



Ph : 080 – 26933221

BHS HIGHER EDUCATION SOCIETY

## **VIJAYA COLLEGE**

R V ROAD, BASAVANAGUDI, BANGALORE – 560 004

**(ACCREDITED BY NAAC WITH 'B' GRADE &  
RECOGNIZED BY UGC AS CPE)**

EMAIL ID :  
principal@vijayacollege.ac.in

**TENDER NO. : VC/EQUIPMENT-LAB/2018-19/CPE/05**

**DATED : 29<sup>th</sup> October 2018**

**SUBJECT : Tender for supply and installation of Electronics Laboratory Equipment  
in Vijaya College, R V Road, Basavanagudi, Bangalore – 560 004**

### **NOTICE INVITING TENDER**

**The Principal, Vijaya College, R V Road, Basavanagudi** invites sealed tenders from the eligible agencies / firms under two bid system consisting of Technical and Financial Bids for supply and installation of equipment for Electronics laboratory as per the details given below.

**Last Date for Submission of Tender : 19<sup>th</sup> November 2018, 11:00 am**

**Date and Time of opening the Technical Bid :**

**20<sup>th</sup> November 2018, 12:30 pm**

**Date and Time of opening the Financial Bid :**

**20<sup>th</sup> November 2018, 2:30 pm**

## Specifications of Electronics Laboratory Equipment

Sl. No.	Name of the Item	Quantity	Specifications
1.	<b>Microcontroller Trainer kit (8051)</b> (ALS Make SDA 51 or equivalent)	02	1
2.	<b>Digital Storage Oscilloscope</b> (Tektronix Model NoTBS1072B or equivalent)	02	2
3.	<b>Function Generator</b> (APLB FG3M or equivalent)	01	3
4.	<b>Optical fiber trainer kit</b> (Scientech 2501A or equivalent)	02	4
5.	<b>All in ONE IoT Trainer Kit</b> (TIF Labs or Pantech or Enthu technologies or equivalent)	01	5
6.	<b>Basic Raspberry Pi3 Kit</b> (TIF Labs or Pantech or equivalent)	01	6

### 1) Specifications of Microcontroller Trainer kit (8051)

ALS Make or equivalent	
CPU	8031 / 8051 operating at 11.0592 mhz
MEMORY	Eprom1 32kb bytes with monitor software
EPROM 2	Optional – 32kb rom
RAM 1	32 kb data ram
RAM 2	32 kb program/data ram
I/O PARALLEL	48 i/o lines using two 8255
I/O SERIAL	One RS232 compatible interface
TIMER	Three 16 bit counter /timer using 8253
KEYBOARD	External pc-at keyboard
DISPLAY	Alphanumeric lcd module(2 lines x 16 characters)
BUS SIGNALS	All bus signals are terminated in FRC connectors. On chip port lines p1.0 to p1.7 to, t1, int1, into are also terminated
MONITOR SOFTWARE	32kb of system monitor, which allows the user to enter, verify, debug or execute the program either from the on-board pc keyboard and display or through serial mode. On-line assembler using pc keyboard and lcd display

### 2) Specifications of Digital Storage Oscilloscope

Digital Storage CRO's:

40MHz Dual Channel, Digital Storage Oscilloscope with minimum 5" TFT Display, 500MS/s on each channels RTS, should be compatible with Lab – view signal express software, should have probe check wizard facility – (Tektronix Model NoTBS1072B or Equivalent)

### 3) Specifications of Function Generator (APLAB FG 3M or equivalent -with frequency fine tune control option)

Function generator	0-3MHz with 20, 40, 60 dB attenuator
Operating Modes	: Sine, Square, Triangle, Ramp, Pulse and TTL
Frequency Range	: 0.3 Hz - 3 MHz in 7 steps
Display	: LCD controlled by keys
Output impedance	: 50 $\Omega$
Output Voltage	: 20 Vpp (Open circuit)
Attenuation	: 20dB & 40dB (fixed) 20dB (variable) Total 60dB
DC Offset	: $\pm 5V$ (approximately) adjustable
Modulation	: Frequency Modulation
Modulation Frequency	: DC to 20 KHz
Range	
Modulation Input	: 2Vpp maximum
Frequency Counter -	: inbuilt DC to 40 MHz
Frequency Display	: Counter operation selected by Menu key
Input Impedance	: 1 M ohm

