

College of Applied Science
Kuthuparamba,
Kottayam Malabar (PO),Kannur(Dist.),
Kerala - 670643

Tender No.C/ 262/2018/CASK

dated 14.12.2018

NOTICE

Sealed Tenders were invited for the supply of various Electronic Equipments for College of Applied Science, Kuthuparamba as per Tender Notice No.C/262/2018/CAS.K dt. 15-11-2018. Due to harthal and non-availability of conveyance on 14-12-2018 the Schedule of receipt and opening of Tender Form are re-scheduled and postponed to 15-12-2018 as follows.

Cost of Tender Form	: Rs.500 + 12% GST
Last Date of Sale of Tender forms	: 15-12-2018, 12.00 PM
Last Date of Receipt of Tender Form	: 15-12-2018, 1PM
Date and Time of Opening Tender Forms	: 15-12-2018, 2.30PM
EMD	: 1 % of quoted amount
GST No.	: 32AAAAI0624DIZJ

Sd/-

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COLLEGE OF APPLIED SCIENCE, KUTHUPARAMBA

Statement for the purchase of Electronic Lab Equipments

SL No.	Particulars	Required
1	<p style="text-align: center;">CRO</p> <p>Cathode Ray Oscilloscope with CE Mark 20 Mhz Oscilloscop with 1 : 10 AttEnUation Probe . Sensitivity: 5mV~5V/DIV, 10 steps in 125 sequence Accuracy: 3% ≤ DC balance shift: 5mV~5V/DIV: ±0.5DIV Sweep time: 0.2us~0.5s/DIV, 20 steps in 125 sequence Vernier sensitivity: 1/2.5 of panel indicated value ≤ Bandwidth: DC (AC 10Hz)~30MHz AC coupling: 1 MHz) Output Amplifier Protection : Protected against short circuit and + 15V overload.</p>	4
2	<p>FUNCTION GENERATOR 2MHZ</p> <p>(DDS BASED FG WITH STANDARD FUNCTIONS & MODULATION AM/FM/PWM/SWEEP) Output waveforms : Sine, Square, Triangle and Pulse& TTL Output : Socket-BNC, Amplitude – 20 V p-p with 50 ohms impedance Frequency Range : 0.1 Hz to 2MHz (SINE,SQR and PULSE) ;0.1 Hz to 1 MHz (TRI,) Selected in 7 steps. Variable Control Display : LCD, micro controlled- menu Keys with freq and amplitude display Modulation : AM, FM, PWM and SWEEP(DC TO 20 KHz)-EXTERNAL Mod input : 5Vpp(maximum) DC Offset : +/- 5V continuously adjustable, attenuated by step Attenuator. Attenuation : 0 db, 20 db, 40 db, 60 db. Level Flatness : 0.2dB from 10 Hz to 1MHz Stability : + 2pm aging +PPM/year amplidute Sine Wave Distortion : 0.5% maximum at 20Vp-p 0.1% maximum at 2V p-p (FO= 20 KHz) Square/Pulse Rise & Fall Time : Less than 50nS at full rated Output. Pulse Duty Cycle Variation : 0% to 100% (10Hz – 1 MHz) 25% to 75% (> 1 MHz) Minimum pulse width : 75 ns Triangle Linearity Error : 0.25 (FO = KHz, 5% to 95%) Output Amplifier Protection : Protected against short circuit and + 15V overload. Power Requirement : 230 V AC + 10%, 50Hz, 10VA.</p> <p>DDS BASED FUNCTION GENERATOR – 0.1HZ to 2MHZ (ST FG –2000)</p>	3

