

Dr. B. C. Roy Engineering College
Jemua Road, Fuljhore, Durgapur, Paschim Bardhaman 713206

No. BCREC / 26-27 / EE/ 02/ NIT

Date: 04/08/2026

NOTICE INVITING TENDER

1. Sealed quotations / tenders are invited from reputed firms / suppliers for **supply of the "AVR microcontroller development boards with programmer, ZigBee wireless communication modules - XBee S2C with USB adapter, I2C communication modules DS1307 RTC + AT24C32 EEPROM, SPI modules SD Card reader + SPI Flash Memory, Motor driver L298N dual H-bridge DC motor control, Digital multimeters and USB logic analyzers, LoRa long-range wireless modules Ai-Thinker Ra-02 SX1278 433MHz, ESP32 Dev. Board WiFi+BT Dual Core Xtensa LX6, Jumper wire (M-M+M-F+F-F), Artix 7 APGA Feed programming get array developing board with accessories (CMOS, VGA camera and TFT display, CMOS 5 Megapixel camera module, sensor addon, motor addon, acrylic protection)" as per the requirement (enclosed herewith) to Dr. B. C. Roy Engineering College, Jemua Road, Fuljhore, Durgapur, Paschim Bardhaman 713206, for the financial year 2026-27" as per the requirement (enclosed herewith) to Dr. B. C. Roy Engineering College, Jemua Road, Fuljhore, Durgapur, Paschim Bardhaman 713206, for the financial year 2026-27.**

Mere submission of quotation / lowest price for the process doesn't ensure any assurance for the work order. Quotation/s/tender/s must be submitted in original separately, clearly mentioning validity period for approved rates (basic price), all taxes, installation charges, discounts (if any), rate of changes to be incorporated in subsequent years etc. along with any other costs thereon; failing which tender will be summarily rejected.

All other legal documents must be furnished along with quotations such as Experience Certificate (certificate from the customer dated not more than 3 years), PAN / TAN, valid Trade License, One Cancelled Cheque, GST Reg. No., IT return of last 3 years etc. Quotations must contain detailed aforementioned specifications along with other information and terms and conditions if required. No advance money will be provided for execution of the job. **Full payment will be made either by cheque or online by the institution after successful completion of the work (delivery, installation and demonstration). Last date for submission of quotation will be 24th August, 2026 up to 17:00 Hrs.** The quotation is valid for the entire period of the financial year ending on **31-03-2027**. The quotation documents are non-refundable. Work Order order will be issued to qualified L₁ bidder as per the requirements of the college throughout the entire financial year subject to fulfillment of all rules and regulations. **The Tender Inviting Authority (TIA) reserves the right to accept / reject any quotation without assigning any reason thereof.**

Payment and delivery schedule must have to be mentioned in the quotation.



s/d
Head

Department -Electrical Engineering
Dr. B. C. Roy Engineering College

Head
Dept. Electrical Engineering
Dr. B. C. Roy Engineering College
Durgapur

Annexure-I

"AVR microcontroller development boards with programmer, ZigBee wireless communication modules - XBee S2C with USB adapter, I2C communication modules DS1307 RTC + AT24C32 EEPROM, SPI modules SD Card reader + SPI Flash Memory, Motor driver L298N dual H-bridge DC motor control, Digital multimeters and USB logic analyzers, LoRa long-range wireless modules Ai-Thinker Ra-02 SX1278 433MHz, ESP32 Dev. Board WiFi+BT Dual Core Xtensa LX6, Jumper wire (M-M+M-F+F-F), Artix 7 APGA Feed programming get array developing board with accessories (CMOS, VGA camera and TFT display, CMOS 5 Megapixel camera module, sensor addon, motor addon, acrylic protection)" as per the requirement (enclosed herewith) to Dr. B. C. Roy Engineering College, Jemua Road, Fuljhore, Durgapur, Paschim Bardhaman 713206, for the financial year 2026-27."

