**Tender Document**

**Supply of Consumable items for the Lab of Electrical & Computer Engineering Department**



**COMSATS University Islamabad**

**Park Road, Tarlai Kalan, Islamabad**

**051-9049-5122 / 051-9049-5154**

**Invitation to Bid**

**Supply of Consumable items for the Lab of Electrical & Computer Engineering Department**

No.CUI/Proc/TN-(166)/5-22/166

1. COMSATS University Islamabad (CUI) Islamabad, a Public Sector Prestigious Educational Organization invites tender from renowned firms/companies registered with Income Tax/Sales Tax Departments and are on Active Tax Payer List of FBR (I.T & GST), for **Supply of Consumable items for the Lab of Electrical & Computer Engineering Department.**
2. Tender procedure will base upon **“Single Stage-Single Envelope”** bidding method as prescribed under PPRA rules.
3. The Financial Bids must be accompanied with the **earnest money Rs. 100,000/-** in the form of Call Deposit/Bank Draft (refundable) drawn in favor of COMSATS University Islamabad (FTN/NTN: 9013701-9)**.**
4. Tender documents are available online for the interested firms/parties on PPRA website as well as CUI website which can be downloaded. Interested firms/bidders are required to submit their bids proposals along with tender fee of **Rs.500/- (non-refundable)** in shape of pay order/DD in favour of CUI Islamabad.
5. Sealed tenders (prepared in accordance with instructions of tender documents) must reach at the given address latest by **May 17, 2022 at 1100 hrs**. (Closing time)
6. Bids will be opened in public on the same day **half hour after the closing time** in Room No. G-6, Faculty Block-I, COMSATS University Islamabad, park Road, Islamabad.

**In-Charge (Procurement)**

**COMSATS University Islamabad**

2nd Floor, Faculty Block-II, Park Road, Tarlai Kalan, Islamabad,

Tel: 051-9049-5154, 9049-5122

Email: fawadhashmi@comsats.edu.pk

**Eligibility & Qualification**

|  |  |
| --- | --- |
| **Detail** | **Criteria** |
| 1. Draft of Earnest Money
 | **Mandatory** |
| 1. Bid /Quotation **(Form No.1)**

*(Strictly as per pattern)* | **Mandatory** |
| 1. Declaration Form **(Form No.2)**
 | **Mandatory** |
| 1. GST and NTN Registered
 | **Mandatory** |
| 1. Active Tax Payer List (ATL) of FBR

Status as “Active”. | **Mandatory** |
| 1. **Proof of Non-Blacklisting:**

Affidavit on legal paper of appropriate value (duly attested from notary public)/letterhead that the firm/company is neither black listed nor in litigation with any of its public sector client  | **Mandatory** |
| 1. **Warranty/Guarantee Terms**

As per manufacturer warranty. | **Mandatory** |
| 1. **Technical Compliance sheet (From-3)**
 | **Mandatory** |

**Criteria for Tenders Evaluation and Award of Contract:**

* Bids will be evaluated in fair, transparent and non-discriminatory manner. For the purpose of determining the lowest evaluated bid, the above criteria shall be taken into consideration of bids;
* The bidder fulfilling all the above criteria will be qualified
* The lowest financial bid will be awarded the contract.
* This will be a frame work contract/Work order/purchase order. The quantities are fixed for the whole year, however the CUI may request supplies as and when required and the payment will be processed accordingly.

## General Terms & Conditions

 1. The Terms & Conditions are as under:

 No tender will be considered if: ‐

* 1. Received without required documentation or found incomplete;
	2. Received later than the date and time fixed for Tender submission;
	3. The Tender is unsigned/ unstamped;
	4. The Tender is singed/stamped by the unauthorized agent of the Firm/company;
	5. The Tender is from a firm which is black listed or in litigation of some sort with any Public-Sector Organization;
	6. The Tender is received by telephone/telex/fax/telegram;
	7. Tenders received without earnest money;
	8. In contradiction with the specification given by the CUI;
1. Suppliers, who are on Active Taxpayers List (ATL) of FBR, both GST and Income Tax are eligible to apply.
2. Bidders will have to produce the proof of being a Tax Filer with FBR.
3. Income tax as applicable and announced by the Govt. of Pakistan will be deducted at source.
4. The payment will be made after successful completion of all items and job, for the item accepted by CUI.
5. The tender must accompany earnest money as mentioned in the tender notice, of the total value of the bid in the form of Call Deposit/Bank draft (refundable) drawn in favor of COMSATS University Islamabad.
6. The rates must be quoted **as per pattern**.
7. Prices should be valid for **One Year.(till June 30,2023)**
8. **Quantity will be Vary as per actual requirement.**
9. Any attempt by a bidder to influence in the examination, evaluation, comparison, and post qualification of the Bids or Contract award decisions may result in the rejection of its bid.
10. CUI reserves the right to accept or reject any or all tenders as per PPRA Rules 33.
11. No advance payment will be permissible.
12. The Work will be given to lowest evaluated bidder on the basis of lowest evaluated bid. In case the successful bidder(s) refuse to supply the item(s), the earnest money will be forfeited AND a ban from business with CUI for a period of ONE YEAR will be imposed.
13. The Supply will be made within **2-4 weeks’ Time** from the date of work Order. Ready stock will be given preference
14. In case of delay in delivery, 0.5% of the total bid will be deducted upto 10% (additional 20 days for supply). In case of further delay, CUI will have the right to cancel the Work Order without any further information or communication and earnest money will be forfeited AND/OR a ban from business with CUI for a period of ONE YEAR will be imposed.
15. 10% Performance Security would be withheld from the payment till the period of warranty.
16. In cases lowest bidder refuses or fails to supply the item(s) within the deadline(s), the Work Order may be offered to the next lowest bidder provided that the difference between the 1st lowest bidder and 2nd lowest bidder (2nd-1st) is less than or equal to the earnest money (General Economic Principle). Same principle for 3rd, 4th lowest bidders and so on.
17. In case of defects/non-compatibility/sub-standard at any stage (from supply till validity of warranty period), CUI will inform the bidder within 15 days-time and the bidder will arrange for replacement of the item(s) within 15 days’ time. In case of non-compliance, CUI will arrange the equipment OR part(s) from alternate source(s) and the charges/expense incurred on the equipment/part(s) will be deducted from the earnest money/Invoice/performance Guarantee of the vendor.
18. Applicable Income tax and GST will be deducted at source/as per rules. In case of exemption, please mention and attach the proper documentation duly verified from the concerned tax authorities/FBR; however, if CUI will be final authority to accept or reject the exemption certificate and the vendor may claim refund from Tax Authorities/FBR.
19. In case of any holiday is announced by the Govt. OR any other unforeseeable circumstances that prevent the tender from being opened on the date announced (Force Majure), the tenders will be opened on the VERY NEXT WORKING DAY. Time and venue of the tender will remain as mentioned in the tender notice.
20. In case of Tie in rates, the bidder securing highest technical score in the criteria will be awarded the contract. In case of tie in technical Score, the bidder having the most valued work orders (work orders provided against relevant experience) will be awarded the Work Order.
21. The documents prepared by the Bidder as well as all correspondence and documents relating to the Bid shall be in English only.
22. The currency of the quotation would be in Pakistan Rupees only.
23. In case of calculation error, the unit price will be considered as valid.
24. Any proposal/tender received by CUI after the deadline will be returned unopened to bidder concerned. Delays in the mail or courier, delays of person in transit, or delivery of a proposal to the wrong office shall not be accepted as an excuse for failure to deliver a proposal at the proper place and time. It shall be the bidder’s responsibility to determine the manner in which timely delivery of his proposal will be accomplished either in person, by messenger or by mail to the concerned office..
25. In case a firm/company submits two bids/options against our tender; the bid with the highest value/amount will be considered.
26. Payment will be made as per actual quantity provided/supplied & accepted.
27. CUI is authorized to vary quantities at the time of establishing the contract and award P.O in phases (Semester Wise) two Purchase Order / Work Order will be issued during the contract.
28. Do not submit any other document other than demanded.
29. No request for correction will be entertained after opening of the bid