### 4) Specifications of Optical fiber trainer kit (Sciencetech 2501A or equivalent)

- Simplex Analog and Digital Trans receiver
- 660 nm channel with Transmitter & Receiver
- AM-FM-PWM modulation / demodulation
- On board Function Generator
- On board Clock & Data Generator
- On board Bit Error Counter
- Crystal controlled Clock
- Functional blocks indicated on-board mimic
- Input-output & test points provided on board
- On board voice link
- Built in DC Power Supply
- Numerical Aperture measurement jig and mandrel for bending loss measurement
- Switched faults on Transmitter & Receiver

### 5) Specifications of All in ONE IoT Trainer Kit (should also include arduino board, Raspberry Pi3 and ESP 01 ) (TIF labs or Pantech or Enthu technologies or equivalent)

- IOTIF Board
- 4 Pin RMC Connectors
- 8 Pin RMC Connectors
- Ethernet Cable
- 5v 3A Power Adapter
- Lab Manual
- Casing

ON-BOARD COMPONENTS:

- Boards – Raspberry Pi, Arduino Nano, ESP 01

- SD Card
- Sensors – PIR, HCSR04, DHT11, Membrane Keypad
- Actuators – LEDs, RGB LED, Relay, Buzzer, 16×2 LCD, Stepper Motor and Servo Motor
- Bluetooth Module
- Joystick Module
- Breadboard

**6) Specifications of Basic Raspberry Pi3 Kit** (TIF labs or pantech or Equivalent)

- Raspberry Pi 3 (WiFi, BLE, 64Bit)
- 8GB SD Card (Class 4) with pre-installed OS (Raspbian Jessie)
- HDMI Cable (1.5M)
- PIR Motion Detection Sensor
- DHT 11 (Humidity and Temperature Sensor) Module
- Power Adapter (5V, 2A) with Micro USB Cable
- 2-Channel Relay Module
- Resistor Box
- Half Size Breadboard
- LEDs (Pack of 10)
- LAN/Ethernet Cable (2M)
- Assorted Jumper Wires (40)
- Alphanumeric LCD 16X2 and Buzzer

## **Instructions to Tenderers**

1. The scope of this tender is to invite quotations for supply and installation of equipment detailed above.
2. The items supplied should remain in warranty for atleast a period of one year from the date of installation.
3. The company should be able to rectify or replace the items as and when required within the stipulated time.
4. Tenders must be submitted duly filled in and signed by authorized person in ink pen or ball pen. Tenders written in pencil or erased /over-written will not be considered.
5. The bidders shall not be at liberty to offer his/her terms and conditions with regard to the tendered work which means that the bidder cannot deviate from the terms and conditions given herein. Otherwise, the tenders are liable to be summarily rejected.
6. Tenderer shall keep their tender valid for acceptance for a period of 45 days from the date of opening. Tenders with shorter validity period will not be considered.
7. GST No. of the firm as applicable while submitting the tender, must be indicated. A tender lacking this will not be considered.
8. The rates are to be quoted on the company's letter head. Each page of the quotation/tender must be signed & stamped by the authorized Signatory. Unsigned quotations may not be considered.
9. Technical & Financial bids should be submitted separately in sealed cover and both these sealed covers should be put in a big cover which should also be sealed and super-sealed with caption '**Quotation for Electronics Laboratory Equipment**'.
10. It should be certified that the tenderer is not blacklisted.
11. Tender Documents not properly sealed will not be considered.