Details	Item Description	No of Items
1. AVR microcontroller development boards with programmer	AVR Microcontroller Development Board with USB Programmer ● ATmega16/ATmega32 AVR Development Board with onboard USBasp programmer ● USB interface for in-system programming (ISP). ● Regulated 5 V power supply. ● GPIO expansion headers for interfacing external peripherals. ● External interrupt switches and reset switch. ● EEPROM programming support. ● Compatible with AVR Studio/Microchip Studio and AVR-GCC.	5
2. ZigBee wireless communication modules - XBee S2C with USB adapter	ZigBee Wireless Communication Module Kit (XBee S2C with USB Adapter) ● Digi XBee S2C ZigBee (IEEE 802.15.4) wireless communication module with UART interface ● XBee USB Explorer Adapter for configuration and programming ● XBee Breadboard Adapter (2 mm to 2.54 mm pitch)	1

	● USB cable and necessary interfacing accessories	
3. I2C communication modules DS1307 RTC + AT24C32 EEPROM	I²C RTC & EEPROM Interface Module Kit (DS3231/DS1307 with AT24C32) ● DS3231/DS1307 Real-Time Clock module with onboard AT24C32 EEPROM ● CR2032 battery ● 4.7 kΩ pull-up resistors – 2 nos. ● Connecting wires and interfacing accessories	5
4. SPI modules SD Card reader + SPI Flash Memory	SPI Communication Module Kit ● MicroSD Card Reader Module (SPI interface) ● 16 GB microSD Card (Class 10 or higher) ● W25Q64 SPI NOR Flash Memory Module ● Connecting wires and interfacing accessories	3
5. Motor driver L298N dual H-bridge DC motor control	DC Motor Driver Module Kit ● L298N Dual H-Bridge Motor Driver Module (2A per channel) ● DC Motors (FA-130 or similar, 3V–6V) – (2 motors per set) ● Breadboard and connecting wires ● Heat sinks for motor driver modules	5
6. Digital multimeters and USB logic analyzers	Digital Multimeter and USB Logic Analyzer Kit ● DT830D Digital Multimeter for voltage, current, resistance, continuity and diode testing ● 8-Channel 24 MHz USB Logic Analyzer with hook clips (Sigrok/PulseView compatible) ● Test probes and USB cables	5
7. LoRa long-range wireless modules Ai-Thinker Ra-02	LoRa Wireless Communication Module Kit ● Ai-Thinker Ra-02 SX1278 433 MHz LoRa wireless communication module ● 433 MHz antenna with IPEX/U.FL connector	2

SX1278 433MHz	● SPI breakout breadboard adapter ● Connecting wires and interfacing accessories	
8. ESP32 Dev. Board WiFi+BT Dual Core Xtensa LX6	ESP32 WiFi + Bluetooth Development Board Kit ● ESP32-WROOM-32 Development Board (38-pin, Dual Core Xtensa LX6, WiFi + Bluetooth, CP2102 USB-UART) ● USB Micro Cable	2
9. Jumper wire (M-M+M-F+F-F)	Jumper Wire Kit (M-M, M-F, F-F) ● Male-to-Male (M-M) jumper wires ● Male-to-Female (M-F) jumper wires ● Female-to-Female (F-F) jumper wires	120 pcs. each
10. Artix 7 APGA Feed programming get array developing board with accessories (CMOS, VGA camera and TFT display, CMOS 5 Megapixel camera module, sensor addon, motor addon, acrylic protection	EDGE Artix-7 FPGA Development Board Accessories/Add-on Modules ● CMOS VGA Camera and TFT Display Interface Module ● CMOS 5 MP Camera Module ● Sensor Add-on Module (Gesture/Ultrasonic/Touch/Accelerometer) ● Motor Add-on Module (Stepper/DC/Servo/Relay) ● Acrylic Protection Top/Bottom Cover	1