**Form 1**

(Letterhead of the Firm)

Ref No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ NTN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ GST: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Financial Bid**

**Supply of Consumable items for the Lab of Electrical & Computer Engineering Department**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sr #** | **Name of Item** | **Description** | **QTY** | **Unit Price (GST Excl)** | **GST Amount** | **Unit Price (GST INCL))** | **Total Cost including taxes** |
| 1 | Fuse | Buss TDC11 5A (6.3x32mm) | 50 |  |  |  |  |
| 2 | Fuse | T 500mA L250v (5x20mm) | 30 |  |  |  |  |
| 3 | Fuse | Buss TDC11 3A (6.3X32mm) | 50 |  |  |  |  |
| 4 | Fuse | T 1A L250v (5x20mm) | 50 |  |  |  |  |
| 5 | Fuse | T 4A H500v (6.3X32mm) RS | 50 |  |  |  |  |
| 6 | Fuse | T 5A L250v (5x20mm) | 50 |  |  |  |  |
| 7 | Fuse | FF 2A 250v (5x20mm) | 30 |  |  |  |  |
| 8 | Fuse | FF 1A AC600v (6.3X32mm) RS | 30 |  |  |  |  |
| 9 | Fuse | FF 8A 500v (6.3X32mm) | 30 |  |  |  |  |
| 10 | Fuse | 400mA (5x20mm) | 50 |  |  |  |  |
| 11 | Fuse | T 1A L250v (6.3x32mm) | 30 |  |  |  |  |
| 12 | Push Button(ON/OFF) | as per sample | 10 |  |  |  |  |
| 13 | Heat Shrink Tube | 1mm,2mm,3mm,4mm, 5mm (10 meter each) | 50 |  |  |  |  |
| 14 | Batteries (9v) | Energizer | 160 |  |  |  |  |
| 15 | 3-Phase Bridge Rectifier | E300359 | 10 |  |  |  |  |
| 16 | Digital Multimeter | UT-70A | 25 |  |  |  |  |
| 17 | AA Batteries | Energizer | 57 |  |  |  |  |
| 18 | PVC Electrical Insulated Tape | Black (10 Pics Roll) | 5 |  |  |  |  |
| 19 | DC Power Supply  | Proskit 0-30V, 5A. Proskit TE-5305B | 15 |  |  |  |  |
| 20 | BNC To Dual 4MM Banana Plug Test Leads | 2 meter | 10 |  |  |  |  |
| 21 | Thermistor | NTC 20 | 30 |  |  |  |  |
| 22 | Transistor | irfz44n | 200 |  |  |  |  |
| 23 | Transistor | TIP42c | 100 |  |  |  |  |
| 24 | Transistor | TIP 41C | 100 |  |  |  |  |
| 25 | Transistor | IRF740 | 100 |  |  |  |  |
| 26 | IC- CD4047BC | Monostable/Astable Multivibrator | 100 |  |  |  |  |
| 27 | IC- 8038 | Function Generator | 200 |  |  |  |  |
| 28 | IC- MIC4605 | Gate driver IC | 100 |  |  |  |  |
| 29 | IC- MIC4103 | Gate driver IC | 100 |  |  |  |  |
| 30 | IC- ULN2003 | Driver IC | 30 |  |  |  |  |
| 31 | Diode | IN4009 | 200 |  |  |  |  |
| 32 | Diode | A10 | 200 |  |  |  |  |
| 33 | Zenar Diode | 5.1V, 1watt | 50 |  |  |  |  |
| 34 | Zenar Diode | 9.0V, 1watt | 50 |  |  |  |  |
| 35 | Zenar Diode | 1N4107 | 200 |  |  |  |  |
| 36 | Zenar Diode | 1N4110  | 200 |  |  |  |  |
| 37 | SCR | 2p4m | 50 |  |  |  |  |
| 38 | SCR | 2N1596 | 50 |  |  |  |  |
| 39 | Flaxible Wire | Red, (40-75) (24 AWG), Single Core, Copper | 100 |  |  |  |  |
| 40 | Flaxible Wire | Black(40-75) (24 AWG), Single Core, Copper | 100 |  |  |  |  |
| 41 | Flaxible Wire | Green(40-75) (24 AWG), Single Core, Copper | 100 |  |  |  |  |
| 42 | Flaxible Wire | Yellow(40-75) (24 AWG), Single Core, Copper | 100 |  |  |  |  |
| 43 | Transformer | multi tape 220 to 12V 5A | 50 |  |  |  |  |
| 44 | Transformer | 6+6, 3 Amps | 50 |  |  |  |  |
| 45 | Transformer | 12+12, 3 Amps | 50 |  |  |  |  |
| 46 | Timer IC | NA555 | 200 |  |  |  |  |
| 47 | Timer IC | NE555 | 2700 |  |  |  |  |
| 48 | Timer IC | TA7555p | 200 |  |  |  |  |
| 49 | Power MOSFET | IRF540/IRF610 | 500 |  |  |  |  |
| 50 | MOSFET  | IR2125, Gate driver with bootstrap compatibility | 200 |  |  |  |  |
| 51 | Insulated Screw terminal strip | 10Amp, 8 pin set | 100 |  |  |  |  |
| 52 | Spade Terminals | 10 Amp, red, black, green, (Each) | 1500 |  |  |  |  |
| 53 | Ring Terminals | 10 Amp, red, black, green, (Each) | 1500 |  |  |  |  |
| 54 | Crimping Tool | Proskit CP-3006 with 6PK-230C, 6PK-301N, 6PK-301H For 6PK-301S 6PK-301E and 6PK-301R die sets. | 3 |  |  |  |  |
| 55 | Power Diode | MUR810 | 200 |  |  |  |  |
| 56 | Power Diode | 1N5408 | 200 |  |  |  |  |
| 57 | Enameled wire | 16AWG, Kg  | 1 |  |  |  |  |
| 58 | Enameled wire | 29 AWG, Kg | 1 |  |  |  |  |
| 59 | Triodal core | 20Khz, 3Amp | 200 |  |  |  |  |
| 60 | Triac |  BT136 | 30 |  |  |  |  |
| 61 | Banana plug(Red,Black) | as per sample, Pair | 500 |  |  |  |  |
| 62 | TC4420(T DIP) | Mosfet Gate Driver | 100 |  |  |  |  |
| 63 | IC | LM 3086N | 30 |  |  |  |  |
| 64 | IC | MC 1496P | 30 |  |  |  |  |
| 65 | BNC to BNC Cable  | 1 meter | 10 |  |  |  |  |
| 66 | BNC to RCA Male Cable | 1 meter | 10 |  |  |  |  |
| 67 | N-type BNC Male to N-type BNC Male Cable | 1 meter(As per sample) | 10 |  |  |  |  |
| 68 | PC Bios Cell |   | 250 |  |  |  |  |
| 69 | Two Pos Conecter |   | 30 |  |  |  |  |
| 70 | Function genrator Probs |   | 210 |  |  |  |  |
| 71 | PC Shiner | Insta clean , 500ml | 28 |  |  |  |  |
| 72 | Glu Stic | 10mm, 25 cm length, Pack of 50 | 10 |  |  |  |  |
| 73 | Cable Ties | 6 inch (pack of 100) | 38 |  |  |  |  |
| 74 | Mouse USB | HP/ DELL | 200 |  |  |  |  |
| 75 | Dusting Cloth | 3x3 feet | 250 |  |  |  |  |
| 76 | VGA to HDMI Convertaer |   | 35 |  |  |  |  |
| 77 | Scotch Tape | 1 inch (Pack of 12) | 5 |  |  |  |  |
| 78 | Ethernet Cable(Straight) | 1 meter long | 20 |  |  |  |  |
| 79 | VGA to VGA Cable | m to m 1.5 meter | 40 |  |  |  |  |
| 80 | Keyboard | USB (Dell) | 70 |  |  |  |  |
| 81 | Battery |  Dry Alkaline,12 V 23 A | 1 |  |  |  |  |
| 82 | Ram | Samsung, 4GB, DDR3 M378B5173BH0-CK0 | 20 |  |  |  |  |
| 83 | SMA male to SMA male cable as per smaple  | 1 meter | 10 |  |  |  |  |
| 84 | Solder iron with cap | CA-40R goot | 20 |  |  |  |  |
| 85 | Solder Tip refresher | BS-2 \goot | 10 |  |  |  |  |
| 86 | Solder Tip recovery | ST-45 goot | 10 |  |  |  |  |
| 87 | Cable tie |  8' (pack of 100) | 20 |  |  |  |  |
| 88 | Cable tie | 10" (pack of 100) | 20 |  |  |  |  |
| 89 | Cable tie | 12" (pack of 100) | 20 |  |  |  |  |
| 90 | soldering wire | As per Sample proskit | 22 |  |  |  |  |
| 91 | DMM prob | As per Sample | 140 |  |  |  |  |
| 92 | DMM | As per Sample proskit | 5 |  |  |  |  |
