



COMSATS University Islamabad (CUI), Lahore Campus

Defence Road, Off Raiwind Road, Lahore

Tender No. CUI-LHR-TN-13-20-1410

Case # 3129

Single Stage One Envelop Procedure

Title of Tender: Consumable Items for Labs of Electrical & Computer Engineering Department

TERMS AND CONDITIONS

1. *All pages of bidding documents are mandatory to be signed / stamped, meaning thereby bidder agrees to our terms & conditions mentioned herein, failing which the bid may be rejected.*
2. *Any addition, deletion or modification of any clause of the procurement terms & conditions/BoQs of CUI, Lahore Campus by any vendor will not be acceptable and may lead to rejection of the bid.*
3. *Only registered Suppliers, who are on Active Taxpayers List (ATL) of FBR, are eligible to participate in tender.*
4. The contract will be executed and handed over in satisfactory conditions up to the entire satisfaction of COMSATS University Islamabad, Lahore Campus.
5. Documents along with Pay Order / Demand Draft amounting to **Rs. 500/-** as a tender document fee (Non-Refundable) shall be submitted in favor of COMSATS University Islamabad, Lahore Campus to the address given below. No bid will be accepted without tender documents' fee.
6. Part / Advance payments is not allowed.
7. **The exact completion/delivery time from the date of the purchase / work order will be 15 days. The handing over / completion time for this contract is of critical importance.**
8. Your bid proposal should be inclusive of freight and all other taxes and to be delivered at CUI, Lahore Campus's premises.
9. After opening of bids, CUI, Lahore Campus will examine the bids for completeness as per tender document.
10. In case more than one bidder have quoted same rates for an item; the bidder securing more items (in terms of cost) will be awarded the specific item.
11. Purchase order (s) will be awarded to the lowest or technically recommended bidder (s) on the basis of item wise / subtotal wise / grand total wise according to the nature of BoQs.
12. The bid should be submitted in a sealed envelope up to **September 16, 2020** on or before **1400hrs** and will be opened on the same date **at 1430hrs** in the presence of available bidders. In case of any holiday is announced by the Govt. OR any unforeseeable circumstances that prevent the tender from being opened on the date announced (Force Majeure Situation), the tenders will be opened on the very next working day. Timing will remain as mentioned in the tender notice.
13. The envelope should be marked as under;
Secretary, Purchase Committee
COMSATS University Islamabad, Lahore Campus
Defence Road, Off Raiwind Road, Lahore.
Tel: 042-111-001-007, Ext: 875

Signature & Stamp of Bidder

The envelope shall also bear the word “**CONFIDENTIAL**” and following identification quotation of “**Consumable Items for Labs of Electrical & Computer Engineering Department**”.

14. The bid form (BoQs) must be duly filled in, stamped and signed by the authorized representative of the bidder.
15. **If the vendor fails to deliver the goods / services to COMSATS University Islamabad (CUI), Lahore Campus within the given deadline, any of the following can be opted by CUI Lahore campus on the recommendation of the end user and approval of the authority;**
 - a. An extension in the delivery period may be granted in case a valid reason/justification with necessary documentary evidence is provided by the vendor supporting the reason for delay.
 - b. A penalty upto 10% of the invoice value may be charged.
 - c. Purchase order may be cancelled along with confiscation of earnest money if the vendor fails to deliver the goods / services after the initial or extended delivery time, as the case may be.
16. If the delivered goods / services are not according to the required quality standards / specifications, the same shall be liable to be rejected after inspection. The vendor would be required to supply as per requirements mentioned in our BoQs, otherwise the purchase / work order will be cancelled after due date with confiscation of earnest money.
17. Deduction of Income Tax and any other tax will be deducted at source according to Government prevailing rules.
18. Payment will be made on submission of Invoice in the name of “COMSATS University Islamabad, Lahore Campus” with a copy of delivery challan (s) after the complete order has been supplied, inspected and accepted which includes delivery / installation, and COMSATS acceptance / inspection thereof.
19. All prices should be quoted on **F.O.R (Pak Rupees) inclusive of all taxes.**
20. All prices should be valid for at least **60 days**. Withdrawal or any modification of the original offer within the validity period shall entitle CUI-Lahore Campus to forfeit the earnest money in favor of the CUI-Lahore Campus and / or put a ban on such vendor participation in CUI tenders / works.
21. It is the sole responsibility of the agent / supplier / manufacturer to comply with the applicable laws, be national or international.
22. In case of any dispute or grievance, the matter shall be addressed as per PPRA rules.
23. The CUI-Lahore Campus reserves the right to modify the quantities of goods / services at any time before the award of purchase / work order.
24. **The bidder is required to furnish in form of Bank deposit/ CDR / Pay order equivalent to 2% of the total Bid price as Earnest Money crossed in favor of “COMSATS University Islamabad, Lahore Campus”.**
25. COMSATS University Islamabad, Lahore Campus reserves the rights to reject the bid if;
 - i. Received without earnest money
 - ii. Received later than the date and time fixed for tender submission
 - iii. The tender is unsigned/ unstamped
 - iv. The offer is ambiguous
 - v. The offer is conditional
 - vi. The offer is from a firm, which is black listed by any Govt. Office.
 - vii. The offer is received by telephone/telex/fax/telegram.
 - viii. Any unsigned / ambiguous erasing, cutting / overwriting etc. is made.

