

**DEPARTMENT OF TECHNICAL EDUCATION**  
**GOVERNMENT ENGINEERING COLLEGE, THRISSUR**

No.D1/2935 /2018

Dated : 2/6/18

SHORT TENDER NOTICE

Sealed Tenders are invited for the supply of Equipments/Consumables for Govt.Engineering college, Thrissur.

| Sl.No. | Tender No.  | Name of lab            | Items & Specification  | Last date of issue | Last date of receipt | Date of opening  | Tender value              | App.Cost   |
|--------|-------------|------------------------|--|--------------------|----------------------|------------------|---------------------------|------------|
| 1      | D1/18/18-19 | Electrical Engineering | Electronic Components  | 27/7/18<br>12 Noon | 27/8/18<br>2 PM      | 28/7/18<br>11 AM | 840/-<br>+ Postal Charges | 2,58,300/- |
| 2      | D1/19/18-19 | Electrical Engineering | LCR meter  | 27/7/18<br>12 Noon | 27/8/18<br>2 PM      | 28/7/18<br>11 AM | 672/-<br>+ Postal Charges | 1,40,000/- |
| 3      | D1/20/18-19 | Electrical Engineering | 1.Digital multimeter<br>2.8085 Microprocessor Trainer Kit,<br>3.Function Generator,<br>4.Analog Portable DC Ammeter,<br>5.Rheostat<br>6. Soldering Station | 27/7/18<br>12 Noon | 27/8/18<br>2 PM      | 28/7/18<br>11 AM | 672/-<br>+ Postal Charges | 1,11,500/- |
|        |             |                        | 1.Whirling of Shaft apparatus<br>2.Universal Governor Apparatus,   |                    |                      |                  |                           |            |

|   |             |                        |  |                       |                 |                  |                           |            |
|---|-------------|------------------------|--|-----------------------|-----------------|------------------|---------------------------|------------|
| 4 | D1/21/18-19 | Mechanical Engineering | 3.Motorised Gyroscope,<br>4.Free Vibration Damped and Un-Damped Apparatus,<br>5.Forced Vibration Damped and Undamped Apparatus | 27/7/18<br>12<br>Noon | 27/8/18<br>2 PM | 28/7/18<br>11 AM | 840/-<br>+ Postal Charges | 2,70,000/- |
|---|-------------|------------------------|--|-----------------------|-----------------|------------------|---------------------------|------------|

Total AS = Rs.7,79,800 /-

Phone No.0487-2334144

Website. [www.gectcr.ac.in](http://www.gectcr.ac.in)

Intending tenderers may obtain the requisite tender form from Principal, Govt.Engineering College, Thrissur on cash remittance of cost of Tender form + postal charge.Tender forms are not transferable. Late Tenders will not be accepted. Application for the tender form should be accompanied by cash remittance, as per the price fixed for the tender form.

Cheques, Postages stamps etc will not be accepted towards the cost of the forms nor the forms will be sent by VPP.

Tenders should be accompanied by EMD of 1% of the amount by DD drawn in favour of the Principal, Govt.Engineering College, Thrissur (EMD Minimum Rs.1500/-)

with an agreement in Kerala Stamp Paper worth Rs.200/-. Details can be had from the Govt.Engineering College Office working hours.

  
PRINCIPAL

Di/2935/18.

Ten. No. Di/18/18-19

Due date : 27/7/18 2pm

Open date : 28/7/18 11Am.