| 93 | Glue gun machine | [GK-380B Proskit](http://testinstruments.pk/proskit-in-pakistan/gk-380b-proskit/page/2/) | 3 |  |  |  |  |
| 94 | Glue gun stick | As per Sample proskit | 122 |  |  |  |  |
| 95 | Power Supply Probe | As per Sample | 160 |  |  |  |  |
| 96 | wooden saw | As per Sample INGCO | 2 |  |  |  |  |
| 97 | Hexa and blades | As per Sample INGCO | 2 |  |  |  |  |
| 98 | Hexa blades | As per Sample | 50 |  |  |  |  |
| 99 | fine wire cutter | [1PK-705Y PRO'SKIT](http://testinstruments.pk/proskit-in-pakistan/1pk-705y-proskit) | 8 |  |  |  |  |
| 100 | Cutting plier | [PM-737 Pro'sKit](http://testinstruments.pk/proskit-in-pakistan/pm-737-proskit/page/2/) | 3 |  |  |  |  |
| 101 | wire cutter  | [1PK-067DS Proskit](http://testinstruments.pk/proskit-in-pakistan/1pk-067ds-proskit) | 5 |  |  |  |  |
| 102 | wire striper | INGCO HWSP102418 INGCO | 10 |  |  |  |  |
| 103 | Desoldering Pump | [8PK-366N-Y Proskit](http://testinstruments.pk/proskit-in-pakistan/8pk-366n-y-proskit) | 18 |  |  |  |  |
| 104 | fine file set | As per Sample | 1 |  |  |  |  |
| 105 | Plier | [1PK-052DS Proskit](http://testinstruments.pk/proskit-in-pakistan/1pk-052ds-proskit) | 5 |  |  |  |  |
| 106 | Long nose plier | [1PK709DS Proskit](http://testinstruments.pk/proskit-in-pakistan/1pk709ds-proskit) | 5 |  |  |  |  |
| 107 | champion set screw driver  | [SW9106 Proskit](http://testinstruments.pk/proskit-in-pakistan/sw9106-proskit/page/3/) | 5 |  |  |  |  |
| 108 | watch maker set | [8PK-2061 Pro'sKit](http://testinstruments.pk/proskit-in-pakistan/8pk-2061-proskit) | 3 |  |  |  |  |
| 109 | Screw driver set | [SD-2301 Proskit](http://testinstruments.pk/proskit-in-pakistan/sd-2301-proskit/page/3/) | 2 |  |  |  |  |
| 110 | Glint |   | 5 |  |  |  |  |
| 111 | WD 40 |   | 6 |  |  |  |  |
| 112 | Soldering paste | [8S005 Proskit](http://testinstruments.pk/proskit-in-pakistan/8s005-proskit) | 45 |  |  |  |  |
| 113 | HDMI Cable |  3 meter | 50 |  |  |  |  |
| 114 | VGA Cable | 3 meter | 150 |  |  |  |  |
| 115 | HDMI cable  | 20 meter , 1080p Display | 10 |  |  |  |  |
| 116 | Hard Desk | sata, 500 GB, GW | 2 |  |  |  |  |
| 117 | Batteries 9 volt  | Rechargeable, camilion | 24 |  |  |  |  |
| 118 | Mouse Pad | Wrist Rest | 200 |  |  |  |  |
| 119 | Networks I/O’s  | 3Com | 60 |  |  |  |  |
| 120 | Hard Disk  | 500 GB with Casing | 1 |  |  |  |  |
| 121 | Power Cable | 2 Pin | 135 |  |  |  |  |
| 122 | Mic | With ring And Without ring | 5 |  |  |  |  |
| 123 | Remote Cell | AAA | 40 |  |  |  |  |
| 124 | USB | 64GB (3.0), Samsung | 6 |  |  |  |  |
| 125 | Power Extension board | wire length 11feet, Solid brass pin shoe, 9 switch sockets | 50 |  |  |  |  |
| 126 | RAM for Hp Systems | 2GB 2Rx8 (DDR-PC3 single cut) | 30 |  |  |  |  |
| 127 | Inducter | 3.3mH | 500 |  |  |  |  |
| 128 | Fuse  | 0.5mA | 4500 |  |  |  |  |
| 129 | Sand Paper |   | 10 |  |  |  |  |
| 130 | Magnetic Switches |   | 50 |  |  |  |  |
| 131 | Connecting wires |   | 4 |  |  |  |  |
| 132 | Magnat |  Bar Magnet | 20 |  |  |  |  |
| 133 | Copper wire | 0.29mm Roll 50 meter | 1 |  |  |  |  |
| 134 | Meldes Apparetus |   | 15 |  |  |  |  |
| 135 | Oscilloscope Probe |  | 140 |  |  |  |  |
| 136 | Analog Amp meter |   | 15 |  |  |  |  |
| 137 | Bulb | 60w | 20 |  |  |  |  |
| 138 | Photo Cell |   | 20 |  |  |  |  |
| 139 | 4001 | Quad 2-input NOR gate | 1000 |  |  |  |  |
| 140 | 4011 | [Buffered Quad 2-Input NAND gate](http://www.search.com/reference/NAND_gate) | 1000 |  |  |  |  |
| 141 | 4069 | Not gate | 1000 |  |  |  |  |
| 142 | 4033 | Decoder | 1000 |  |  |  |  |
| 143 | 4008 | full adder | 500 |  |  |  |  |
| 144 | 4070 | Quad exclusive-OR | 500 |  |  |  |  |
| 145 | 4071 | [Quad 2-input OR gate](http://www.search.com/reference/OR_gate) | 1000 |  |  |  |  |
| 146 | 4072 | Dual 4-input OR gate | 500 |  |  |  |  |
| 147 | 4073 | [Triple tri-input AND gate](http://www.search.com/reference/AND_gate) | 500 |  |  |  |  |
| 148 | 4077 | Quad 2-input EXLUSIVE-NOR gate | 500 |  |  |  |  |
| 149 | 4081 | Quad 2-input AND gate | 500 |  |  |  |  |
| 150 | 7404 | Hex inverter | 500 |  |  |  |  |
| 151 | 7483 | 4 bit full adder | 1000 |  |  |  |  |
| 152 | 7400 |  [Quad 2-Input NAND gate](http://www.search.com/reference/NAND_gate) | 500 |  |  |  |  |
| 153 | 7447 | comon anode driving IC | 1000 |  |  |  |  |
| 154 | 4511 | BCD to seven segment latch decoder | 1000 |  |  |  |  |
| 155 | 4543 | Decoder multipurpose | 1000 |  |  |  |  |
| 156 | Jumper Wire | Kg (as per sample) | 95 |  |  |  |  |
| 157 | Paper Tape | 1 inch width, 100 meter | 5 |  |  |  |  |
| 158 | Push Button  | Small Switch (Reset), micro | 400 |  |  |  |  |
| 159 | Push Button | ON/OFF (Small), micro | 200 |  |  |  |  |
| 160 | jumper  | mother board | 100 |  |  |  |  |
| 161 | Keypad | 4 x 4 Matrix Array Membrane | 20 |  |  |  |  |
| 162 | Pmod for Nexus | PmodCLP | 5 |  |  |  |  |
| 163 | 7-Segment Display Small | Common Anode | 1000 |  |  |  |  |
| 164 | 7-Segment Display Small | Common Cathode | 1000 |  |  |  |  |
| 165 | Headphone with Mic | Dual jack | 20 |  |  |  |  |
| 166 | Soldering Paste | Goot white flux paste , 4 oz | 10 |  |  |  |  |
| 167 | Relay | 12V | 50 |  |  |  |  |
| 168 | Relay | 6V | 50 |  |  |  |  |
| 169 | L.E.D White | Crystal 3V 5mm | 1200 |  |  |  |  |
| 170 | L.E.D Red | Crystal 3V 5mm | 2200 |  |  |  |  |
| 171 | L.E.D Blue | Crystal 3V 5mm | 2200 |  |  |  |  |
| 172 | Temperature Sensor | LM35 | 300 |  |  |  |  |
| 173 | Arduino Nano | 32-pin,ATMega328P,With USB Cable | 40 |  |  |  |  |
| 174 | Alphanumeric LCD | 16x2 | 50 |  |  |  |  |
| 175 | MCP4821 | DAC, 8-pin, Single channel | 40 |  |  |  |  |
| 176 | Header | 40 pin Sip (Male) | 20 |  |  |  |  |
| 177 | CD-RW Re-writable  | Blank CD,pack of 10 | 2 |  |  |  |  |
| 178 | ESP32 Dev Kit V1 | dual core, 512 kB RAM | 20 |  |  |  |  |
| 179 | Header | 40 pin Sip (FeMale) | 20 |  |  |  |  |
| 180 | Soldering Iron sponge cleaner | 6 sequare feet | 7 |  |  |  |  |
| 181 | Servo Motor SG90 |   | 20 |  |  |  |  |
