Capacity with Seal)**

**INTEGRITY PACT AGREEMENT**

As per CVC guidelines every bidder has to submit the attached signed integrity pact format with technical bid, without signed integrity pact the bid will be rejected. This signed format would be part of agreement and successful bidder will be bound to sign the integrity pact agreement again in Rs. 100/- non judicial stamp paper. (As per given annexure 'A')

**PRE-CONTRACT INTEGRITY PACT Annexure 'A' General**

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on \_\_\_\_\_ day of the month of \_\_\_\_\_ 20...., between on one hand the New Delhi Municipal Council acting through Shri R.P. Gupta, The director (Education) (hereinafter called the "Principal/Owner", which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s \_\_\_\_\_ represented by Shri \_\_\_\_\_ (hereinafter called the Bidder(s)/Contractor(s) which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns ) of the Second Part.

**Whereas** the Principal/Owner proposes to procure (Name of work..... ) through the Bidder(s)/Contractor(s) and the Bidder(s)/Contractor(s) is willing to offer / has offered the same.

**Whereas** the Bidder(s)/Contractor(s) is a private company/public company/ Government undertaking/ partnership/ registered export agency, constituted in accordance with the relevant law in the matter and the Principal/Owner is the municipal government of New Delhi established as per NDMC act 1994 performing its functions on behalf of the Council.

**Now, therefore,**

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to: Enabling the Principal/Owner to procure the desired said work/ Services/ Stores / Equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption during tendering, execution & public procurement,

**and**

Enabling Bidder(s)/Contractor(s) to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the Principal/Owner will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

**Commitments of the Principal/Owner**

**1.1** The Principal/Owner undertakes that no official of the Principal/Owner, connected directly or indirectly with the contract, will demand, take a promise for or accept,

directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the Bidder(s)/Contractor(s), either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

**1.2** The Principal/Owner will, during the pre-contract stage, treat all Bidder(s)/Contractor(s) alike, and will provide to all Bidder(s)/Contractor(s) the same information and will not provide and such information to any particular Bidder(s)/Contractor(s) which could afford an advantage to that particular Bidder(s)/Contractor(s) in comparison to other Bidder(s)/Contractor (s).

**1.3** All the officials of the Principal/Owner will report to the CVO, NDMC any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

**2.** In case any such preceding misconduct on the part of such official(s) is reported by the Bidder(s)/Contractor(s) to the CVO, NDMC with full and verifiable facts and the same is prima facie found to be correct by the NDMC, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the NDMC and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the NDMC the proceedings under the contract would not be stalled.

### **3. Commitments of Bidder(s)/Contractor(s)**

The Bidder(s)/Contractor(s) commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:

**3.1** The Bidder(s)/Contractor(s) will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Principal/Owner, connected directly or indirectly with the bidding process, or to any person, organization or third part related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.

**3.2** The Bidder(s)/Contractor(s) further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees brokerage or inducement to any official of the Principal/Owner or otherwise in executing the contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the New Delhi Municipal Council for showing or forbearing to show favour or disfavor to any person in relation to the contract or any other contract with the New Delhi Municipal Council.

**3.3** Bidder(s)/Contractor(s) shall disclose the name and address of agents/Brokers/representatives/Intermediaries and Indian Bidder(s)/Contractor(s)

shall disclose their foreign Principals or associates at the time of bidding.

