NIELIT CALICUT

(Autonomous Scientific Society of Ministry of Electronics & Information Technology, Govt. of India)

NIT Campus Post, CALICUT-673 601, KERALA

Email: **purchase@calicut.nielit.in** Web: **http://nielit.gov.in/calicut**

Phone: 0495-2287266

LIMITED TENDER ENQUIRY

Ref. No.: 2(1199)/2020-21/ 3DPAM/CAESW

Date: 10.08.2020

To

DUE DATE: 07.09.2020

TENDER OPENING DATE: 09.09.2020 TIME: 2:00 PM

1. Quotations are invited for the supply of the items as per **Annexure-I**.

2. The quotations duly **SIGNED, SEALED AND SUPERSCRIBED ON THE ENVELOPE WITH THE REFERENCE No. AND DUE DATE,** should be addressed to the undersigned so as to reach on or before the due date stipulated above. Quotations received after the due date will not be considered.

3. Quotation will be opened at the above address on the date and time mentioned above. If this day becomes a holiday, the same will be opened on the next working day. The Tenderer or his authorized representative can be present during tender opening.

4. The quotations should be valid for acceptance for a period of **sixty days** from the due date

5. Quotations will not be accepted by Fax, Email or any such electronic data transfer form.

6. The quotations should be for goods exactly conforming to our requirements and specifications.

7. Relevant literature pertaining to the items quoted with full specifications and drawings, if any should be sent along with the quotations, wherever applicable. Samples, if called for, should be submitted free of charges and collected back at the supplier's expenses.

8. Copy of Manufacturing licence, Principal or Authorized Distributor/Dealer Certificate, and Proprietary Certificate, as applicable, should be enclosed.

9. Quotation should be for **free delivery** at our Centre and should clearly specify the **delivery period**. If delivery quoted is Ex-Godown/Consignor Station, delivery charges consisting of freight, packing & forwarding charges, insurance, etc. should be indicated separately. Goods should be supplied duly carriage paid and insured.

10. GST Registration Number of NIELIT Calicut is: **32AAATD0315M1Z6**. GST or any other taxes may be charged as per the rates applicable to Scientific/Educational institutions.

11. **Security Deposit @ 5% of the Purchase Order/Invoice value shall be retained, in case order/contract value exceeds Rs.1,00,000/- (Rupees one lakh), which will be released after the expiry of warranty period.**

12. Goods shall not be supplied without an official purchase order.

13. Payment: Payment will be made after completion of supply, installation/assembly and commissioning of the items covered by the order along with necessary spares supplied to the entire satisfaction of NIELIT CALICUT. Payment against invoices shall normally be made within 30 days of receipt and acceptance of equipment/materials at our office. **No advance payment will be made under any circumstance**.

14. Incomplete quotations and quotations which do not comply with all the above instructions are liable to be summarily rejected.

15. NIELIT CALICUT does not bind itself to accept the lowest or any such quotation and has the right to accept or reject whole or any part of tenders or a portion of the supply of goods without assigning any reasons. No correspondence in case of rejected tenders will be entertained.

16. Earnest Money Deposit (EMD) for **Rs. 37,500/-** be deposited by NEFT in the Bank Account No. 10401158037 (IFSC: SBIN0002207) at State Bank of India, NIT Calicut Branch, CREC Campus, Chathamangalam, Calicut – 673 601, in favour of Director, NIELIT CALICUT, failing which the quotation will be rejected. Proof of Deposit of EMD amount with Tenderer's Bank Account No. and IFSC No. should be submitted with the Quotation. Alternatively, the Tenderer may choose to submit EMD/Bid Security Declaration, as given in **Annexure-II**, subject to the conditions stipulated therein.

Yours faithfully,

10/06/20

Purchase In-Charge
For Executive Director

Encl: **Annexure**

ANNEXURE-I

Your Quotation No.   Date:

1	Description of item(s)	CAD/CAM/CAE Software (Educational Purpose) Quantity-1No. (15 users)
2	**Specifications & Quantity** :	As per Specifications attached.
3	Price per unit in Rs. (in figures & words)	
4	Total Price in Rupees (in figures & words)	
5	Delivery Period	
6	Terms of Delivery	
7	Taxes, Duties & any other statutory levies or charges	
8	Transportation, Insurance, Packing & Forwarding charges, if any	
9	Discount/off etc., if any	
10	GST Registration No.	
11	Payment Terms	
12	Validity of Tender	
13	Warranty	
14	EMD Amount and Payment details	
15	Bank Account No. with IFSC Code	
16	Any other remarks	
17	Signature of the Tenderer with Name and Date	
18	Address with Email ID & Mobile No.	
19	Central Public Procurement Portal (www.eprocure.gov.in) Registration, Email login ID	

NB: (1) The prices quoted and Taxes charged should be Academic/Educational Prices/rates, wherever applicable.

(2) Enquiry for the above items and specifications can also be downloaded from our website *http://nielit.gov.in/calicut* or *www.eprocure.gov.in*

(3) Please register at www.eprocure.gov.in and intimate login details without fail. Watch website for regular updates.