| 182 | Berg Strip Male Female Connector |   | 100 |  |  |  |  |
| 183 |  2N2222 | NPN Transistor | 10000 |  |  |  |  |
| 184 | 3904 | NPN Transistor | 10000 |  |  |  |  |
| 185 | BC547 | NPN Transistor | 4000 |  |  |  |  |
| 186 | BC548 | NPN Transistor | 4000 |  |  |  |  |
| 187 | 3906 | PNP Transistor | 10000 |  |  |  |  |
| 188 | 2N7000 | N-Channel Enhancement Mosfet | 9000 |  |  |  |  |
| 189 | IN4007 | Silicon diode  | 10000 |  |  |  |  |
| 190 | IN4148 | Silicon diode  | 1000 |  |  |  |  |
| 191 | Fuse | 1 Ampere(Small) | 50 |  |  |  |  |
| 192 | Fuse | 15 Ampere(big) | 25 |  |  |  |  |
| 193 | Fuse | 1.5 Ampere (Small) | 25 |  |  |  |  |
| 194 | 7805 | Three Terminal Positive Voltage Regulator | 150 |  |  |  |  |
| 195 | 7809 | Three Terminal Positive Voltage Regulator | 50 |  |  |  |  |
| 196 | 7812 | Three Terminal Positive Voltage Regulator | 50 |  |  |  |  |
| 167 | 1mh | Inductor | 300 |  |  |  |  |
| 98 | 2.2mh | Inductor | 300 |  |  |  |  |
| 199 | 10mh | Inductor | 300 |  |  |  |  |
| 200 | 33mh | Inductor | 300 |  |  |  |  |
| 201 | LM741 | Opamp | 3000 |  |  |  |  |
| 202 | BreadBoard | Small  | 200 |  |  |  |  |
| 203 | Fine Cutter  | Proskit | 5 |  |  |  |  |
| 204 | Wire Stripper | Proskit | 5 |  |  |  |  |
| 205 | power Cable | 3 pin | 60 |  |  |  |  |
| 206 | Galvanometer  |   | 20 |  |  |  |  |
| 207 | 1 Ω  |  1/4 Watt | 5000 |  |  |  |  |
| 208 | 10 Ω  |  1/4 Watt | 5000 |  |  |  |  |
| 209 | Resistor  | 1KΩ 1/2 w | 23500 |  |  |  |  |
| 210 | Resistor  | 3KΩ | 3000 |  |  |  |  |
| 211 | Resistor  | 2.2KΩ | 16000 |  |  |  |  |
| 212 | Resistor  | 5KΩ | 3000 |  |  |  |  |
| 213 | Resistor  | 200Ω | 3000 |  |  |  |  |
| 214 | Resistor  | 500Ω | 8000 |  |  |  |  |
| 215 | Resistor  | 800Ω | 3000 |  |  |  |  |
| 216 | Resistor  | 470Ω | 10000 |  |  |  |  |
| 217 | 100Ω  |  1/2 Watt | 9000 |  |  |  |  |
| 218 | 220Ω  |  1/2 Watt | 10000 |  |  |  |  |
| 219 | 330Ω  |  1/2 Watt | 10000 |  |  |  |  |
| 220 | 460Ω  |  1/2 Watt | 4000 |  |  |  |  |
| 221 | 180Ω  |  1/2 Watt | 10000 |  |  |  |  |
| 222 | 820Ω  |  1/2 Watt | 4000 |  |  |  |  |
| 223 | 3.9 KΩ  |  1/2 Watt | 5000 |  |  |  |  |
| 224 | 33 KΩ  |  1/2 Watt | 9000 |  |  |  |  |
| 225 | 250 KΩ  |  1/2 Watt | 5000 |  |  |  |  |
| 226 | 560 KΩ  |  1/2 Watt | 10000 |  |  |  |  |
| 227 | 50 KΩ  |  1/2 Watt | 5000 |  |  |  |  |
| 228 | Resistor | 1.2kohm, 0.5 watt  | 4200 |  |  |  |  |
| 229 | Resistor | 560ohm, 0.5 watt  | 200 |  |  |  |  |
| 230 | Resistor | 5.6Kohm, 0.5 watt  | 200 |  |  |  |  |
| 231 | Resistor | 100Kohm, 0.5 watt  | 13200 |  |  |  |  |
| 232 | Resistor | 10Kohm, 0.5 watt  | 23200 |  |  |  |  |
| 233 | Resistor | 3.3kohm, 0.5 watt  | 13200 |  |  |  |  |
| 234 | Resistor | 100ohm, 1watt  | 100 |  |  |  |  |
| 235 | Resistor | 1 ohm, 10Watt | 100 |  |  |  |  |
| 236 | Resistor | 10 ohm, 10Watt | 100 |  |  |  |  |
| 237 | Power Resistor | 12 ohm 20 W | 100 |  |  |  |  |
| 238 | Power Resistor | 6 ohm 30 W | 100 |  |  |  |  |
| 239 | Power Resistor | 9 ohm, 40 W | 100 |  |  |  |  |
| 240 | Power Resistor | 18 ohm, 25W | 100 |  |  |  |  |
| 241 | Power Resistor | 90 ohm, 15W | 100 |  |  |  |  |
| 242 | Variable Resistor | 1K | 50 |  |  |  |  |
| 243 | Variable Resistor | 10K | 250 |  |  |  |  |
| 244 | Variable Resistor | 100K | 50 |  |  |  |  |
| 245 | 1KΩ | Mini B1K RotaryPotentiometer(as per sample) | 350 |  |  |  |  |
| 246 | 10KΩ | Mini B1K RotaryPotentiometer(as per sample) | 250 |  |  |  |  |
| 247 | 100KΩ | Mini B1K RotaryPotentiometer(as per sample) | 250 |  |  |  |  |
| 248 | 1MΩ | Mini B1K RotaryPotentiometer(as per sample) | 250 |  |  |  |  |
| 249 |  20kΩ | Vaiable Resistor | 200 |  |  |  |  |
| 250 |  1MΩ | Vaiable Resistor | 200 |  |  |  |  |
| 251 | Resister | 5 k Ohm Veriable | 0 |  |  |  |  |
| 252 | Resister | 4.7 k Ohm 1/2w | 15000 |  |  |  |  |
| 253 | 1.5 KΩ  |   | 5000 |  |  |  |  |
| 254 | 47 KΩ  |   | 5000 |  |  |  |  |
| 255 | Capacitor | 2.2µF | 1000 |  |  |  |  |
| 256 | Capacitor | 1µF 50v | 1200 |  |  |  |  |
| 257 | 2.2µF | 25 V | 7000 |  |  |  |  |
| 258 | 4.7µF | 25 V | 2000 |  |  |  |  |
| 259 | 100µF | 25 V | 6000 |  |  |  |  |
| 260 | 10µF  | 25 V | 7000 |  |  |  |  |
| 261 | 22µF  | 25 V | 3000 |  |  |  |  |
| 262 | 25µF  | 25V | 2000 |  |  |  |  |
| 263 | 1µF  | 25V | 5000 |  |  |  |  |
| 264 | 0.1µF  |  non polar ceramic | 10000 |  |  |  |  |
| 265 | 0.001µF |  non polar ceramic | 7000 |  |  |  |  |
| 266 | 0.022µF |  non polar ceramic | 5000 |  |  |  |  |
| 267 | 0.01µF |  non polar ceramic | 15000 |  |  |  |  |
| 268 | Capacitor | 22uF,100V  | 100 |  |  |  |  |
| 269 | Capacitor | 0.1uF,100V  | 100 |  |  |  |  |
| 270 | Capacitor | 0.2uF,100V  | 100 |  |  |  |  |
| 271 | Capacitor | 0.01uF,100V  | 100 |  |  |  |  |
| 272 | Capacitor | 4.7pF,100V  | 100 |  |  |  |  |
| 273 | Capacitor | 45uf,100V  | 100 |  |  |  |  |
| 274 | Capacitor | 90uf,100V  | 100 |  |  |  |  |
| 275 | Capacitor | 40uf,100V  | 100 |  |  |  |  |
| 276 | Capacitor | 80uf, 100V  | 100 |  |  |  |  |
| 277 | 1µF | 16 V | 3000 |  |  |  |  |
| 278 | 4.7µF | 15 V | 1000 |  |  |  |  |
| 279 | 47µF | 16 V | 1000 |  |  |  |  |
| 280 | 0.1µF  | 25 V | 3000 |  |  |  |  |
| 281 | 0.2µF  | 25 V | 2000 |  |  |  |  |
| 282 | 4.7nF | Non Poler | 1000 |  |  |  |  |
| 283 | 10nF | Non Poler | 1000 |  |  |  |  |
| 284 | 100nF | Non Poler | 1000 |  |  |  |  |
| 285 | 1000nF | Non Poler | 1000 |  |  |  |  |
| 286 | 10pF | Non Poler | 1000 |  |  |  |  |
| 287 | 47pF | Non Poler | 1000 |  |  |  |  |
| 288 | 100pF | Non Poler | 1000 |  |  |  |  |
| 289 | 1000pF | Non Poler | 2000 |  |  |  |  |
| 290 | BS170 | MOSFET | 5000 |  |  |  |  |
| 291 | IN4001 | Diode | 5000 |  |  |  |  |
| 292 | Ziner Diode | 5V Ziner Diode | 1000 |  |  |  |  |
| 293 | Ziner Diode | 6V Ziner Diode | 1000 |  |  |  |  |
| 294 | Battries | 9V, Camlian | 120 |  |  |  |  |
| 295 | Battery Connector  | As per Sample (15cm)  | 100 |  |  |  |  |
| 296 | Thiner | 2 Liter | 3 |  |  |  |  |

