



Tender Ref. No. CARS/ST/P-332/OTM/2023

Date: 11-07-2023

Invitation for Tender (National)

Sealed Tenders are hereby invited from reputed supplier for Supply, Installation, Testing and Commissioning of Equipment for CARS, University of Dhaka.

1.	Ministry/Division	Ministry of Education		
2.	Agency	University of Dhaka		
3.	Procuring Entity Name	Centre for Advanced Research in Sciences (CARS), University of Dhaka.		
4.	Procuring Entity Code	332		
5.	Procuring Entity District	Dhaka		
6.	Invitation for	Supply, Installation, Testing and Commissioning of Equipment for CARS		
7.	Invitation TenderRef No.	CARS/ST/P-332/OTM/2023		
8.	Date :	11-07-2023		
KEY INFORMATION				
9.	Procurement Method	Open Tendering Method		
FUNDING INFORMATION				
10.	Budget and Source of Funds	Revenue Budget (RB)		
11.	Development Partner (if applicable)	N/A		
PARTICULAR INFORMATION				
12.	Project/Programme Code (if applicable)	Not used		
13.	Project/Programme Name (if applicable)	Not Applicable		
14.	Tender Package No.	Lot wise		
15.	Tender Package Name	Supply, Installation, Testing and Commissioning of Equipment for CARS		
16.	Tender Publication Date	11-07-2023		
17.	Tender Last Selling Date	02-08-2023 Up to office hours		
18.	Tender Closing Date and Time	Date :	Time:	
		03-08-2023	11:00 am	
19.	Tender Opening Date and Time	03-08-2023	11:30 am	
20.	Name & Address of the Office(s)	Address(s)		
	-Selling Tender Document (Principal)	(i) Centre for Advanced Research in Sciences (CARS), University of Dhaka.		
	-Receiving Tender Document	(i) Centre for Advanced Research in Sciences (CARS), University of Dhaka.		
	-Opening Tender Document	Centre for Advanced Research in Sciences (CARS), University of Dhaka.		
21.	Place/Date/Time of Pre-Tender Meeting	Name/Address	Date:	Time
INFORMATION FOR TENDERER				
22.	Eligibility of Tenderer	(i) Up to date Trade License (ii) Up to date VAT Registration Certificate (iii) Up to date Income Tax Clearance Certificate (iv) Experience Certificate in similar works of comparable value in a single tender in last five years as mentioned in TDS (v) Bank solvency Certificate (vi) Manufacturer Authorization letter for applicable Equipment. (vii) Applicant must be owner of the firm or Representative of the firm will be authorized by the owner of the Firm signature with name and		



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		<p>seal of the owner. viii) Country of origin and made in country will be same. If differ then explain clearly with black and white. (ix) catalogue of the Equipment. (x) The Supplier has to avail an expert maintenance team, list of application training support team and needed submission of team member's list with Bio-data. (xi) Competency certificate of after sale service as mentioned in the TDS. Availability of Spare- Parts Certainty declaration at least 10 years. (xii) Warranty: 2 years, Installation and training must be provided by the supplier (free of cost).</p>		
23.	Brief Description of Goods	Supply, Installation, Testing and Commissioning of Equipment		
24.	Brief Description of Related Services	Supply, Installation, Testing and Commissioning of Equipment for CARS		
25.	Tender Document Price TK. 4,000.00	The Price of Tender Schedule as mentioned is to be deposited in A/C No. 36000392, Janata Bank, T.S.C branch, Dhaka University . Tender schedule and terms and conditions may be collected on submission of the deposit receipt from the above mentioned offices on all working days except on the date fixed for submitting the tender.		
26.	Identification/Name of Goods	Location	Tender Security Amount in Taka	Completion Time
	Equipment	CARS, DU.	Lot-1: Equipment 24,200.00 Lot-2: Equipment for Robotics laboratory 27,700.00	90 days from the date of issuance a Purchase order (Supply of Goods)
PROCURING ENTITY DETAILS				
27.	Name of Official Inviting Tender	Professor Dr. Ishtiaque M. Syed		
28.	Designation of Official Inviting Tender	Director		
29.	Address of Official Inviting Tender	Centre for Advanced Research in Sciences (CARS), University of Dhaka.		
30.	Contact details of Official Inviting Tender	9661900/Ext. 4616/ 4636.		
31.	The procuring entity reserves the right to accept or reject any or all tenders without assigning any reason whatsoever. The procuring authority also reserves the right to omit, increase or decrease the quantities of Equipment from the Tender. The suppliers must abide by the decision of the University authority. Tender form, schedule of requirements of supply, tender notice and terms and conditions etc. will form the integral part of the tender. The suppliers should write the name of the item and the name of the firm on the envelope clearly . Vat, Income Tax and other Taxes, if any, imposed by the Govt. will be deducted from their bills as per Govt. rules.			