10/08/20

<u>**ANNEXURE-II**</u>

<u>Undertaking for EMD</u>
(on the letterhead of Organization)

Date: ....

To

The Executive Director
NIELIT
NIT Campus P.O.
Kozhikode – 673601
Kerala

Subject: Undertaking as per GFR–2017, Rule 170(iii).

Dear Sir,

We, the undersigned, offer to supply .... in response to your Tender No. .... dated .... We are hereby submitting our Bid/Quotation for the same. As a part of eligibility requirement stipulated in the said Tender documents, we hereby submit a declaration in lieu of Earnest Money Deposit (EMD), as given below:

1. Our bid shall remain valid for 60 days from the date of submission and that we will not withdraw or modify our bid during the validity period.
2. In case, we are declared as successful bidder and an order is placed on us, we will submit the acceptance in writing within 7 days of placement of order on us.
3. In case, we are declared as successful bidder and an order is placed on us, we undertake, to submit a Security Deposit of 5% of the order value, as per terms stipulated in the Tender.
4. In case of failure on our part to comply with any of the above said requirements, we are aware that we shall be declared as ineligible for said Tender and/or debarred from any **<u>future bidding process of NIELIT for a period of minimum two years.</u>**
5. The undersigned is authorized to sign this undertaking.

Yours sincerely,

Authorized Signatory:
Name and Title of Signatory (with seal):
E-mail:
Mobile No:

Specifications CAD/CAM/CAE Software (Educational Purpose) (Preferred product: Siemens NX/CATIA) Platform Supported: PC with Windows 10 operating system No of licenses: 15, type: Perpetual		
Specify Name of the software and Version no		
Sl no	Description	Complied (Y/N)
1.	Computer Aided Design - CAD	
	Solid Modeling • Associative, Feature based Hybrid Modeling Capabilities • Constraint based feature modeling and explicit geometric modeling. • 2D & 3D wireframe, swept and revolved solids, booleans, parametric editing • Variational sketching tools for quick and efficient conceptual design by capturing design communication intent • Incorporating thread specifications, on hole definitions and circular pads and holes. • Tools for general modeling and editing. • Expanded hybrid modeling capability with surface and shape design products • Create 2D and 3D drawings according to international standards, including ASME, ISO and JIS. • Create an associative bill-of-material (BOM) and associated balloon notes automatically • Automate the creation of drawings with templates	
	Feature Based Modeling • Designs in terms of Engg. Features • Design of 3D models from a 2D conceptual geometry • Support for creation and editing of standard design features • Parametric features with dimension-driven editing (size and position) • Includes Flexible, post-design 3D parameterization • Use of stored User Defined Features • Feature instance to create sets (arrays) • Design and annotate 3D model using a 2D drafting look	
	Freeform Modeling • Design of complex Freeform shapes (solids and surfaces) • Sweeps along curves, proportionally developed shapes, lofted bodies, blends, surfaces that bridge 2 or more bodies. • Shapes defined through mesh of curves / points, cloud of points • Tools for evaluating shape, size, curvature of complex models. • Trim/extend surfaces using tools such as extrude, revolve, blend, and sweep • Perform surface operations such as copy, merge, extend, and transform	
	Drafting • Make production drawings from Solid models • Dimensions associated to geometric model • Layout of 3D models, with full drafting capabilities. • Auto view layout (projections, sectioning, auxiliary & detail views)	
	Assembly Modeling • Concurrent Top Down Product Development Approach	

	• Provide assembly annotation and documentation for all types of application. High productivity assembly manipulation and modification tools allowing dynamic analysis of assembly definitions and collision checking. • Assemblies represent real-world applications by using mechanical assembly definition (flexible-assemblies) as well as rigid BOM based assemblies. • Master models can be designed and edited in the context of the overall assembly • Components can be flexibly mated / positioned and are associative. • Parametric Modeling of Assembly: Mating relationships, specifying groups & duplicated parts. • Extremely large product structures can be created and shared by a design team. • Accessing part revisions with user-defined naming rules. • To embed fit, form and function knowledge to create assemblies quickly and accurately • Leverage real-time collision detection • Provide assembly annotation and documentation for all types of application. • Design in assembly context with user-control of associativity with contextual link • Concurrent Engineering between the design of the assembly and the design of individual parts	
	Sheet metal Modeling • Dedicated Sheetmetal feature-based modeling • Allows Folding / unfolding of the sheetmetal part • Includes Reverse engineering from drafting • Concurrent engineering between unfolded and folded part representations • Access to company-defined bending tables • Dedicated drawing extraction capability includes unfolded view and user defined extraction settings • Compliance with industry standards such as DXF • Create walls, bends, punches, notches, forms, and reliefs using the streamlined user interface • Automatically generate flat patterns from 3D geometry • Use a variety of bend allowance calculations to create flat patterns of the designs	
	Weld Modeling and Documentation • Creates welding operations from a catalogue of 15 welding bead shapes (1 fillet / 7groove and 7 double bead) and preparations based on ISO standards. • Automatically chamfers parts and edges in preparation for welding • Creates associative features between parts and specification for ease of modification. • User Define Weld • All weld features are integrated into the 3D design: Mass inertia, space reservation therefore improving confidence and quality of finished product. • The weld visualization and specification is displayed in the drafting environment for full documentation. • Define joining requirements • Extract valuable information from the model, such as mass properties, clearances, interferences, and cost data	
2.	**Computer Aided Engineering**	
	Analysis Features • Nonlinear Structural Analysis • Thermal Analysis • SIMIULIA RULE BASED MESHING	