- 3.4** Bidder(s)/Contractor(s) shall disclose the payments to be made by them to such agents/brokers/representatives/ intermediaries, in connection with this bid/contract at the time of bidding.
- 3.5** The Bidder(s)/Contractor(s), either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in Connection with the contract and the details of services agreed upon for such payments. A copy of contract so made with agents /brokers/intermediaries shall be submitted.
- 3.6** The Bidder(s)/Contractor(s) will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract. Bidder shall remain responsible to maintain safety & confidentiality of his bid documents during bid process.
- 3.7** The Bidder(s)/Contractor(s) will not accept any advantage in exchange for any corrupt practice, unfair means, and illegal activities.
- 3.8** The Bidder(s)/Contractor(s) shall not use improperly, for purposed of competition or personal gain, or pass on to others, any information provided by the Principal/Owner as part business relationship regarding plans, technical tenders and business details, including information contained in any electronic data carrier. The Bidder(s)/Contractor(s) also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.9** The Bidder(s)/Contractor(s) commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts, either to principal/owner or to IEMs so appointed by NDMC.
- 3.10** The Bidder(s)/Contractor(s) shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.11** If the Bidder(s)/Contractor(s) or any employee of the Bidder(s)/ Contractor(s) or any person acting on behalf of the Bidder(s)/ Contractor(s), either directly or indirectly, is a relative of any of the officers of the Principal/Owner, or alternatively, if any relative of an officer of the Principal/Owner has financial interest/ stake in the Bidder(s)/Contractor(s) firm, the same shall be disclosed by the Bidder(s)/ Contractor(s) at the time of filing of tender. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.
- 3.12** The Bidder(s)/Contractor(s) shall not lend to or borrow any money form or enter into any monetary dealings or transaction, directly or indirectly, with any employee of the Principal/Owner.
- 3.13** NDMC has adopted integrity pact for all its contract for 50 lacs and above. It is mandatory for the Bidders/ Service Provider(s) to sign the I.P. The bid of Bidder/ Service Provider(s) to do not sign the I.P. shall not be considered details of IEMs (Independent External Monitor) are as under:-
1. DR. D.K. Sharma, IEM [shharmadk@gmail.com](mailto:shharmadk@gmail.com)
  2. Sh. V.K. Gupta, IEM [Vinod101951@gmail.com](mailto:Vinod101951@gmail.com)
- In case of any grievances about the bid the same may be sent to IEM/Vigilance of NDMC with the name address of the sender.



#### **4. Previous Transgression**

- 4.1** The Bidder(s)/Contractor(s) declares that no previous transgression occurred in the last Five years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged here under or with any Public Sector Enterprise in India or New Delhi Municipal Council that could justify Bidder(s)/Contractor(s) exclusion from the tender process.
- 4.2** The Bidder(s)/Contractor(s) agrees that if it makes incorrect statement on this subject, Bidder(s)/Contractor(s) can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

#### **5. Sanctions for Violations**

- 5.1** Any breach of the aforesaid provisions by the Bidder(s)/Contractor(s) or any one employed by it or acting on its behalf (whether with or without the knowledge of the Bidder(s)/Contractor(s) shall entitle the Principal/ Owner to take all or any one of the following actions, wherever required: -
- 5.2** To encash the advance bank guarantee and performance bond/ warranty bond, if furnished by the Bidder(s)/Contractor(s), in order to recover the payments, already made by the Principal/Owner, along with interest.
- 5.3** To cancel all or any other contracts with the Bidder(s)/Contractor(s). The Bidder(s)/Contractor(s) shall be liable to pay compensation for any loss or damage to the Principal/Owner resulting from such cancellation/ rescission and the Principal/Owner shall be entitled to deduct the amount so payable from the money(s) due to the Bidder(s)/Contractor(s).
- 5.4** To debar the Bidder(s)/Contractor(s) from participation in future bidding processes of the New Delhi Municipal Council for a period ranging from six months to maximum five years. However, if the bidder takes corrective measures against transgressions, subject to satisfaction of Principal/Owner & IEMs, the period of debar can be reviewed.
- 5.5** To recover all sums paid in violation of this Pact by Bidder(s)/Contractor(s) to any middleman or agent or broker with a view to securing the contract.
- 5.6** In case where irrevocable Letter of Credit have been received in respect of any contract signed by the Principal/Owner with the Bidder(s)/Contractor(s), the same shall not be opened.
- 5.7** Forfeiture of Performance Bond/Guarantee in case of a decision by the Principal/Owner to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 6.** The Principal/Owner will be entitled to take all or any of the actions mentioned at para 6.1 (i) to (8) of this Pact also on the Commission by the Bidder(s)/Contractor(s) or any one employed by it or acting on its behalf (whether with or without the knowledge of the Bidder(s)/Contractor(s), of an offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 6.1** The decision of the Principal/Owner to the effect that a breach of the provisions of this Pact has been committed by the Bidder(s)/Contractor(s) shall be final and conclusive on the