**Bid Valid as per given in the terms & conditions.**

|  |  |
| --- | --- |
| **Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **Contact Information: \_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **Official Stamp: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |

**Form 2**

**Declaration Form**

**(Mandatory)**

**(This form is to be provided with the Bid. Non-provision of this form will disqualify the bidder from the bidding process)**

All the terms & conditions have been carefully read and understood and are hereby unconditionally accepted and it is declared that

I understand that by inserting any condition in my bid consciously or unconsciously will AUTOMATICALLY disqualify me from the bidding process.

All the information furnished by me/us here-in is correct to the best of my knowledge and belief.

I/we have no objection if enquiries are made about the work listed by me/us in the accompanying annexure.

I / We agree that the decision of committee in selection will be final and binding to me/us.

I / We have read the instructions appended to the proforma and I / we understand that if any false information is found at any stage, the committee is at liberty to act in a manner it feels deemed fit, which includes, but not limited to, confiscation of Security/Earnest Money AND/OR imposing a bar/restriction from future business with CUI AND/OR blacklisting.

|  |  |  |
| --- | --- | --- |
|  **Tender No.** |  |   |
|  |  |  |
| **Name of Firm/ Company**  |  |   |
|  |  |  |
| **Year of Establishment** |  |  |
|  |  |  |
| **Name of Owner/Authorized agent** |  |  |
|  |  |  |
| **Office Address** |  |   |
|  |  |  |
| **GST No.** |  |  |
|  |  |  |
| **NTN.** |  |   |
|  |  |  |
| **Valid Telephone No.** |  |   |
|  |  |  |
| **Valid E-mail** (For Official Correspondence) |  |   |
|  |  |  |
| **Signature & Stamp**(Authorized Representative) |  |  |

**Form -3**

(Letterhead of the Firm)

Ref No:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_ NTN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ GST: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Technical Compliance Performa**