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENG  
GOVERNMENT ENGINEERING COLLEGE, THRI

**PROPOSAL**

**PURCHASE OF ELECTRONIC COMPONENTS TOWARDS I**

| S.No. | Item with specification   | Quantity |
|-------|---|----------|
| 1     | LA55 current sensor   | 10 No.   |
| 2     | ACS722 or ACS712, 10A current sensor  | 15Nos    |
| 3     | ACS712 20A current sensor module  | 15 Nos   |
| 4     | ACS712 5A current sensor module   | 15 Nos   |
| 5     | LV25 voltage sensor   | 10 Nos.  |
| 6     | AMS1117-3.3V  | 25       |
| 7     | SMD resistors 1206 package, 1/4 W, 100 Nos each value (0E, 1Ω, 10 Ω, 47 Ω, 100 Ω, 220 Ω, 330 Ω, 470 Ω, 680 Ω, 1k, 2.2K, 3.3k, 4.7k, 10k, 12k, 22k, 47k, 100k, 220k, 470k)   | 100 each |
| 8     | SMD ceramic capacitors 1206 package, 25V or 16 V, 100 Nos each value (18pf, 22pf, 100pf, 1nf, 2.2nf, 10nf, 22nf, 47nf, 100nf, 220nf, 470nf, 1uf, 4.7uf, 10uf)               | 100 each |
| 9     | Standard metal film resistors 1/4 W, 100 Nos each value (0E, 1Ω, 10 Ω, 47 Ω, 100 Ω, 220 Ω, 330 Ω, 470 Ω, 680 Ω, 1k, 2.2K, 3.3k, 4.7k, 10k, 12k, 22k, 47k, 100k, 220k, 470k) | 100 each |
| 10    | Disk capacitors, 25V, 100 Nos each value (18pf, 22pf, 100pf, 1nf, 2.2nf, 10nf, 22nf, 47nf, 100nf, 220nf, 470nf, 1uf)  | 100 each |
| 11    | Electrolytic capacitor 50V: 1uf, 4.7uf, 10uf, 22uf, 47uf, 100uf, 220uf, 470uf, 1000uf<br>50nos each   | 50 each  |
| 12    | 25N120 IGBT   | 20       |
| 13    | 40W Glue Gun with 1 pack glue sticks  | 1        |
| 14    | IRF840 MOSFET   | 20       |
| 15    | IRFP450 MOSFET  | 20       |
| 16    | FAN7392   | 50       |
| 17    | IR2104  | 10       |
| 18    | 8MHz quartz crystal through hole  | 10       |
| 19    | 20MHz quartz crystal through hole   | 10       |

|    |  |                       |
|----|--|-----------------------|
| 20 | MC33153 IGBT driver  | 10                    |
| 21 | 8MHZ Quartz crystal SMD  | 10                    |
| 22 | 20 MHz Quartz crystal SMD  | 10                    |
| 23 | dsPic30f2010 DIP package   | 30                    |
| 24 | dsPic30f2010 SOIC package  | 20                    |
| 25 | 1 sq mm pvc insulated copper wire  | 3 rolls<br>(90 m)     |
| 26 | Breadboard 840 Points High Quality Nickel Plated Bread board                     | 25                    |
| 27 | Single Sided Copper Clad Laminate Circuit Board 10 X 15 cm (Glass Epoxy FR4 PCB) | 50                    |
| 28 | Double Sided Copper Clad Laminate Circuit Board 10 X 15 cm (Glass Epoxy FR4 PCB) | 25                    |
| 29 | Dextrin Coated Heat Toner Transfer A4 Size Paper                                 | 100                   |
| 30 | Ferric Chloride FeCl <sub>3</sub> Power for PCB Etching 100 gms bottled          | 10                    |
| 31 | 7805 three terminal regulator  | 25                    |
| 32 | 16f877 microcontroller   | 20                    |
| 33 | MBR20200   | 20                    |
| 34 | MUR860   | 20                    |
| 35 | 10 ohm, 10W resistor   | 50                    |
| 36 | 4.7 ohm, 10W resistor  | 50                    |
| 37 | Ferrite core with obbin EE30   | 50                    |
| 38 | Ferrite core with obbin EE42   | 50                    |
| 39 | Ferrite core with bobbin EE55  | 50                    |
| 40 | Ferrite core with bobbin EE65  | 50                    |
| 41 | Single tread wire for bread boarding, different colours                          | 3 roll<br>(30 meters) |
| 42 | Multi tread wire (1A), different colours   | 3 roll<br>(30 meters) |
| 43 | General purpose PCB Board 10 X 15 cm (Glass Epoxy FR4 PCB)                       | 25                    |
| 44 | Bergstick 0.1" , 10cm length male  | 50                    |
| 45 | Bergstick 0.1" , 10cm length female  | 50                    |
| 46 | Wire stripper & cutter   | 20 nos                |