- (i) To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the Bidder(s)/Contractor(s). However, the proceedings with the other Bidder(s)/Contractor(s) would continue.
  - (ii) The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/ Performance Bond / Guarantee (after the contract is signed) shall stand forfeited and the Principal/Owner shall not be required to assign any reason therefore.
  - (iii) To immediately cancel the contract, if already signed, without giving any compensation to the Bidder(s)/Contractor(s).
  - (iv) To recover all sums already paid by the Principal/Owner, and in case of Indian Bidder(s)/Contractor(s) with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of Bidder(s)/Contractor(s) form a country other than India with interest there on at 2% higher than the LIBOR. If any outstanding payment is due to the Bidder(s)/Contractor(s) form the Principal/Owner in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest.
- Bidder(s)/Contractor(s). However, the Bidder(s)/Contractor(s) can approach the Independent Monitor(s) appointed for the purposes of this Pact. IEMs shall examine the transgression and its severity and submit the report to Chairman, NDMC for further action after providing an opportunity and hearing to the affected parties.

## **7. Independent External Monitors**

- 7.1** The Principal/Owner has appointed Independent External Monitors (hereinafter referred to as IEMs) for this Pact in consultation with the Central Vigilance Commission whose names and email IDs have been given in the NIT.
- 7.2** The task of the IEMs shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this pact.
- 7.3** The IEMs shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 7.4** Both the parities accept that the IEMs have the right to access all the documents relating to the project/procurement, including minutes of meetings
- 7.5** As soon as the IEMs notices, or have reasons to believe a violation of this Pact, they shall so inform to Chairman, NDMC.
- 7.6** The Bidder(s)/Contractor(s) accepts that the IEMs have the right to access without restriction to all Project documentation of the Principal/Owner including that provided by the Bidder(s)/Contractor(s). The Bidder(s)/Contractor(s) will also grant the IEMs, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to subcontractors. The IEMs shall be under contractual obligation to treat the information and documents of the Bidder(s)/Contractor(s)/ Subcontractor(s) confidentiality.
- 7.7** The Principal/Owner will provide to the IEMs sufficient information about all meetings among the parties related to the Project provided such meeting could have an impact on the contractual relations between the parties. The parties will offer to the IEMs the option to participate in such meetings
- 7.8** The IEMs will submit a written report to the Chairman, NDMC within 8 to 10 weeks from the date of reference or intimation to him by the

Principal/Owner/Bidder(s)/Contractor(s) and, should the occasion arise, submit tenders for correcting problematic situation. However an opportunity of hearing shall be provided by the IEMs to the buyers /bidders before submitting their written report.

**8. Facilitation of Investigation**

In case of any allegation of violation of any provisions of this pact or payment of commission, the Principal/Owner or its agencies shall be entitled to examine all the documents including the Books of Accounts of the Bidder(s)/Contractor(s) and the Bidder(s)/Contractor(s) shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination

**9. Law and Place of Jurisdiction**

This pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the Principal/Owner.

**10. Other Legal Actions**

This pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the Principal/Owner.

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

**11. Validity**

**11.1** The validity of this Integrity Pact shall be from date of its signing and extend upto 12 months beyond the defects liability period of the contracts. In case Bidder(s)/Contractor(s) is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract by the successful bidder.

**11.2** Should one or several provision of this Pact turn out to be invalid, the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intention.

**12.** The parties hereby sign this Integrity Pact at \_\_\_\_\_ on \_\_\_\_\_

Principal/Owner  
Bidder(s)/Contractor(s)  
Chief Executive Officer  
Name of the Officer,  
Designation

**New Delhi Municipal Council**

Witness

1. \_\_\_\_\_  
2. \_\_\_\_\_

Witness

1. \_\_\_\_\_  
2. \_\_\_\_\_

\* Provisions of these clauses would need to be amended / deleted in line with the policy of the Principal/Owner in regard to involvement of Indian agents of foreign suppliers.