SD/-

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Director
Centre for Advanced Research in Sciences (CARS)
University of Dhaka



Section 6. Schedule of Requirements

This Section provides the List of Goods and Delivery Schedule and List of Related Services and Completion Schedule and must be carefully prepared by a Procuring Entity for each object of procurement.

Invitation for Tender No :

Date :

Tender Package No :

A. List of Goods & Related services and Delivery Schedule

Item No.	Description of Item	Unit of Measurement	Quantity	Point of Delivery	Delivery Period Required
1	2	3	4	5	6

Lot-1: Equipment

Sl. No.	Product Specification	Pack size	Qty.
1	Refrigerator: Type-Direct Cool, Gross Volume: Minimum 223 Ltr, Net Volume: Minimum 219 Ltr, Freezer Cabinet Less than -18°C, Refrigerator Cabinet 0°C to +5°C, Double door.	No's	1
2	Natural Convection Oven: Chamber Volume: Minimum 100 Liters. Temp. Range: RT to 250°C, Heating System: Natural (Gravity) Air Convection. Chamber material – Stainless Steel, Insulation – 50mm thick woven mineral wool, Controller- Digital Microprocessor PID Temperature Controller, Internal observation is possible through the viewing window, Stainless Steel Wire Shelf.	No's	1



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3	Vacuum Drying Oven: Capacity: 64 Liter, Temperature Range: + 10°C to 250°C, Vacuum: 760 mmHg, Digital PID Controller with LED Display, Rotary Vane Vacuum Pump: 180 W max power, 2.5x10 ⁻² mbar Max. Vacuum, 1400 RPM Motor rotation. Fitting: Vacuum/Vent Ø 11 mm Hose barb, Valves: Vacuum/Lock: 2-Way Valve.	No's	1
4	Ultrasonic Bath (Sonicator): Tank Capacity-10 Liter, Ultrasonic power- 320 W, Frequency-37-40 kHz, heating power- 310 W, Time control-1 to 60 min, Drainage valve, Basket & Lid.	No's	1

Lot-2: Equipment for Robotics Laboratory

Sl. No.	Product Specification	Pack size	Qty.
1	CR-5 Pro (High-temp Version) 3D Printer Molding Technology: FDM Layer Thickness: 0.1mm to 0.3mm Machine Size: minimum 530x487x612 Print Size: minimum 300x725x380mm Screen: minimum 4.3-inch Touch Screen Nozzle Temperature: around 300°C Rated Power: minimum 350W File Format: STL/OBJ/AMF Filaments: PLA/ABS Printing Accuracy: ±0.1mm File Transfer: USB/SD Card Number of Nozzle: 01 Nozzle Diameter: minimum 0.4mm (Standard) Diameter of Filament: minimum 1.75mm Computer System: Windows 10 or later	No's	1
2	Microsoft Azure Kinect DK Developer Kit Dimensions: minimum 4.96 x 4.05 x 1.53 in (126.00 x 103.00 x 39.00 mm) Sensors Depth camera: 1MP Time-of-flight RGB camera: 12MP CMOS sensor rolling shutter IMU: 3D digital accelerometer and a 3D digital gyroscope Microphone: 7-microphone circular array Input/Output/Connectivity: USB-C data connector Power through USB-C (USB-C to USB-C cable not included) or external PSU Sync connectors to synchronize multiple units	No's	1

