

TENDER-5: ELECTRONICS & TELECOMMUNICATION DEPARTMENT

Tender Ref. No.: SJVPM/NEC/LAB/EXTC/2026/05

A. Electronics & Telecommunication Labs

Sr.No	Item Description	Specifications	Qty	Unit Price (₹)	Total Price (₹)
1	Analog Electronics Lab Kit	Diodes, Transistors, Op-Amps, Power Supply	20 Sets		
2	Digital Electronics Lab Kit	Logic Gates, Flip-Flops, Counters, MUX/DEMUX	20 Sets		
3	Microprocessor Kit (8085)	Z80/8085, 16-bit Data, 20-bit Address	10 Sets		
4	Microcontroller Kit (8051)	8051/89C51, 8KB ROM, 256B RAM	15 Sets		
5	ARM Microcontroller Kit	Cortex-M3/M4, JTAG Debugger	10 Sets		
6	Embedded Systems Kit	STM32, ESP32, Sensors, Actuators	20 Sets		
7	CRO (Analog)	30 MHz, Dual Trace	5 Nos.		
8	Digital Storage Oscilloscope	100 MHz, 2 Channel, 1 GSa/s	10 Nos.		
9	Function Generator	10 MHz, Sine/Square/Triangle/Sweep	10 Nos.		
10	Arbitrary Waveform Generator	50 MHz, 14-bit, 125 MSa/s	3 Nos.		
11	Spectrum Analyzer	1 GHz, FFT, Tracking Generator	1 No.		
12	Logic Analyzer	16 Channel, 100 MHz	5 Nos.		
13	Digital Multimeter	True RMS, 4½ Digit, Auto Range	20 Nos.		
14	LCR Q Meter	100 Hz-100 kHz, Digital	5 Nos.		
15	Frequency Counter	1 GHz, 8 Digit Display	5 Nos.		
16	Regulated Power Supply	0-30V/0-5A, Dual Channel	15 Nos.		
17	Function Generator + Power Supply Combo	5 MHz, 0-30V/3A	10 Sets		
18	Soldering Station (Digital)	Temperature Controlled, ESD Safe	30 Nos.		
19	Hot Air Rework Station	Digital, ESD Safe	10 Nos.		
20	PCB Design Software	Eagle, KiCad, Altium (Educational)	60 Users		
21	PCB Fabrication Kit	Etching Tank, Drill, UV Exposure	1 Set		
22	Antenna Measurement Setup	Dipole, Yagi, Parabolic, SWR Meter	1 Set		
23	RF Signal Generator	100 kHz-1 GHz, AM/FM	2 Nos.		
24	RF Power Meter	10 MHz-2 GHz, -30 to +20 dBm	2 Nos.		
25	Network Analyzer (VNA)	100 kHz-3 GHz, S-Parameter	1 No.		
26	Vector Signal Generator	100 kHz-6 GHz, QPSK, QAM	1 No.		
27	Communication Trainer Kits	AM, FM, PM, PCM, PWM, PPM	10 Sets		
28	Digital Communication Trainer	ASK, FSK, PSK, DPSK, QPSK	10 Sets		
29	Optical Communication Kit	LED, Laser, Fiber, Detector	10 Sets		

30	Microwave Test Bench	Klystron, VSWR Meter, Goniometer	2 Sets		
31	Waveguide Setup	X-Band, Slotted Line, Detector	2 Sets		
32	Antenna Trainer	Dipole, Yagi, Loop, Helical	5 Sets		
33	GSM/GPS Module Kit	SIM800/900, NEO-6M GPS	15 Sets		
34	IoT Development Kit	ESP8266/ESP32, Sensors, Cloud	20 Sets		
35	Wireless Sensor Network Kit	ZigBee, LoRa, Bluetooth	10 Sets		
36	Robotics Kit	Arduino, Motors, Sensors, Chassis	10 Sets		
37	Image Processing Kit	Raspberry Pi, Camera, OpenCV	10 Sets		
38	DSP Processor Kit	TMS320C6713, Code Composer	10 Sets		
39	FPGA Development Board	Xilinx/Altera, 100K Gates	10 Sets		
40	VHDL/Verilog Training Kit	CPLD, FPGA, Programmer	10 Sets		
41	EMC/EMI Test Setup	LISN, ESD Gun, Near Field Probe	1 Set		
42	Thermal Imaging Camera	-20°C to 350°C, 320×240	1 No.		
43	Data Acquisition System	16 Channel, 16-bit, USB	5 Sets		
44	Virtual Instrumentation (LabVIEW)	With DAQ, 60 Users	60 Users		
45	MATLAB/Simulink License	Signal Processing, Communications	60 Users		
46	Multisim/PSpice License	Circuit Simulation, 60 Users	60 Users		
47	NI Elvis II+ Workstation	Complete Electronics Lab	5 Nos.		
48	Telecom Exchange Trainer	EPABX, 8 Extensions	2 Sets		
49	Fiber Optic Splicing Kit	Fusion Splicer, OTDR, Cleaver	1 Set		
50	SDH/PDH Multiplexer	2 Mbps, 8 Mbps, 34 Mbps	1 Set		

EMD: ₹25,000

Tender Fee: ₹5,000