**BANK GUARANTEE FORMAT**  
**(On Rs. 100/- non- judicial stamp paper)**

1. In consideration of the New Delhi Municipal Council, Palika Kendra, Sansad Marg, New Delhi – 110001, (hereinafter called 'the council') having agreed to exempt **M/s Firm name with address** (hereinafter called the said 'Contractor(s)') from the demand, under the terms and conditions of work order No. \_\_\_\_\_ Dated \_\_\_\_\_ made between New Delhi Municipal Council **and M/s Firm name** for the **Name of work** (hereinafter called 'the said Agreement') of security deposit for the due fulfillment by the said Contractor(s) of the terms and conditions in the said Agreement on production of Bank Guarantee for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ Only) we, **Bank name with address, (Indicate the name of Bank)** (hereinafter referred to as 'the bank') at the request of **M/s Firm name, Contractor(s)** do hereby undertake to pay to the Council an amount not exceeding of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ Only) on demand by Council.
2. We, Bank name, do hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Council stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ Only).
3. We undertake to pay to the Council any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceedings pending before any court or Tribunal relating thereto, our liability under this present being, absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liability for payment hereunder and the Contractor(s) shall have no claim against us for making such payment.
4. We, Bank name with address, further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Council under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till person-in-charge on behalf of the Council certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee, or till 66 months from the date of execution of agreement whichever is earlier.
5. We, Bank name with address, further agree with the Council that the Council shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Agreement or the extend time of

performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Council against the said Contractor(s) / Suppliers and to forebear or enforce any of terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) / Suppliers or for any forbearance, act or omission on the part of the Council or any indulgence by the Council to the said Contractor(s) / Suppliers or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to change in the constitution of the bank or the Contractor(s).
7. We, Bank name with address, hereby undertake not to revoke this guarantee except with the previous consent of the Council in writing.
8. This Guarantee shall be valid up to \_\_\_\_\_ unless extended on demand to be made by the Council. Notwithstanding anything mentioned above, Our liability against this guarantee is restricted to Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ Only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee, all our liabilities under this guarantee, shall stand discharged.
9. The BG shall be extended in case the NDMC extends the contract, to an extent that the BG is valid for a minimum of 6 months after the expiry of the Contract.
10. The extended BG in all the above cases shall be submitted at least 3 months before the expiry of the previous BG, failing which, NDMC reserves the rights to terminate the contract, and forfeit the BG.

Dated the \_\_\_\_\_ day of \_\_\_\_\_ 200\_\_

For \_\_\_\_\_

(Indicate name of Bank)

**Technical Bid Form  
(To be submitted on letterhead of the Bidder)**

**To**

**Ref: Setting up of and management of 3D printing and Design tech labs for 10 NDMC Schools for Class VI to XII including supply and installation of 3D Printers, 3D Pens, PLA Filament Spools, Designing Software, Online portal (Digital Resources), and Supply of Electronic and Mechanical consumables which may be required for the successful operation of the 3D Printing Labs and providing 3D design and printing curriculum for 05 years including onsite comprehensive annual maintenance**

Date for opening tender bid on .....