**Supply of Consumable Items for the Lab of Electrical & Computer Engineering Department**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sr # | Name of Item | Description | Brand | Compliance | Non Compliance | Higher Specs If any |
| 1 | Fuse | Buss TDC11 5A (6.3x32mm) |  |  |  |  |
| 2 | Fuse | T 500mA L250v (5x20mm) |  |  |  |  |
| 3 | Fuse | Buss TDC11 3A (6.3X32mm) |  |  |  |  |
| 4 | Fuse | T 1A L250v (5x20mm) |  |  |  |  |
| 5 | Fuse | T 4A H500v (6.3X32mm) RS |  |  |  |  |
| 6 | Fuse | T 5A L250v (5x20mm) |  |  |  |  |
| 7 | Fuse | FF 2A 250v (5x20mm) |  |  |  |  |
| 8 | Fuse | FF 1A AC600v (6.3X32mm) RS |  |  |  |  |
| 9 | Fuse | FF 8A 500v (6.3X32mm) |  |  |  |  |
| 10 | Fuse | 400mA (5x20mm) |  |  |  |  |
| 11 | Fuse | T 1A L250v (6.3x32mm) |  |  |  |  |
| 12 | Push Button(ON/OFF) | as per sample |  |  |  |  |
| 13 | Heat Shrink Tube | 1mm,2mm,3mm,4mm, 5mm (10 meter each) |  |  |  |  |
| 14 | Batteries (9v) | Energizer |  |  |  |  |
| 15 | 3-Phase Bridge Rectifier | E300359 |  |  |  |  |
| 16 | Digital Multimeter | UT-70A |  |  |  |  |
| 17 | AA Batteries | Energizer |  |  |  |  |
| 18 | PVC Electrical Insulated Tape | Black (10 Pics Roll) |  |  |  |  |
| 19 | DC Power Supply  | Proskit 0-30V, 5A. Proskit TE-5305B |  |  |  |  |
| 20 | BNC To Dual 4MM Banana Plug Test Leads | 2 meter |  |  |  |  |
| 21 | Thermistor | NTC 20 |  |  |  |  |
| 22 | Transistor | irfz44n |  |  |  |  |
| 23 | Transistor | TIP42c |  |  |  |  |
| 24 | Transistor | TIP 41C |  |  |  |  |
| 25 | Transistor | IRF740 |  |  |  |  |
| 26 | IC- CD4047BC | Monostable/Astable Multivibrator |  |  |  |  |
| 27 | IC- 8038 | Function Generator |  |  |  |  |
| 28 | IC- MIC4605 | Gate driver IC |  |  |  |  |
| 29 | IC- MIC4103 | Gate driver IC |  |  |  |  |
| 30 | IC- ULN2003 | Driver IC |  |  |  |  |
| 31 | Diode | IN4009 |  |  |  |  |
| 32 | Diode | A10 |  |  |  |  |
| 33 | Zenar Diode | 5.1V, 1watt |  |  |  |  |
| 34 | Zenar Diode | 9.0V, 1watt |  |  |  |  |
| 35 | Zenar Diode | 1N4107 |  |  |  |  |
| 36 | Zenar Diode | 1N4110  |  |  |  |  |
| 37 | SCR | 2p4m |  |  |  |  |
| 38 | SCR | 2N1596 |  |  |  |  |
| 39 | Flaxible Wire | Red, (40-75) (24 AWG), Single Core, Copper |  |  |  |  |
| 40 | Flaxible Wire | Black(40-75) (24 AWG), Single Core, Copper |  |  |  |  |
| 41 | Flaxible Wire | Green(40-75) (24 AWG), Single Core, Copper |  |  |  |  |
| 42 | Flaxible Wire | Yellow(40-75) (24 AWG), Single Core, Copper |  |  |  |  |
| 43 | Transformer | multi tape 220 to 12V 5A |  |  |  |  |
| 44 | Transformer | 6+6, 3 Amps |  |  |  |  |
| 45 | Transformer | 12+12, 3 Amps |  |  |  |  |
| 46 | Timer IC | NA555 |  |  |  |  |
| 47 | Timer IC | NE555 |  |  |  |  |
| 48 | Timer IC | TA7555p |  |  |  |  |
| 49 | Power MOSFET | IRF540/IRF610 |  |  |  |  |
| 50 | MOSFET  | IR2125, Gate driver with bootstrap compatibility |  |  |  |  |
| 51 | Insulated Screw terminal strip | 10Amp, 8 pin set |  |  |  |  |
| 52 | Spade Terminals | 10 Amp, red, black, green, (Each) |  |  |  |  |
| 53 | Ring Terminals | 10 Amp, red, black, green, (Each) |  |  |  |  |
| 54 | Crimping Tool | Proskit CP-3006 with 6PK-230C, 6PK-301N, 6PK-301H For 6PK-301S 6PK-301E and 6PK-301R die sets. |  |  |  |  |
| 55 | Power Diode | MUR810 |  |  |  |  |
| 56 | Power Diode | 1N5408 |  |  |  |  |
| 57 | Enameled wire | 16AWG, Kg  |  |  |  |  |
| 58 | Enameled wire | 29 AWG, Kg |  |  |  |  |
| 59 | Triodal core | 20Khz, 3Amp |  |  |  |  |
| 60 | Triac |  BT136 |  |  |  |  |
| 61 | Banana plug(Red,Black) | as per sample, Pair |  |  |  |  |
| 62 | TC4420(T DIP) | Mosfet Gate Driver |  |  |  |  |
| 63 | IC | LM 3086N |  |  |  |  |
| 64 | IC | MC 1496P |  |  |  |  |
| 65 | BNC to BNC Cable  | 1 meter |  |  |  |  |
| 66 | BNC to RCA Male Cable | 1 meter |  |  |  |  |
| 67 | N-type BNC Male to N-type BNC Male Cable | 1 meter(As per sample) |  |  |  |  |
| 68 | PC Bios Cell |   |  |  |  |  |
| 69 | Two Pos Conecter |   |  |  |  |  |
| 70 | Function genrator Probs |   |  |  |  |  |
| 71 | PC Shiner | Insta clean , 500ml |  |  |  |  |
| 72 | Glu Stic | 10mm, 25 cm length, Pack of 50 |  |  |  |  |
| 73 | Cable Ties | 6 inch (pack of 100) |  |  |  |  |
| 74 | Mouse USB | HP/ DELL |  |  |  |  |
| 75 | Dusting Cloth | 3x3 feet |  |  |  |  |
| 76 | VGA to HDMI Convertaer |   |  |  |  |  |
| 77 | Scotch Tape | 1 inch (Pack of 12) |  |  |  |  |
| 78 | Ethernet Cable(Straight) | 1 meter long |  |  |  |  |
| 79 | VGA to VGA Cable | m to m 1.5 meter |  |  |  |  |
| 80 | Keyboard | USB (Dell) |  |  |  |  |
| 81 | Battery |  Dry Alkaline,12 V 23 A |  |  |  |  |
| 82 | Ram | Samsung, 4GB, DDR3 M378B5173BH0-CK0 |  |  |  |  |
| 83 | SMA male to SMA male cable as per smaple  | 1 meter |  |  |  |  |
| 84 | Solder iron with cap | CA-40R goot |  |  |  |  |
| 85 | Solder Tip refresher | BS-2 \goot |  |  |  |  |
| 86 | Solder Tip recovery | ST-45 goot |  |  |  |  |
| 87 | Cable tie |  8' (pack of 100) |  |  |  |  |
| 88 | Cable tie | 10" (pack of 100) |  |  |  |  |
| 89 | Cable tie | 12" (pack of 100) |  |  |  |  |
| 90 | soldering wire | As per Sample proskit |  |  |  |  |
| 91 | DMM prob | As per Sample |  |  |  |  |
| 92 | DMM | As per Sample proskit |  |  |  |  |
| 93 | Glue gun machine | [GK-380B Proskit](http://testinstruments.pk/proskit-in-pakistan/gk-380b-proskit/page/2/) |  |  |  |  |
| 94 | Glue gun stick | As per Sample proskit |  |  |  |  |
| 95 | Power Supply Probe | As per Sample |  |  |  |  |
| 96 | wooden saw | As per Sample INGCO |  |  |  |  |
| 97 | Hexa and blades | As per Sample INGCO |  |  |  |  |
| 98 | Hexa blades | As per Sample |  |  |  |  |
| 99 | fine wire cutter | [1PK-705Y PRO'SKIT](http://testinstruments.pk/proskit-in-pakistan/1pk-705y-proskit) |  |  |  |  |
