

**KERALA STATE SCIENCE AND TECHNOLOGY MUSEUM AND PRIYADARSINI  
PLANETARIUM**

Vikasbhavan P.O., Thiruvananthapuram - 695 033

Phone: 0471-2306024 Fax: 0471-2304286

[www.ksstmuseum.com](http://www.ksstmuseum.com)

(A Government of Kerala Undertaking)



**Tender for: Procurement of 3D Printer - FDM (Fused  
Deposition Modeling)**

Name and Address of the Tenderer:.....

.....  
.....

Last date and time of submission of tender: 24.01.2025, 3.00 pm

Date and time of opening of tender: 24.01.2025, 4.00 pm

Time of completion: 14 days

Probable Amount of Contract (PAC): 110000/-

Earnest Money Deposit (EMD): 2.5% of PAC IE - ₹2750/-

Cost of Tender Document: ₹500 + 18% GST

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**TENDER NOTICE**

No. A/623/2014/KSSTM

Dt.04.01.2025

Sealed tenders are invited for the procurement of a 3D Printer - FDM (Fused Deposition Modeling).

**SPECIFICATIONS & ESTIMATE FOR 3D PRINTER**

Sl. No	Description	Details
1	Build Volume	Minimum 45x45x45 cm
2	Layer Resolution	0.05 mm to 0.35 mm
3	XY Positioning Precision	13 microns or better
4	Z Positioning Precision	Approx. 5 microns
5	Print Speed(maximum)	>=120 mm/s
6	Operating Voltage	180-240V, Single Phase, 50Hz
7	Warranty	One year or more for all parts
8	Features	Heated bed capable of reaching 100-110°C, auto bed leveling, nozzle swapping (0.4mm standard), dual extrusion (optional), enclosed chamber (optional), power loss recovery, filament runout sensor, Wi-Fi/cloud connectivity, optional touchscreen interface, etc.
9	Print Materials	PLA, ABS, PETG, Nylon (PA)(1 reel of PLA and ABS should be supplied)
10	Dry Box for Filament Storage	Capacity to hold at least one reel, humidity-controlled

**Additional Technical Details to be Specified by Tenderer**

- Product Weight
- Product Dimensions
- Number of Extruders
- Nozzle Temperature
- Build Platform
- Filament Diameter

- Connectivity
- Supported Software and File Types
- Brand, Model, and Accessories

The envelopes containing the tender should bear the superscription "**Procurement of 3D Printer - FDM**" and should be addressed to the **Director, Kerala State Science and Technology Museum**.

The last date for receipt of tenders is **24.01.2025**. Late tenders will not be accepted. Tenders will be opened on **24.01.2025, 4.00 pm** in the presence of tenderers or their authorized representatives who choose to be present.

Intending tenderers may, on application to the Director, KSSTM, obtain the requisite tender forms on payment of ₹500 + 18% GST (non-refundable). Sale of tender forms will close on [Insert Date and Time]. Duplicate forms, if required, will also be issued at ₹500 + 18% GST per copy.

  
Director

**General Information of contractor**

- 1) Name of the firm/Tenderer :
- 2) Address :
- 3) Contact person :  
Phone  
Fax  
Email  
Cell Phone
- 4) Registration No. (If any) :
- 5) Details of type of contract license held (If any):  
(Copy to be enclosed)
- 6) Permanent Account No. (PAN) :
- 7) Details of Bank A/c :  
Account Number :  
IFSC Code :  
Name & Branch
- 8) GST Registration No (If available) :

**FORM OF TENDER**

From

.....  
.....  
.....  
.....  
.....

To

DIRECTOR  
Kerala State Science and  
Technology Museum  
Vikasbhavan P.O.  
Thiruvananthapuram.

Sir,

Having examined the specifications and tender schedule, schedule of work and having acquired the requisite information relating to the tender in all respects, I/We

.....  
.....

hereby offer to execute the work as specified in this tender at the rates mentioned in the schedule of work attached in accordance with the specifications, conditions of the tender, the articles of the agreements and such other materials as may be prescribed from time to time.

If this tender be accepted, I/We.....  
.....

hereby agree to abide by and fulfill the terms and provisions of the said conditions of contract annexed hereto so far as they may be applicable or in default thereof to forfeit the E.M.D. and



pay the Kerala State Science and Technology Museum, the amount mentioned in the said conditions.

I/we.....

..... have deposited a sum **Rs.**

**2,750/-**( Rupees Two Thousand Seven Hundred and fifty only) as EMD in the form of crossed demand draft in favour of the Director, Kerala State Science and Technology Museum, payable at Thiruvananthapuram. Should I/We fail to execute the agreement when called upon to do so, or to commence work as provided in the conditions, I/we do hereby agree that the Museum shall without prejudice to any right or remedy be at liberty to forfeit the EMD absolutely and also recover from me /us the entire loss that may be caused to the museum by retender arrangement of the work otherwise, under the provisions of Revenue Recovery Act or otherwise.

