

JAMIA MILLIA ISLAMIA

(A Central University by an Act of Parliament)

Tel. 26982651

26981717 Ext.: 2340, 2342

e-mail: electrical@jmi.ac.in

Website: <https://www.jmi.ac.in>



جامعہ
میلیہ
اسلامیہ

DEPARTMENT OF ELECTRICAL ENGINEERING

Faculty of Engineering and Technology

Maulana Mohammed Ali Jauhar Marg, New Delhi-110025

EED/Q-01/2024/25

January 28, 2025

LIMITED TENDER NOTICE

The Department of Electrical Engineering, Jamia Millia Islamia, New Delhi, invite quotations for the following items as per University Purchase procedure. It is requested to kindly provide us sealed quotations/e-mail <electrical@jmi.ac.in> of these items along with their specifications, if any. The quotation may be submitted within a day's up to 07/02/2025 in the office of the undersigned.

S. No.	Particular and Technical Specification	Unit Rate	Tax	Total Amount
1	<p>Humanoid Robot</p> <p>Technical Specification</p> <p>Dimensions W x L x H 150 *130 *330 (mm)</p> <p>Connectivity Wi-Fi connectivity (ad-hoc/infrastructure/WEP/WPA/WPA2)</p> <p>On-board Computer 220MHz 32-bit total processing with two 32-bit ARM Cortex processors</p> <p>Amplified speaker for streaming speech and music audio</p> <p>IO Ports 1 x real-time EZ-B v4 Camera port 8 x 5 volt tolerant analog (ADC) ports 24 x 5 volt tolerant digital ports (servos, PWM, and more) Supports up to 73 servos (combining PWM and Dynamixel) 3 x I²C ports 3 x high speed UART ports Battery and temperature monitor</p> <p>Servo Motor Operating speed: 0.22±0.01 sec/60° (7.4v) Running current: 1400±30mA (7.4v) Stall torque: 19±0.20kg·cm (7.4v) Stall current: 3000±50mA (7.4v)</p> <p>Supported Software and APIs OEM Software which supports RoboScratch and Blockly. Text-based coding languages like JavaScript, and EZ-Script (a C# derivative).</p>	01		

<p>2</p>	<p>ROLI Rover</p> <p>Technical Specification Rover-style robot that inspires teaching and empowers learning. Support for complex technologies such as:</p> <p>Object tracking, Speech recognition, Artificial intelligence (AI) and Machine learning. HDD Servos</p>	<p>01</p>		
<p>3</p>	<p>SIX Hexapod</p> <p>Hexapod/Quadpod Carbon fibre frame ~40-60 min flying time 3.3 kg MTOW upto 16 m/s Max Speed 440 m VLOS Range upto 6 m/s Wind Resistance upto 400 ft Operational Altitude High resolution Camera Payload</p>			
<p>4</p>	<p>Adventure Bot</p> <p>AI application practice equipment based on indoor service robot platform NVIDIA high-performance on-device AI platform is adopted for Brain board Touch display and high-resolution wide-angle camera for GUI-based user interface and deep learning are provided Gigabit Ethernet, dual-band Wi-Fi, and Bluetooth are provided Voice recognition and audio playback through digital microphone and speaker are possible Various IoT sensor modules through 4 dedicated expansion interfaces are supported For precise control of the driving part, controller equipped with a high-performance MCU controls omni wheel motor, encoder and sensor Connected via highly reliable CAN FD communication for collaboration between brain board and controller Built-in power path management circuit to make it possible to continue practicing even while the battery is charging Service robot development is supported through ROS2, robot standard middleware High-level Pop libraries enabling to focus on application implementation is provided CUDA-based PyTorch and Tensorflow artificial intelligence framework are supported Web browser-based Google block coding platform (Blockly) is supported Pre-set integrated development environment based on Visual Studio Code for professional application development is supported Deep learning-based service robot learning contents are provided On-device AI self-driving car training equipment The driving part adopts a 3-axis omni wheel to maximize the robot's movement</p>			

5	Robot Developer's Kit AI-based developer kit Computer Vision Navigation Deep Learning Integration Intelligent Speech Processing Python, ROS, Gazebo support Arduino/Raspberry PI controller HD Camera LIDAR			
6	Data Analyzing Kit			

Shahida
20/01/2025

(Prof. Shahida Khatoon)
Head

Notes:

- Quotation should be sealed in a separate envelope/item wise duly super scribed "Item name" –
Quotation reference No.: -----
- Applicable Taxes, Warranty, Delivery period and other Terms & Conditions should be mentioned clearly
- The quotation should be a reputed and an authorized firm/supplier having after sales service agreement with the OEM (Proof for the same to be enclosed along with address, phone nos. & E-mail etc. of the Service Centre).
- The quotation document complete in all respects should reach The Head, Department of Electrical Engineering, Faculty of Engineering and Technology, Jamia Millia Islamia, New delhi-110025
 - (Attn. Head, Department of Electrical Engineering should be written over the sealed envelope)