| 100 | Cutting plier | [PM-737 Pro'sKit](http://testinstruments.pk/proskit-in-pakistan/pm-737-proskit/page/2/) |  |  |  |  |
| 101 | wire cutter  | [1PK-067DS Proskit](http://testinstruments.pk/proskit-in-pakistan/1pk-067ds-proskit) |  |  |  |  |
| 102 | wire striper | INGCO HWSP102418 INGCO |  |  |  |  |
| 103 | Desoldering Pump | [8PK-366N-Y Proskit](http://testinstruments.pk/proskit-in-pakistan/8pk-366n-y-proskit) |  |  |  |  |
| 104 | fine file set | As per Sample |  |  |  |  |
| 105 | Plier | [1PK-052DS Proskit](http://testinstruments.pk/proskit-in-pakistan/1pk-052ds-proskit) |  |  |  |  |
| 106 | Long nose plier | [1PK709DS Proskit](http://testinstruments.pk/proskit-in-pakistan/1pk709ds-proskit) |  |  |  |  |
| 107 | champion set screw driver  | [SW9106 Proskit](http://testinstruments.pk/proskit-in-pakistan/sw9106-proskit/page/3/) |  |  |  |  |
| 108 | watch maker set | [8PK-2061 Pro'sKit](http://testinstruments.pk/proskit-in-pakistan/8pk-2061-proskit) |  |  |  |  |
| 109 | Screw driver set | [SD-2301 Proskit](http://testinstruments.pk/proskit-in-pakistan/sd-2301-proskit/page/3/) |  |  |  |  |
| 110 | Glint |   |  |  |  |  |
| 111 | WD 40 |   |  |  |  |  |
| 112 | Soldering paste | [8S005 Proskit](http://testinstruments.pk/proskit-in-pakistan/8s005-proskit) |  |  |  |  |
| 113 | HDMI Cable |  3 meter |  |  |  |  |
| 114 | VGA Cable | 3 meter |  |  |  |  |
| 115 | HDMI cable  | 20 meter , 1080p Display |  |  |  |  |
| 116 | Hard Desk | sata, 500 GB, GW |  |  |  |  |
| 117 | Batteries 9 volt  | Rechargeable, camilion |  |  |  |  |
| 118 | Mouse Pad | Wrist Rest |  |  |  |  |
| 119 | Networks I/O’s  | 3Com |  |  |  |  |
| 120 | Hard Disk  | 500 GB with Casing |  |  |  |  |
| 121 | Power Cable | 2 Pin |  |  |  |  |
| 122 | Mic | With ring And Without ring |  |  |  |  |
| 123 | Remote Cell | AAA |  |  |  |  |
| 124 | USB | 64GB (3.0), Samsung |  |  |  |  |
| 125 | Power Extension board | wire length 11feet, Solid brass pin shoe, 9 switch sockets |  |  |  |  |
| 126 | RAM for Hp Systems | 2GB 2Rx8 (DDR-PC3 single cut) |  |  |  |  |
| 127 | Inducter | 3.3mH |  |  |  |  |
| 128 | Fuse  | 0.5mA |  |  |  |  |
| 129 | Sand Paper |   |  |  |  |  |
| 130 | Magnetic Switches |   |  |  |  |  |
| 131 | Connecting wires |   |  |  |  |  |
| 132 | Magnat |  Bar Magnet |  |  |  |  |
| 133 | Copper wire | 0.29mm Roll 50 meter |  |  |  |  |
| 134 | Meldes Apparetus |   |  |  |  |  |
| 135 | Oscilloscope Probe |  |  |  |  |  |
| 136 | Analog Amp meter |   |  |  |  |  |
| 137 | Bulb | 60w |  |  |  |  |
| 138 | Photo Cell |   |  |  |  |  |
| 139 | 4001 | Quad 2-input NOR gate |  |  |  |  |
| 140 | 4011 | [Buffered Quad 2-Input NAND gate](http://www.search.com/reference/NAND_gate) |  |  |  |  |
| 141 | 4069 | Not gate |  |  |  |  |
| 142 | 4033 | Decoder |  |  |  |  |
| 143 | 4008 | full adder |  |  |  |  |
| 144 | 4070 | Quad exclusive-OR |  |  |  |  |
| 145 | 4071 | [Quad 2-input OR gate](http://www.search.com/reference/OR_gate) |  |  |  |  |
| 146 | 4072 | Dual 4-input OR gate |  |  |  |  |
| 147 | 4073 | [Triple tri-input AND gate](http://www.search.com/reference/AND_gate) |  |  |  |  |
| 148 | 4077 | Quad 2-input EXLUSIVE-NOR gate |  |  |  |  |
| 149 | 4081 | Quad 2-input AND gate |  |  |  |  |
| 150 | 7404 | Hex inverter |  |  |  |  |
| 151 | 7483 | 4 bit full adder |  |  |  |  |
| 152 | 7400 |  [Quad 2-Input NAND gate](http://www.search.com/reference/NAND_gate) |  |  |  |  |
| 153 | 7447 | comon anode driving IC |  |  |  |  |
| 154 | 4511 | BCD to seven segment latch decoder |  |  |  |  |
| 155 | 4543 | Decoder multipurpose |  |  |  |  |
| 156 | Jumper Wire | Kg (as per sample) |  |  |  |  |
| 157 | Paper Tape | 1 inch width, 100 meter |  |  |  |  |
| 158 | Push Button  | Small Switch (Reset), micro |  |  |  |  |
| 159 | Push Button | ON/OFF (Small), micro |  |  |  |  |
| 160 | jumper  | mother board |  |  |  |  |
| 161 | Keypad | 4 x 4 Matrix Array Membrane |  |  |  |  |
| 162 | Pmod for Nexus | PmodCLP |  |  |  |  |
| 163 | 7-Segment Display Small | Common Anode |  |  |  |  |
| 164 | 7-Segment Display Small | Common Cathode |  |  |  |  |
| 165 | Headphone with Mic | Dual jack |  |  |  |  |
| 166 | Soldering Paste | Goot white flux paste , 4 oz |  |  |  |  |
| 167 | Relay | 12V |  |  |  |  |
| 168 | Relay | 6V |  |  |  |  |
| 169 | L.E.D White | Crystal 3V 5mm |  |  |  |  |
| 170 | L.E.D Red | Crystal 3V 5mm |  |  |  |  |
| 171 | L.E.D Blue | Crystal 3V 5mm |  |  |  |  |
| 172 | Temperature Sensor | LM35 |  |  |  |  |
| 173 | Arduino Nano | 32-pin,ATMega328P,With USB Cable |  |  |  |  |
| 174 | Alphanumeric LCD | 16x2 |  |  |  |  |
| 175 | MCP4821 | DAC, 8-pin, Single channel |  |  |  |  |
| 176 | Header | 40 pin Sip (Male) |  |  |  |  |
| 177 | CD-RW Re-writable  | Blank CD,pack of 10 |  |  |  |  |
| 178 | ESP32 Dev Kit V1 | dual core, 512 kB RAM |  |  |  |  |
| 179 | Header | 40 pin Sip (FeMale) |  |  |  |  |
| 180 | Soldering Iron sponge cleaner | 6 sequare feet |  |  |  |  |
| 181 | Servo Motor SG90 |   |  |  |  |  |
| 182 | Berg Strip Male Female Connector |   |  |  |  |  |
| 183 |  2N2222 | NPN Transistor |  |  |  |  |
| 184 | 3904 | NPN Transistor |  |  |  |  |
| 185 | BC547 | NPN Transistor |  |  |  |  |
| 186 | BC548 | NPN Transistor |  |  |  |  |
| 187 | 3906 | PNP Transistor |  |  |  |  |
| 188 | 2N7000 | N-Channel Enhancement Mosfet |  |  |  |  |
| 189 | IN4007 | Silicon diode  |  |  |  |  |
| 190 | IN4148 | Silicon diode  |  |  |  |  |
| 191 | Fuse | 1 Ampere(Small) |  |  |  |  |
| 192 | Fuse | 15 Ampere(big) |  |  |  |  |
| 193 | Fuse | 1.5 Ampere (Small) |  |  |  |  |
| 194 | 7805 | Three Terminal Positive Voltage Regulator |  |  |  |  |