|    |  |          |
|----|--|----------|
| 47 | LED SMD type, Red and Green  | 100 each |
| 48 | LED through hole type, 3mm size, , Red and Green   | 50 each  |
| 49 | Solder wire 67:33/ 70:30, 100 gm   | 10 nos   |
| 50 | Solder flux 15g  | 20 nos   |
| 51 | Desoldering pump   | 10 nos   |
| 52 | Braiding wire 3 m  | 10 nos   |
| 53 | TLP350   | 50 nos   |
| 54 | TLP250   | 50 nos   |
| 55 | 230/120-12, 1 A transformer  | 10 nos   |
| 56 | 470uf/450V, electrolytic capacitor Alcon   | 4 Nos    |
| 57 | IGBT module Semikron/Infeneon<br>100A/1200V, >25KHz Switching frequency  | 8 Nos    |
| 58 | DC link Polypropylene film capacitor Alcon<br>220uf/500V, Alcon  | 5 nos    |
| 59 | IGBT Snubber capacitor- Polypropelene, 1uf,<br>1200V Alcon   | 10 Nos   |
| 60 | IGBT Snubber capacitor- Polypropelene,<br>0.1uf, 1200V, Alcon  | 10 Nos   |
| 61 | BC547B   | 100 Nos  |
| 62 | BC557B   | 100 Nos  |
| 63 | FNA41560B2   | 10 Nos   |
| 64 | M57962L IGBT driver  | 25 Nos   |
| 65 | UF4007   | 100 Nos  |
| 66 | BR1010 Full Wave Bridge Rectifier Module   | 10 Nos   |
| 67 | Three phase bridge rectifier module 20 A   | 6 Nos    |
| 68 | Cabinet for storage and easy picking up of<br>electronic components<br>: 20-Inch x 16-Inch x 6-1/2-Inch or larger<br>dimension<br><ul style="list-style-type: none"> <li>• 12 number of 4-3/8-inch by 2-inch by 5-1/4-inch Large drawers or larger dimension</li> <li>• 32 number of 2-1/8-inch by 1-1/2-inch by 5-1/4-inch Small drawers or larger dimension</li> </ul> | 2 nos    |
| 69 | Multipurpose Plastic Storage Box Divided<br>into 36 or 24 Grid Cells for Convenience and<br>Easy picking up of electronic components<br>Plastic Dividers, Locks Safely to Keep The<br>Contents Secure and Organized.<br>Clear Transparent Plastic Construction<br>Size: 28 x 19 x 4.5 cm (minimum size   | 10 nos   |

|    |  |     |
|----|--|-----|
|    | dimensions. The size can be larger)  |     |
| 70 | <p>Tool set with box:<br/>         Bosch 500W hammer drill, four metal drill bits, five concrete drill bits, four wood drill bits, ten screwdriver bits, one hammer, one combination pliers, one cutter, one wrench, one spirit level, one measuring tape, one utility knife</p> | 1   |
| 71 | <p>A3 Size Laminator:<br/>         Laminating width, max. : 320mm,<br/>         Laminating speed : 300 mm/minute or higher, Thickness: 50 micron - 250 micron or better, Rollers :4 ,<br/>         Heating System : IR Lamp , Power: 400 W.<br/>         Complete Metal body</p> | 1   |
| 72 | 19 SWG enameled copper wire wound on bobbin  | 8kg |
| 73 | 22 SWG enameled copper wire wound on bobbin  | 8kg |
| 74 | 25 SWG enameled copper wire wound on bobbin  | 8kg |
| 75 | 28 SWG enameled copper wire wound on bobbin  | 8kg |
| 76 | Taparia 840 Screw Driver Set   | 2   |
| 77 | <p>Tweezers for SMD work<br/>         Anti-static Non Magnetic Stainless Steel ESD safe</p>  | 6   |