Dear Sir,

1. Having examined the tender document of Providing 3D Printing and Design Technology Labs in Schools as detailed in the tender document, Terms & Conditions and scope of procurement, Specifications etc., and having understood the provisions and requirements relating to the procurement and all other factors governing the tender, We hereby submit our offer for the tender document providing and setting up 3D Printing and Design Technology labs, in accordance with terms and conditions and confirm our acceptance to execute the order within the time period specified in the tender document, at the rates quoted by us in the accompanying financial Bid.
2. We accept the Tender document and if we fail to complete the delivery as per the order, we agree that, NDMC shall have full authority to forfeit the earnest money/Performance Security and cancel our order with no obligation on their part.
3. We confirm having deposited earnest money of INR of Rs 1,80,460/- (INR One Lakh Eighty thousand Four hundred sixty only) with hard copy of document submission on or before the submission date and time in NDMC. Scan copy of EMD also submitted online also with other technical document
4. We further confirm that –
  - i) We have successfully executed orders of similar nature of work and we have sufficient experience and financial strength in handling orders of this value.
  - ii) We have sufficient qualified manpower and necessary expertise/materials and after sales support to execute the order efficiently in the specified time schedule the quoted rates shall be valid for 90 days from the date of submission of the bid.
  - iii) We further confirm that all contents of the tender document have been read, understood and signed and there is no deviation/discrepancy.

**Signature of the Bidder  
With stamp and date**

**Bidder's Profile**

(To be submitted on letterhead of the Bidder)

<b>TECHNICAL PROPOSAL SUBMISSION FORM</b>		
<b>Section 1: Organizational Details/Personal details</b>		
1.1 Name of the Firm/ Organization/ Individual		
1.2 Address of the Head Office:		
1.3 Address of the Project Offices:		
1.4 Telephone, Fax and Email details		
1.5 Name and Designation of the Authorized Representative of the renderer to whom all the references shall be made :		
1.6 Address, phone, fax and email of the Authorized Representative		
<b>Section 2: Subject Area</b>		<b>Reference page</b>
2.1 Area of Expertise:		
<b>Section 3: Registration Details</b>		<b>Reference page</b>
3.1 Registration no. and date:		
3.2 PAN/TAN card number details		
3.3 Service tax registration		
3.4 Any other registration		

<b>Section 4: Experience &amp; Profile</b>		
4.1 Summary of similar projects executed successfully in the past years; focusing on brief descriptions of assignments and experience in similar conditions.		
(i) Project title		
(ii) Total Cost		
(iii) Implementing partners (if any)		
(iv) Project duration		
(v) Client Name		
(vi) Project brief		
4.2 Experience in 3D Printing and Design Lab Software Applications Development		
<b>Section 5: Earnest money deposit (Bid Security) and validity</b>		
5.1 Validity of Offer (not less than 90 days)		
5.2 Details of Earnest money deposit		
(i) Amount of DD/BC		
(ii) DD/BC number		
(iii) Issue Date		
(iv) Name of the Issuing Bank		
(v) Name of the Issuing Branch		

**Signature of the Bidder With stamp and date**



**Project Experience****(To be submitted on letterhead of customer separately for every similar kind of project)**

<b>General Information</b>		
1	Customer Name/Government Department for which project executed	
2	Name of the Contact Person and Contact details including email-id.	
<b>Brief Description of scope of Project</b>		
3	Contract Value of the project (in Lakh)	
4	Total cost of the services provided (by the Bidder)	
<b>Project Details</b>		
5	Name of the project	
6	Start Date/End Date	
7	Date of Go-Live	
8	Current Status (work in progress, completed)	
9	Contract Tenure	
10	Brief Scope of Work	
11	Resources Deployed with Quantity (3D PRinters, 3D Pens, HR Resource, etc.)	

Please submit the documentary proof w.r.t. to work order and satisfactory completion report

**Authorization Letter**

**(Representative AUTHORIZATION Letter on the Letterhead of the Bidder)**

Date :.....

Ref :.....

To,

<< Name of authority>>

<< Department>>

<<Address>

Subject:

Ms./Mr.....is hereby authorized to sign relevant documents on behalf of the company/firm in dealing with tender reference No ..... She/ He is also authorized to attend meetings and submit technical and financial bid (Online) information as required by NEW DELHI MUNICIPAL COUNCIL for processing of bid. Ms. /Mr. .... is hereby authorized to make technical presentation on behalf of the company. (Proof of above two persons as employee of the company to be enclosed)

Thanking you,

**Representative Signature**

.....

**Authorized Signatory**

.....