| 195 | 7809 | Three Terminal Positive Voltage Regulator |  |  |  |  |
| 196 | 7812 | Three Terminal Positive Voltage Regulator |  |  |  |  |
| 167 | 1mh | Inductor |  |  |  |  |
| 98 | 2.2mh | Inductor |  |  |  |  |
| 199 | 10mh | Inductor |  |  |  |  |
| 200 | 33mh | Inductor |  |  |  |  |
| 201 | LM741 | Opamp |  |  |  |  |
| 202 | BreadBoard | Small  |  |  |  |  |
| 203 | Fine Cutter  | Proskit |  |  |  |  |
| 204 | Wire Stripper | Proskit |  |  |  |  |
| 205 | power Cable | 3 pin |  |  |  |  |
| 206 | Galvanometer  |   |  |  |  |  |
| 207 | 1 Ω  |  1/4 Watt |  |  |  |  |
| 208 | 10 Ω  |  1/4 Watt |  |  |  |  |
| 209 | Resistor  | 1KΩ 1/2 w |  |  |  |  |
| 210 | Resistor  | 3KΩ |  |  |  |  |
| 211 | Resistor  | 2.2KΩ |  |  |  |  |
| 212 | Resistor  | 5KΩ |  |  |  |  |
| 213 | Resistor  | 200Ω |  |  |  |  |
| 214 | Resistor  | 500Ω |  |  |  |  |
| 215 | Resistor  | 800Ω |  |  |  |  |
| 216 | Resistor  | 470Ω |  |  |  |  |
| 217 | 100Ω  |  1/2 Watt |  |  |  |  |
| 218 | 220Ω  |  1/2 Watt |  |  |  |  |
| 219 | 330Ω  |  1/2 Watt |  |  |  |  |
| 220 | 460Ω  |  1/2 Watt |  |  |  |  |
| 221 | 180Ω  |  1/2 Watt |  |  |  |  |
| 222 | 820Ω  |  1/2 Watt |  |  |  |  |
| 223 | 3.9 KΩ  |  1/2 Watt |  |  |  |  |
| 224 | 33 KΩ  |  1/2 Watt |  |  |  |  |
| 225 | 250 KΩ  |  1/2 Watt |  |  |  |  |
| 226 | 560 KΩ  |  1/2 Watt |  |  |  |  |
| 227 | 50 KΩ  |  1/2 Watt |  |  |  |  |
| 228 | Resistor | 1.2kohm, 0.5 watt  |  |  |  |  |
| 229 | Resistor | 560ohm, 0.5 watt  |  |  |  |  |
| 230 | Resistor | 5.6Kohm, 0.5 watt  |  |  |  |  |
| 231 | Resistor | 100Kohm, 0.5 watt  |  |  |  |  |
| 232 | Resistor | 10Kohm, 0.5 watt  |  |  |  |  |
| 233 | Resistor | 3.3kohm, 0.5 watt  |  |  |  |  |
| 234 | Resistor | 100ohm, 1watt  |  |  |  |  |
| 235 | Resistor | 1 ohm, 10Watt |  |  |  |  |
| 236 | Resistor | 10 ohm, 10Watt |  |  |  |  |
| 237 | Power Resistor | 12 ohm 20 W |  |  |  |  |
| 238 | Power Resistor | 6 ohm 30 W |  |  |  |  |
| 239 | Power Resistor | 9 ohm, 40 W |  |  |  |  |
| 240 | Power Resistor | 18 ohm, 25W |  |  |  |  |
| 241 | Power Resistor | 90 ohm, 15W |  |  |  |  |
| 242 | Variable Resistor | 1K |  |  |  |  |
| 243 | Variable Resistor | 10K |  |  |  |  |
| 244 | Variable Resistor | 100K |  |  |  |  |
| 245 | 1KΩ | Mini B1K RotaryPotentiometer(as per sample) |  |  |  |  |
| 246 | 10KΩ | Mini B1K RotaryPotentiometer(as per sample) |  |  |  |  |
| 247 | 100KΩ | Mini B1K RotaryPotentiometer(as per sample) |  |  |  |  |
| 248 | 1MΩ | Mini B1K RotaryPotentiometer(as per sample) |  |  |  |  |
| 249 |  20kΩ | Vaiable Resistor |  |  |  |  |
| 250 |  1MΩ | Vaiable Resistor |  |  |  |  |
| 251 | Resister | 5 k Ohm Veriable |  |  |  |  |
| 252 | Resister | 4.7 k Ohm 1/2w |  |  |  |  |
| 253 | 1.5 KΩ  |   |  |  |  |  |
| 254 | 47 KΩ  |   |  |  |  |  |
| 255 | Capacitor | 2.2µF |  |  |  |  |
| 256 | Capacitor | 1µF 50v |  |  |  |  |
| 257 | 2.2µF | 25 V |  |  |  |  |
| 258 | 4.7µF | 25 V |  |  |  |  |
| 259 | 100µF | 25 V |  |  |  |  |
| 260 | 10µF  | 25 V |  |  |  |  |
| 261 | 22µF  | 25 V |  |  |  |  |
| 262 | 25µF  | 25V |  |  |  |  |
| 263 | 1µF  | 25V |  |  |  |  |
| 264 | 0.1µF  |  non polar ceramic |  |  |  |  |
| 265 | 0.001µF |  non polar ceramic |  |  |  |  |
| 266 | 0.022µF |  non polar ceramic |  |  |  |  |
| 267 | 0.01µF |  non polar ceramic |  |  |  |  |
| 268 | Capacitor | 22uF,100V  |  |  |  |  |
| 269 | Capacitor | 0.1uF,100V  |  |  |  |  |
| 270 | Capacitor | 0.2uF,100V  |  |  |  |  |
| 271 | Capacitor | 0.01uF,100V  |  |  |  |  |
| 272 | Capacitor | 4.7pF,100V  |  |  |  |  |
| 273 | Capacitor | 45uf,100V  |  |  |  |  |
| 274 | Capacitor | 90uf,100V  |  |  |  |  |
| 275 | Capacitor | 40uf,100V  |  |  |  |  |
| 276 | Capacitor | 80uf, 100V  |  |  |  |  |
| 277 | 1µF | 16 V |  |  |  |  |
| 278 | 4.7µF | 15 V |  |  |  |  |
| 279 | 47µF | 16 V |  |  |  |  |
| 280 | 0.1µF  | 25 V |  |  |  |  |
| 281 | 0.2µF  | 25 V |  |  |  |  |
| 282 | 4.7nF | Non Poler |  |  |  |  |
| 283 | 10nF | Non Poler |  |  |  |  |
| 284 | 100nF | Non Poler |  |  |  |  |
| 285 | 1000nF | Non Poler |  |  |  |  |
| 286 | 10pF | Non Poler |  |  |  |  |
| 287 | 47pF | Non Poler |  |  |  |  |
| 288 | 100pF | Non Poler |  |  |  |  |
| 289 | 1000pF | Non Poler |  |  |  |  |
| 290 | BS170 | MOSFET |  |  |  |  |
| 291 | IN4001 | Diode |  |  |  |  |
| 292 | Ziner Diode | 5V Ziner Diode |  |  |  |  |
| 293 | Ziner Diode | 6V Ziner Diode |  |  |  |  |
| 294 | Battries | 9V, Camlian |  |  |  |  |
| 295 | Battery Connector  | As per Sample (15cm)  |  |  |  |  |
| 296 | Thiner | 2 Liter |  |  |  |  |

**Bid Valid as per given in the terms & conditions.**

|  |  |
| --- | --- |
| **Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **Contact Information: \_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **Official Stamp: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |

**Check List** *(To be filled by Applicants)*

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*Prepare & Submit the Bid in this Order*

|  |  |  |
| --- | --- | --- |
| **Detail** | **Yes****🗸** | **No****🗴** |
| 1. **ALL Pages signed and Stamped by Bidder**
 |  |  |
| 1. Draft of Earnest Money
 |  |  |
| 1. Bid (Form 1)
 |  |  |
| 1. Declaration Form (Form 2)
 |  |  |
| 1. GST and NTN Registered
 |  |  |
| 1. Active Tax Payer List (ATL) of FBR
 |  |  |
| 1. Proof of Non-Blacklisting:
 |  |  |
| 1. Warranty / Guarantee Terms
 |  |  |
| 1. Technical Compliance Sheet (Form-3)
 |  |  |

**For queries and further clarification, you may**

* write to us on fawadhashmi@comsats.edu.pk
* Visit us at 2nd Floor, Faculty Block-II, CUI, Islamabad
* Call us at 051-9049-5122 / 051-9049-5154