3	<p style="text-align: center;">+10V/1A</p> <p>LOW VOLTAGE DC REGULATED FIXED DUAL output power supply, with protection against short circuit and continuous overloads WITH OUT METERS DC OUTPUT +/-10V/1Amp</p>	3
4	<p style="text-align: center;">8085LED Kit</p> <p>MICROPROCESSOR 8085 LED TRAINER with CE Mark Microprocessor Trainer 8K EPROM/8K RAM(Expandable) LED 28 KEYS KEY BOARD 6DIGIT SEVEN SEGMENT DISPLAY 16 BIT TIMER/COUNTER using 8253 24 I/O LINES USING 8255&26 PIN FRC CONNECTOR 8279 ,50 PIN FRC BUS CONNECTOR RS-232C through SID/SOD lines using software WITH PC INTERFACE</p>	3
5	<p style="text-align: center;">DMM</p> <p>Features: 3½ Digital Multimeter• No Power-OFF under natural operation• Full protection in All Ranges• NCV Tes• Technical Data : Basic Functions Range Basic Accuracy DC Voltage 200mV/2V/20V/200V/1000V ±(0.5% + 4) AC Voltage 200mV/2V/20V/200V/750V ±(0.8% + 5) DC Current 200uA/2mA/20mA/20mA/2A/20A ±(1.0% + 5) AC Current 200uA/2mA/20mA/20mA/2A/20A ±(1.5% + 5) ±(0.8% + 1)ΩM02/ΩM2/Ωκ002/Ωκ02/Ωκ2/ΩResistance 200 Temperature -40 ~ 1000 C / 0 ~ 1832 F ±(1.0% + 5) Special Function : } NCV } Diode test Ω Input impedance 10M} Transistor Testing Continuity Buzzer Approx. < Sampling Rate 3 times per secondΩ +10Ω30 Low Battery Display Approx. < 7.5V AC Frequency Response 40-400Hz Auto Power OFF Approx. 30 min. Power 9V (6F22) Standard Accessories : Test Leads, Holster, Temp. Probe, Manual</p>	5
6	<p>Digital Trainer Kit</p> <p>10 TTL compatible logic input toggle switches with spring termination for wiring. ☑ 10 LEDs with drivers and equipped with spring termination for displaying the output. ☑ Four 7-segment displays, each with BCD to 7-segment decoder IC and spring termination at the BCD input. ☑ Monopulser with a push button switch to produce positive and negative pulse and each with spring termination. ☑ Clock generator with fixed clock frequencies of 1Hz, 10Hz, 100Hz, 1 kHz, 10 kHz, and 1 MHz, each with spring terminations ☑ Solder less bread board with 1680 tie points fixed to the kit. ☑ Two numbers of 20 pin ZIF sockets. ☑ Availability of built in power supplies on the kit: +5V -2A, +/- 12V/250mA ☑ The kit is mounted on a sloping ,elegant, powder coated metal cabinet. Manual and sufficient patch cords are provided. ☑ Spring type sockets providing multiple interconnection on socket using single stranded patch cords</p>	9
7	<p>LCD MONITOR</p> <p>Display Type :19 inches TFT LCD 48.3 cm Dimensions (include base) Height Depth Width 16.4 inches 7.56 inches 16.3 inches 41.6 cm 19.2 cm 41.4 cm</p>	1

	<p>Maximum Graphic Resolution 1280 × 1024 (75 Hz) analog input Optimum Graphic Resolution 1280 x 1024 (60Hz) analog input Text Mode 720 × 400</p>	
8	<p style="text-align: center;">ADC INTERFACE BOARD ADC INTERFACE BOARD with CE Mark for 8051 LCD kit</p>	2
9	<p style="text-align: center;">ADC Interface Board ADC INTERFACE BOARD with CE Mark for PIC16F 877A</p>	2
10	<p style="text-align: center;">DAC INTERFACE BOARD for 8051 LCD kit</p>	2
11	<p style="text-align: center;">DAC INTERFACE BOARD for PIC16F 877A</p>	2
12	<p style="text-align: center;">STEPPER MOTOR INTERFACE BOARD</p>	2
13	<p style="text-align: center;">PIC 16F 877A TRAINER KIT PIC MICROCONTROLLER 16F877A-ST-PIC-02 8 Digital IO-LEDS/SWITCHES -4X4 matrix keypad Character based LCD(16X2) ☑ RS232 Port I2C Peripheral –RTC -7 Segment Displays ICD2 Connector for Direct programming ☑ 10-Bit on Chip ADC -High-Performance RISC CPU-PIC16F877 ☑ Operating Speed:DC-20Mhz Clock input DC-200nS instruction Cycle ☑ 10bit,upto 8 channel ADC - Timer0:8bit/16bit timer/Counter ☑ SSP with SPI(master Mode) and I2C (master/Slave) USART/SCI ☑ ICSP via two pins -Single supply 5V ICSP ☑ LM35 temperature sensor -H bridge driver is to interface stepper motor & DC motor ☑ MOC7811 sensor to measure speed - DC motor</p>	3
14	<p style="text-align: center;">DC interfacing Motor +12V with connecting cables</p>	2
15	<p>LCD PROJECTOR Light output : 3,300 lm Resolution : 800x600 Contrast : 15,000 : 1 Projector type: LCD With Remote control Digital zoom : 1.35 x</p>	1

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