.....  
**Signature attested**

**Self-Declaration – No Blacklisting/Clean Track Record  
(On bidder’s letter head)**

**To  
Director (Education)  
New Delhi Municipal Council  
Palika Kendra, Sansad Marg  
New Delhi-110001**

In response to the Tender Ref. No. \_\_\_\_\_ dated \_\_\_\_\_ for {Project Title} \_\_\_\_\_, as an Owner/Partner/Director of \_\_\_\_\_, I/ We hereby declare that presently our Company/ firm \_\_\_\_\_ or any of our group or associate companies, at the time of bidding, is having unblemished record and is not declared ineligible or has been issued letter for blacklisting for corrupt & fraudulent practices either indefinitely or for a particular period of time by any State/ Central government/ PSU/ UT or the Procuring Entity.

If this declaration is found to be incorrect then without prejudice to any other action that may be taken, my/ our security may be forfeited in full and our bid, to the extent accepted, may be cancelled.

Thanking you,

<b>Name:</b>	
<b>Address:</b>	
<b>In the capacity of:</b>	
<b>Signed:</b>	
<b>Date:</b>	
<b>Place:</b>	
<b>Seal of the Organization:</b>	

**OEM/BRAND WISE DETAILS OF DELIVERABLES**

<b>S.No.</b>	<b>Item /deliverable name</b>	<b>OEM</b>	<b>Brand/ Model No.</b>

**Signature of the Bidder with seal**

**COMMITMENT LETTER FOR SUPPORT FROM PRINCIPAL MANUFACTURER/OEM**

Date.....

To,  
The Director (Education)  
New Delhi Municipal Council,  
Palika Kender, Sansad Marg  
New Delhi-110001

Dear Sir,

**Ref: Tender No.**

I / We ..... hereby commit & confirm the following:

- a) The duration of the service support will be for a period of five years from the date of supply of material.
- b) The service support will be provided onsite at no cost to the NDMC.
- c) The service support will be comprehensive hence no extra charges are to be paid for any Hardware failure by the NDMC.
- d) We will provide warranty and spares up to quoted time or mentioned in tender document ,even in case of authorize representative/dealer terminated by us and we will transfer responsibility of authorized representative/dealer to another dealer in case of termination of main bidder.

**Signature .....**

**Name .....**

**Designation .....**

**AUTHORITY LETTER FROM PRINCIPAL MANUFACTURER/OEM**

To,

The Director (Education)  
New Delhi Municipal Council,  
Palika Kendra, Sansad Marg  
New Delhi-110001

Dear Sir,

**Ref: Tender No.**

.....[Manufacturer] hereby certify that M/s.....[bidder] is an authorized .....[relationship] of ..... [Manufacturer] and they are authorized to represent .....[Manufacturer] in submitting their bid for..... [Product& services] and conclude the contract with you. We.....[manufacturer] are confident of M/s [bidder's] ability to represent us and provide full support in making your project successful. We.....[Manufacturer] have authorized..... to quote for this tender.

**Signature .....**

**Name .....**

**Designation .....**

**UNDERTAKING ACCEPTANCE REGARDING IMPLEMENTATION SCHEDULE AND  
PAYMENT TERMS**

I/We ..... hereby accept and confirm that I/We agree to all the terms and condition of the implementation schedule and payment terms as mentioned in the tender document in Section VI.

**Signature of the Bidder with seal**

**Declaration**

It is declared that we, \_\_\_\_\_ (Name of the Bidding firm) will supply Electronic and Mechanical consumables in every four year which will be needed in the 2<sup>nd</sup> year onwards to the 5<sup>th</sup> year for the successful implementation of curriculum and covered under the comprehensive warranty terms.