12. Principal, Vijaya College, R V Road, Basavanagudi, Bangalore -4, reserves the right to accept or reject any or all the bids in full or in part including the lowest, without assigning any reason thereof or incurring any liability thereby.
13. The quotation should be addressed to Principal, Vijaya College, R V Road, Basavanagudi, Bangalore – 560 004

Principal, Vijaya College,  
R V Road, Basavanagudi,  
Bangalore – 560 004

**ANNEXURE - I**  
**INFORMATION ABOUT THE TENDERER**

<b>Sl. No.</b>	<b>PARTICULARS</b>	<b>TO BE FILLED BY THE TENDERER</b>
1.	NAME OF THE COMPANY	
2.	YEAR OF ESTABLISHMENT	
3.	STATUS OF THE COMPANY (PARTNERSHIP, LIMITED, ETC.)	
4.	POSTAL ADDRESS	
5.	PHONE NUMBERS	
6.	EMAIL - ID	
7.	WEBSITE ADDRESS	
8.	ANY AUTHORIZED DEALERS. IF YES, GIVE DETAILS	
9.	NAME OF THE PROPRIETOR, MANAGING DIRECTOR, ETC.	
10.	NATURE OF THE FIRM (MANUFACTURER, DEALER, DISTRIBUTOR, AGENT, ETC.)	
11.	DETAILS OF PRODUCTS DEALT BY THE COMPANY (CATALOGUE MAY BE ENCLOSED)	
12.	TURNOVER FOR THE LAST THREE YEARS : YEAR WISE	
13.	LIST OF EXISTING CLIENTS (GOVT., PSU, MAJOR CLIENTS, ETC.)	
14.	WHETHER ENLISTED WITH CENTRAL PROCUREMENT OR E - PROCUREMENT PORTAL OF KARNATAKA?	
15.	HAS YOUR COMPANY BEEN BLACKLISTED? IF YES, GIVE DETAILS	

<b>Sl. No.</b>	<b>PARTICULARS</b>	<b>TO BE FILLED BY THE TENDERER</b>
16.	IF BLACKLISTED & REVOKED, GIVE DETAILS	
17.	PAN/TAN NO. (copy to be enclosed)	
18.	GST REGISTRATION NO.	
19.	COPY OF INCOME TAX RETURN FOR THE LAST TWO YEARS	

### **Declaration**

I/We do hereby declare that the entries made in this quotation are true to the best of my/our knowledge and belief. I/We do also confirm that I/We have read and understood General conditions of Contract as contained in these tender documents and agree to abide by the same in all respect.

I/We undertake to communicate promptly all the subsequent changes in condition affecting the accuracy of the details given above. Further I/We undertake that in case the facts/information furnished, as above is/has been found false, the Principal, Vijaya College may at its absolute discretion reject/cancel any assignment, if any, awarded/agreed to be awarded to me/us and in such case I/We shall not be entitled to claim any damages/whatsoever in regard to that assignment.

Signature of Proprietor/Director/  
Managing Director/Constituted authority

Place :

Name :

Date :

Designation :



**ANNEXURE – II**  
**FINANCIAL BID**

- I. NAME OF THE SUPPLIER :
- II. ADDRESS :
- III. PHONE NUMBER :
- IV. AUTHORIZED CONTACT PERSON WITH CONTACT NO. :
- V. Rates quoted are all inclusive and no separate claims will be made towards any cess, GST, delivery charges, installation charges, testing charges etc.
- VI. Terms of payment for supply of computers will be claimed only after delivery and successful installation of the same as per supply order and no advance will be claimed by this firm.
- VII. The applicant should submit their bids in sealed envelopes to the PRINCIPAL, VIJAYA COLLEGE
- VIII. Total Quoted Price. (Both in words and figures) (All inclusive).

Sl. No.	Description	Specification	Unit Price (in Rs.)	GST	Quantity	Total Price (in Rs.)

**DECLARATION**

I hereby declare that the information furnished above is true and correct to the best of my /our knowledge.

Signature of Authorized Signatory with date.