I/we agree that arbitration shall not be a means of settlement of any dispute or claim arising out of this contract.

Signature of the tenderer

Full Name and address:

**Details of EMD:**

DD No. ....dt..... for Rs. .... drawn on .....

.....

**UNCONDITIONAL ACCEPTANCE OF TENDER CONDITIONS**

NAME OF WORK: Procurement of 3D Printer - FDM (Fused Deposition Modeling)

I/We of M/s. \_\_\_\_\_, bidder for the above noted workdo hereby unconditionally accept all the terms and conditions mentioned in the tenderdocuments.

Further, we have noted that after unconditionally accepting the tender conditions in itsentirety, it is not permissible to put any remarks/conditions in the tender submission envelope. In case this provision of the tender is found violated at any time after opening of the tender, we agree that the tender is liable to be rejected and KSSTM shall, without prejudice to any other right or remedy, be at liberty to forfeit the full said Earnest money absolutely.

Signature of the Bidder:

Name of the tenderer:



## INSTRUCTIONS AND GENERAL CONDITIONS

Kerala State Science and Technology Museum is an Autonomous Organization, registered under Charitable Societies Act, established by the Govt. of Kerala for popularizing Science education to various sections of the society. This Museum is governed by a Governing Body chaired by the Hon'ble Minister for Education.

1. **Submission of tender** Tender shall be submitted in sealed cover, superscribed as Tender for Procurement of 3D Printer - FDM (Fused Deposition Modeling), KSSTM. The cover shall contain the following:

(a) Complete set of Tender documents as issued by the Museum together with addenda/corrigenda if any, filled in and signed by the tenderer, with address stamps/seals wherever stipulated. The rate quoted shall be both in words and figures. In case of any mismatch between the two, the amount indicated in words will be considered as correct.

(b) Earnest money deposit of ₹2750/- in the form of crossed demand draft drawn in favor of the Director, Kerala State Science and Technology Museum, Thiruvananthapuram payable at Thiruvananthapuram.

The offer shall be valid for a period of 45 days from the date of opening of the tender. Tender not accompanied by the E.M.D. shall be rejected as non-responsive.

2. **Acceptance / Rejection of tenders** The tenders submitted after the stipulated time of submission shall be rejected. The tenders not submitted in the prescribed forms, not duly signed at the places marked, incomplete/torn-off tender forms etc., shall be rejected. The Director, Kerala State Science and Technology Museum, Thiruvananthapuram reserves the right to accept or reject any of the tenders without assigning any reasons thereof. Becoming the lowest offered party does not entitle a tenderer to award the work. Apart from cost, quality of work, durability, track record of the contractor, guarantee offered etc. will also be considered for awarding the supply.
3. **Place of work and time of completion** The scope of the work covered by this tender is Procurement of 3D Printer - FDM (Fused Deposition Modeling) at Kerala State Science and Technology Museum, VikasBhavan, Thiruvananthapuram. Time of delivery, quality & precision in specifications are the essences of this tender. The procurement covered by this tender shall be completed in all respects within 7 Days from the date of agreement for the work. Delivery will be treated as complete only upon approval and certification of the Engineer-in-charge.
4. **Security Deposit for Agreement for the work** Within 7 working days of receipt of the letter of award, the awarded contractor has to execute an agreement with the Museum for the due fulfillment of the contract in the prescribed format, with a security deposit of 5% of the contract either in the form of Demand Draft, in favour of the Director, KSSTM, payable at Trivandrum or Bank Guarantee of Cash. The EMD submitted by all the tenderers will be released upon executing the agreement by the successful tenderer. The security deposit vide this clause will be released after successful completion of the guarantee period vide clause (5) below, and on certification of the Engineer.