<b>S.NO.</b>	<b>Component</b>	<b>Name of Component</b>	<b>Quantity per lab</b>	<b>Quantity for 10 labs</b>
1.	Mechanical Consumables	MDF Boards 4mm	5 boards of 8ft x 12ft	50
		Springs	20	200
2.	Electronic Consumables	Batteries 9V	40	400
		LEDs	100	1000
		Connecting Wires		
3.	Stationary	Fevicol	10 Bottles	100
		Double Tape	2 rolls	20
		Cello Tape	2 Packs	20
		Cardboards	200	2000
		Board Markers	10	100

**(Name and Seal of the Bidder)**



### Technical Bid Evaluation indicative Checklist

#### Check List-1

Sr. No.	Specific Requirements	Table of content with Page No. (to be filled by bidder)
1.	The Bidder should deposit EMD physical copy with NDMC before last date of bid and upload the same along with the Technical bid.	
2.	Compliance of Technical specification of 3D Printing Lab Hardware, Software, Annual Maintenance and Manpower requirement as mentioned at clause no. 12 of the Chapter – IV of the RFP document.	
3.	Bidder's Authorization Certificate	
4.	Self-Declaration – No Blacklisting	
5.	Technical Bid Submission Sheet	
6.	Suggestive electronics and other components required for 3D Printing Assignment related for each lab per year for the final 3D Projects ,mentioned in annexure - VI	
7.	Scanned copy of Permanent Account Number (PAN) of the firm/company	
8.	Scanned Self attested documentary evidence of Proof of Registered Office of the Bidder Firm/Company/Society	
9.	Compliance of curriculum for 3D printing labs including your suggestion so that desired objectives may be achieved.	
10.	Undertaking regarding acceptance of implementation schedule and payment terms Annexure – 5 : Format - 10	

#### Check List-2

S. No.	Basic Requirement	Documents Required	Page No. (to be filled by bidder)
1	General Requirement	Work Orders / Client Certificates confirming year and area of activity should be enclosed along with turnover. <b>(Annexure – V : Format -3 )</b>	
2	Certifications	Scanned and Self Attested copy of partnership deed in case of a partnership firm, memorandum and article of association and certificate of registration in case of Private/Public	

		limited company or registered society	
<b>3</b>	Tax Registration	Scanned and Self Attested Copies of relevant(s) Certificates of Registration and copy of latest Returns	
<b>4</b>	Technical Specifications of BOQ items	The Bidder should enclose relevant catalogues, brochures, etc. in support of all the items quoted in the Bid. Compliance of technical specification stated in <b>Table A, Table B, Table C</b> which is mentioned in the clause 12 of chapter – IV (Scope of work)	
<b>5.</b>	Experience	Scanned copy of satisfactory completion certificate from the user agency certifying the successful completion of the similar work done by the bidder	
<b>6.</b>	HR Availability	Copy of the relevant certificates of proposed candidate.	
<b>7.</b>	Bank Solvency	The Bidder should submit Bank Solvency Certificate for a minimum amount of Rs. 18, 84,760/- i.e. 40% of the estimated cost, issued on or after 1 <sup>st</sup> April 2018 by a Scheduled Bank. This Bank solvency certificate may be got verified from the Bank concerned.	
<b>8.</b>	Integrity Pact	The bidder should submit duly signed and stamped Integrity Pact which is placed at annexure - III	

**LIST OF SCHOOLS FOR ESTABLISHING 3D PRINTING LABS:**

<b>S. No</b>	<b>NAME OF THE SCHOOL</b>
1.	NP GIRLS SR. SEC. SCHOOL, GOLE MARKET
2.	NP BENGALI GIRLS SSS. SCHOOL, GOLE MKT
3.	NP CO-ED. SR. SEC. SCHOOL, TILAK MARG
4.	N.P CO-ED SR. SEC. SCHOOL, BAPU DHAM
5.	NP CO-ED. SR. SEC. SCHOOL, LAXMIBAI NAGAR
6.	NP CO-ED. SR.SEC SCHOOL, ANSARI NAGAR
7.	NP CO-ED. SR.SEC SCHOOL, HAVLOCK SQUARE
8.	NP CO-ED. SR.SEC SCHOOL, LODHI ESTATE
9.	NAVYUG SR. SEC. SCHOOL, SAROJINI NAGAR
10.	NAVYUG SR. SEC. SCHOOL, VINAY MARG

The list is tentative and may be changed at the time of award of work.