		- Generative Part Structural Analysis - Generative Assembly Structural Analysis - Generative Dynamic Response Analysis - Structural Analysis - FEM Surface - FEM Solid - Perform basic static structural analysis on parts and assemblies with CAE capabilities - Validate the kinematic motion of the design - Interoperability with engineering calculation software, lets you integrate worksheets with the design to predict behavior and drive critical parameters and dimensions - Add Microsoft·Excel·files to your design	
		Real-Time Photo Rendering• - Create accurate, photorealistic images of products quickly, while rendering even the largest assemblies - Applies rendering and technological specifications to designs enabling to produce realistic renderings - Enable designers to interactively create material texture definitions - Allow designers to create design families and organize the material definitions - Includes a library of predefined materials - Offers users the option of applying textures with standard Windows methods or through a specification-driven approach - Renders textured images in real time - Make dynamic geometry changes while maintaining photorealistic effects such as shadows, reflections, textures, and transparency	
		Integrated Design Animation - Defines single object or groups of objects to be moved during the disassembly procedure - Generates dis-assembly trajectory avoiding collisions and respecting angular limitations - Interactively simulates objects' trajectories with visual feedback - Dynamically analyzes simulated trajectories in order to validate their feasibility - Integrates with other DMU products for powerful combination of simulations - Create assembly/disassembly animations directly from the modeling environment - Automatically generates mechanisms from mechanical assembly constraints defined in ASD allowing quick and easy definition of mechanisms - Simulates mechanism motion in order to validate mechanisms - Analyzes mechanism motion dynamically with visual feedback by checking limits and interferences, and computing minimal distances - Records motion analysis results to increase accessibility of simulation results - Generates useful information such as traces and swept volumes to be taken into account for further design modifications - Allows automation of mechanism creation and simulation through Visual Basic macro programming - Allows combined simulations through the integration with other DMU products - Simulates and analyzes mechanisms involving any multi-CAD parts - Reuse models easily, with the option to include mechanism simulation	
3.	**Computer Aided Manufacturing**		
		CAM Base - NC Machine Tool Builder - NC Machine Tool Simulation	

	• NC Manufacturing Review • Prismatic Machining • 3-Axis Surface Machining • Multi-Axis Surface Machining • Multi-pocket Machining • Advanced Machining • Lathe Machining • Multi-Slide Lathe Machining • NC Manufacturing Verification • STL Rapid Prototyping • This module links all machining modules with common capabilities • Graphical editing of tool path is possible • Also includes general purpose point to point operations routines	
	Post Processing • Customization of postprocessors for majority of NC machines available in the industry • Support for 2-5 axis milling, 2-4 axis lathes and wire EDM	
	Planar Milling • All the tools to produce planar 2 to 2 1/2 axis parts • Automatic handling of Design changes through full associativity • Routines for milling operations such as multiple pass profiling, follow pocketing, lace cutting (zig-zag). • Clamp avoidance & internal moves can be specified • Routines to perform multi-level cutting of pockets and machining of islands on the pocket floor • Boundary and blank geometry can be defined • Displays uncut areas with boundaries for additional processing • Auxiliary commands (Coolant, cutter compensation and clamping)	
	Core & Cavity Milling • Particularly useful for machining moulds and dies for auto / consumer products. • All capabilities for roughing single or multiple cavities to remove large amounts of stock material around arbitrarily shaped objects (cores) • Able to generate tracings and cut patterns over very complex shapes • Tolerant cavity milling allows for machining of loosely designed shapes that may have gaps and overlaps • The No. of cavity faces that can be analysed can range into hundreds • If abnormalities are detected, it can either correct them or machine the cavity within user-defined tolerance	
	Flow Cut • Should provide time savings in semi-finishing or finishing operations • User can specify a tool whose bi-tangency defines the drive path • The processor generates either single tool path or multiple passes to remove material in these areas • For complex cores or cavities, this module greatly reduces effort required to finish the part to attain uniform stock before finish passes are applied	
	Variable Axis Milling • Supports both fixed as well as variable axis milling functions on any Surface Machining • Full 3-5 axis contouring motion, tool orientation and quality of surface finish can be specified. • Tool paths can be controlled using surface parameters to project tool paths onto the surface and by arbitrary curves or points	

	Sequential Milling • Completely associative • User to build the tool path piece by piece, interactively	
	CAM Visualize • Interactively simulates, verifies and displays the NC tool path inexpensive and highly productive for testing of NC machining applications without using machine tool • Eliminates prototypes, reduces setup and cleanup time and tool wear. • Provides complete graphic control over the dimension, location and orientation of the rough stock and depicts both milling and drilling operations	

Sign of Authorized Signatory with Name & Seal