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	Compatible OS: Windows 10 (not S mode) and Ubuntu 18.04 (preview)		
3	<p>Intel RealSense LiDAR Camera: Technology: Laser scanning Ideal range: .25 m to 9 m Depth technology: LiDAR Depth frame rate: minimum 30 fps RGB sensor resolution: minimum 2 MP Processing: Intel RealSense Vision ASIC Diameter × Height: minimum 61 mm × 26 mm</p>	No's	1
4	<p>BioIRIS Dual Iris Scanner: Capture Mode Automatic capture of dual iris images Image Standard ISO 19794-6, K1, K2, K3, K7 Resolution 500 dpi, 8 bit grayscale Image Size minimum 640 x 480 pixels Capture Speed Typically less than 0.4 second MTBF In excess of 50,000 hours Image Format BMP, JPEG, PNG, TIF IR Illumination Near infrared dual LED Eye Safety Standard IEC 62471 Inter-pupillary Distance Covers from 40mm to 90mm Ingress Protection IP64 rating</p>	No's	1
5	<p>Raspberry Pi 4 Processor: Broadcom BCM2711, quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz Memory: minimum 4GB Connectivity: 2.4 GHz and 5.0 GHz IEEE 802.11b/g/n/ac wireless LAN, Bluetooth 5.0, BLE, Gigabit Ethernet 2 × USB 3.0 ports, 2 × USB 2.0 ports H.265 (4Kp60 decode) OpenGL ES, 3.0 graphics Micro SD card slot for loading operating system and data storage 5V DC via USB-C connector (minimum 3A) 5V DC via GPIO header (minimum 3A) Power over Ethernet (PoE)–enabled(requires separate PoE HAT</p>	No's	3
6	<p>NVIDIA Jetson Nano Developer Ki GPU: 128-core NVIDIA Maxwell™ GPU CPU: Quad-core ARM® A57 CPU Memory: minimum 4 GB 64-bit LPDDR4 Storage: minimum 16GB eMMC 5.1 flash Video Encoder: 4K @30 (H.264/H.265) Video Decoder: 4K @60 (H.264/H.265) Camera: 12 lanes (3×4 or 4×2) MIPI CSI-2 DPHY 1. (1.5Gbps) Connectivity: Gigabit Ethernet Display: HDMI 2.0 or DP1.2 eDP 1.4 DSI (1x2) UPHY: 1x1/2/4 PCIE, 1xUSB3.0, 3xUSB2.0 I/O: 1xSDIO/ 2xSPI /6xI2C /2xI2S /GPIO Dimension: minimum 100 x 80 x 29 mm/3.94x3.15x1.14"</p>	No's	4

Warranty: 12 Months from the date of installation for the all equipment.
Country of Origin: USA/UK/EU/Japan/Australia/Canada/Singapore/Equivalent.

Section 7. Technical Specifications.

The Goods and Related Services shall comply with following Technical Specifications:

Item No	Name of Item or Related Service	Technical Specification and Standards
»	CARS	Supplier

Lot-1: Equipment

Sl. No.	Product Specification
1	Refrigerator: Type-Direct Cool, Gross Volume: Minimum 223 Ltr, Net Volume: Minimum 219 Ltr, Freezer Cabinet Less than -18°C, Refrigerator Cabinet 0°C to +5°C, Double door.
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	Drainage valve, Basket & Lid.
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	<p>MTBF In excess of 50,000 hours Image Format BMP, JPEG, PNG, TIF IR Illumination Near infrared dual LED Eye Safety Standard IEC 62471 Inter-pupillary Distance Covers from 40mm to 90mm Ingress Protection IP64 rating</p>
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