File.No.D1/2957/18

Due date : 27/7/18 2PM

Tender No.D1/19/18-19

Open date : 28/7/18 11AM

| SI.No. | Item      | Qty. |
|--------|-----------|------|
| 1      | LCR Meter | 2    |

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PRINCIPAL  
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File no. D<sub>1</sub> / 2958/18.

Ten. No. D<sub>1</sub> / 20/18-C9.

One date: 27/7/18 2pm

Open date: 28/7/18 11 AM.

DEPARTMENT OF ELECTRICAL

PROPOSAL FOR EQUIPMENTS TO

| Sl. No. | Item                            | Specification   |
|---------|---------------------------------|---|
| 1.      | Digital Multimeter              | AC Voltage Measurement (1mV to 1000V with 0.1% resolution)<br>DC Voltage Measurement (1mV to 1000V with 0.1% resolution)<br>AC Current Measurement (400uA to 10A)<br>DC Current Measurement (400uA to 10A)<br>Resistance Measurement<br>Capacitance Measurement (40nF to 1mF)<br>Diode test<br>4000 counts LCD Display<br>Backlight |
| 2.      | 8085 Microprocessor Trainer Kit | 8085 Microprocessor Trainer Kit with 8K RAM, TIMER, 24 I/O lines, Hex Keypad for data entry, 6 digit Seven segment display (4 for address & 2 for data), RS 232 Serial Interface and Battery backup for user RAM  |



|    |                            |  |
|----|----------------------------|--|
| 3. | Function Generator         | 10MHz sine, square, ramp, Pulse waveform generation.<br>Frequency and amplitude display. Amplitude variation from 1mV p-p to 10V p-p |
| 4  | Analog Portable DC Ammeter | 0 – 500mA  |
| 5  | Analog Portable DC Ammeter | 0 – 25 – 50 mA   |
| 6  | Rheostat                   | Single Tube<br>500Ω , 1.2 A  |

|   |                   |  |
|---|-------------------|--|
| 7 | Soldering Station | Digital soldering station with maximum temperature above 450 Celsius and Digital Temperature Display |
|---|-------------------|--|

File No. D1/2948/18.

Ten. No. D1/21/17-18.

Due date: 27/7/18 2 PM

Open date: 28/7/18 11 AM.

| SL ND | ITEM S  | REQUIREMENTS/SPECIFICATIDNS   | No of Units |
|-------|---|---|-------------|
| 1     | Whirling of shaft apparaus                      | Investigation of Various Modes of Whirl for Shafts  | 1           |
| 2     | Universal Governor Apparatus                    | to perform the folowing experiments A). The Effect of Varying Mass of the Center Sleeve. DIA (MM) LENGTH (MM) 3 1000 approx. 6 1000 approx. 4 1000 approx. B). The Effect of Varying the Rotating Mass. C). Determination of Characteristic Curves of Sleeve Position against Speed of Rotation.. D). The Effect of Varying the Initial Spring Compression. | 1           |
| 3     | Motorised Gyroscope                             | and the Rate and Direction of Rotation. Rotor Dia: 240 Mm, Thickness 10 Mm<br>Ac/ Dc Motor 1/12 Th Hp<br>Digital Rpm Indicator<br>Set Df Dead Weights   | 1           |
| 4     | FREE VIBRATIDN DAMPED AND UN-DAMPED APPARATUS   | To perform vibration experiments  | 1           |
| 5     | FDRCED VIBRATIDN DAMPED AND UN-DAMPED APPARATUS | To perform vibration experiments  | 1           |

PRINCIPAL

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