  
Director

Signature of the tenderer

5. **Guarantee period (Defect Liability Period)** The procurement covered by this tender shall be guaranteed for a minimum period of one year from the date of delivery. Any defects observed during this period due to the usage of inferior quality materials or bad workmanship shall be rectified/replaced as per the opinion of the client/consultant within a reasonable period of 7 days, failing which the Museum shall have the right to rectify/replace the same at the risk and cost of the contractor.
6. **Withdrawals of the offer** Withdrawals of the offer after it is accepted or failure to deliver the equipment within a specified time or according to specifications will entail cancellation of the order and procurement being made at the offer's expenses from elsewhere, any loss incurred thereby being payable by the defaulting party. In such an event, the Museum reserves the right to remove the defaulter's name from the list of Museum's vendors and to report to the Government for blacklisting the tenderer in Government works permanently or for a specified number of years.
7. **Rates and Taxes** The rates quoted shall be firm for a period of 45 days from the date of opening of the tender. Rates offered shall be inclusive of all taxes & duties in force at the time of tendering. The quantities mentioned in the schedule of works are indicative, and no additional claims for deviation in quantities will be entertained during the tenure of the work or after the completion. The Museum shall have the rights to increase/decrease/delete item/items of work mentioned in the schedule of works, according to the requirements. Payments will be made on actual measurements as per agreed rates. No representation for enhancement of price will be considered on any ground.
8. **Site Visit** The tenderers are requested to visit the Museum and collect required data from the Engineer-in-charge before submitting the tender.
9. **Safety Precautions** The tenderer should take all precautionary measures to protect the interest of the Museum staff and equipment during the delivery and installation process. Any damage caused during the process must be rectified by the contractor at their own expense.
10. **Utilities** electric supply and any assistance required for installation shall be made available by the Museum free of charges.
11. **Influencing Officers** Any attempt on the part of tenderers or their agents to influence the officers concerned in their favor by personal canvassing will disqualify the tender.
12. **Jurisdiction** All disputes arising out of or in any way connected within this tender shall be deemed to have arisen in Thiruvananthapuram and only civil courts in Thiruvananthapuram shall have jurisdiction to determine the same.
13. **Payment Terms** 95% value of work based on agreed rates will be released on successful delivery and installation of the equipment and certification of the Engineer-in-charge. 5% will be paid on successful completion of the guarantee period, along with the security deposit.

Special conditions for payment, if any, printed on the tender sheets by the tenderer or attached with the tender will not be applicable to the tender unless they are expressly accepted in writing by the Director, KSSTM.

  
Director.

Signature of the tenderer



**SPECIAL CONDITIONS OF CONTRACT****Procurement of 3D Printer - FDM (Fused Deposition Modeling)**

1. **General scope of work** Procurement and delivery of a 3D Printer - FDM with all specifications outlined in the tender document shall be carried out as per the direction and specification provided.
2. **Quality Control** The quality of the equipment supplied shall conform to the specifications attached. The equipment must be in perfect working condition upon delivery, and any faults identified must be rectified or replaced immediately.
3. **Site Visit** The contractor shall visit the site and consult with the Engineer-in-charge before placing the bid to ensure a clear understanding of the requirements.
4. **Defect liability period** The contractor shall provide necessary technical support and supervision during installation and until the expiry of the defect liability period. Faulty equipment or materials found during this period shall be replaced with new ones without any additional cost to the Museum.
5. **Dismissal of personnel** The contractor shall, on the request of the employer, immediately remove any person employed by them who, in the opinion of the employer, is deemed incompetent or unsuitable for the task.
6. **Subletting** The entirety of the work included in the contract shall be executed by the contractor. The contractor shall not directly or indirectly transfer or sublet the contract to any third party.
7. **Measurement** The contractor and employer shall perform joint verification of the delivered equipment and prepare the bill for scrutiny and certification by the Engineer-in-charge. Payment shall be based on the verified quantities and quality of the delivered equipment.
8. **Completion period** The supply, delivery, and installation of the 3D Printer shall be completed in all respects within 14 DAYS from the date of execution of the agreement for the work.



Director

Signature of Tenderer

## Schedule of Work

Sl. No	Description	Details	QTY	Unit Rate	Amount
1	3D Printer with below mentioned specification	<p><b>Build Volume</b> Minimum 45x45x45 cm</p> <p><b>Layer Resolution</b> 0.05 mm to 0.35 mm</p> <p><b>XY Positioning Precision</b> 13 microns or better</p> <p><b>Z Positioning Precision</b> Approx. 5 microns</p> <p><b>Print Speed</b> (maximum) &gt;=120 mm/s</p> <p><b>Operating Voltage</b> 180-240V, Single Phase, 50Hz</p> <p><b>Warranty</b> One year or more for all parts</p> <p><b>Features</b> Heated bed capable of reaching 100-110°C, auto bed leveling, nozzle swapping (0.4mm standard), dual extrusion (optional), enclosed chamber (optional), power loss recovery, filament runout sensor, Wi-Fi/cloud connectivity, optional touchscreen interface, etc.</p>	1		
2	Print Materials compatible PLA, ABS, PETG, Nylon (PA)(1 reel of PLA and ABS should be supplied)		1 reel of PLA and ABS		
3	Dry Box for Filament Storage		1		
	Capacity to hold at least one reel, humidity-controlled				
4	Total including GST				

  
Director

Signature of Tenderer