26. The bidder should furnish a certificate as worded below in token of acceptance of all the terms and conditions of the tender otherwise the tender will not be considered under any circumstances.
27. The undersigned affirm that the terms and conditions as contained in this document have been read and accepted and that in the event of selection of my/our rate the agreement in the prescribed form will be entered into:

- **Company / Vendor Name:**.....
- **Postal Address:**.....
- **Tel. / Mobile:**.....**Email:**.....
- **NTN# :**.....**GST#:**.....
- **Signature:**
- Please also attach the Certificate supporting being Active Taxpayer as per requirement of FBR.

BoQs of Consumable Items for Labs of Electrical & Computer Engineering Department

Vendors are required to provide both unit and total price of each item and calculations must be made carefully to avoid mistakes. However, in case, total price does not match with the unit price and quantity due to calculation error or typo error, any of the following can be opted:

1. The bid may be rejected on the reason of ambiguity (OR)

Unit price will be considered as final and total price of the respective item will be calculated by multiplying it with the quantity required. Sub-totals and grand total will also be corrected accordingly

No change in the BoQs (Specs & Qty.) of CUI-Lahore Campus, as detailed below, is allowed. Any additional information may be mentioned in the blank columns (i.e. model / brand or Price). Any modification in CUI-Lahore Campus BoQ may lead to rejection of bid (fully or partially).

Prices to be quoted inclusive of all applicable taxes

Sr. #	Item Name & Specifications		Qty		Quoted Model / Brand /Make	Unit Price (Rs.)	Total Price (Rs.)
Communication Systems lab							
1	IC	74HC00	Nos.	12			
2	IC	LF356	Nos.	12			
3	IC	LM6171	Nos.	12			
4	IC	7408 (8 PIN)	Nos.	12			
5	IC	74LS14	Nos.	12			
6	IC	AD633	Nos.	12			
7	Transistor	BC557	Nos.	50			

8	Capacitor	2200uf	Nos.	12			
9	Capacitor	.03uf	Nos.	100			
10	Capacitor	100pf	Nos.	100			
11	Resistor	0.5 K (500 Nos. containing in One Pack)	Pack	1			
12	Resistor	.001 K (500 Nos. containing in One Pack)	Pack	1			
13	Resistor	100 K (500 Nos. containing in One Pack)	Pack	1			
14	Resistor	0.8 K (500 Nos. containing in One Pack)	Pack	1			
15	Resistor	7.5 K (500 Nos. containing in One Pack)	Pack	1			
Sub Total Amount (Rs.) inclusive of All Taxes)							
Power Electronics/ Industrial Electronics, Integrated Circuit Design lab							
16	Soldering Wire	60/40 0.8mm 100G Tin Lead Rosin Core Solder Flux Soldering Wire	Roll	2			
17	Glass Fuse	5 x 20mm , 10A	Nos.	100			
18	Glass Fuse	5 x 20mm , 4A	Nos.	100			
19	Glass Fuse	5 x 20mm , 630mA	Nos.	100			
20	Cable Tie 12"	12"	Pkt.	1			
21	Battery Rechargeable	9v	Nos.	15			
22	Jumper Wire	Male to Male Connector	Strip	5			

23	Jumper Wire	Roll for bread board	Kg	2			
24	Diode	IN 5408	Nos.	200			
25	Diode	IN 4148	Nos.	200			
26	Diode	IN 4007	Nos.	200			
27	Thyristor	BT151	Nos.	100			
28	Thyristor	BT152	Nos.	100			
29	Thyristor	TIC106	Nos.	100			
30	Zener Diode	6V2	Nos.	50			
31	Diode (GERMANIUM)	AA113	Nos.	50			
32	UJT	2N2646	Nos.	50			
33	PUT	2N6027	Nos.	50			
34	SCR	C106D	Nos.	100			
35	SCR	MCR 100-5	Nos.	100			
36	SCR	TIC47	Nos.	50			
37	TRIAC	Z0405MF	Nos.	50			
38	DIAC	D3202	Nos.	50			
39	MOSFET	IRF 9640	Nos.	100			
40	MOSFET	IRF 740	Nos.	100			
41	MOSFET	IRF 540	Nos.	100			
42	THYRISTOR	BT 151	Nos.	100			
43	THYRISTOR	BT 152	Nos.	100			
44	TRANSISTOR	BC 337	Nos.	100			
45	TRANSISTOR	BC 327	Nos.	100			
46	TRANSISTOR	2N3904	Nos.	100			

47	TRANSISTOR	2N3906	Nos.	100			
48	Laminated copper Wire	36/38 SWG	Kg	2			
49	Ferrite Core "O Shape"	As per Sample available In concern lab	Nos.	100			
50	POT	10K	Nos.	100			
51	POT	100K	Nos.	100			
52	Variable power supply connector (Male)	As per Sample	Nos.	100			
53	Capacitor	1uf , 50v, Non Polar	Nos.	100			
54	Capacitor	3.3uf , 50v, Non Polar	Nos.	100			
55	Capacitor	10uf , 50v, Non Polar	Nos.	100			
56	Capacitor	33uf , 50v, Non Polar	Nos.	100			
57	Capacitor	47uf , 50v, Non Polar	Nos.	100			
58	Capacitor	56uf , 50v, Non Polar	Nos.	100			
59	Capacitor	10uf , 50v, Non Polar	Nos.	100			
60	Capacitor	22uf , 50v, Non Polar	Nos.	100			
61	Capacitor	33uf , 50v, Non Polar	Nos.	100			
62	Capacitor	47uf , 50v, Non Polar	Nos.	100			
63	Capacitor	56uf , 50v, Non Polar	Nos.	100			
64	Capacitor	100uf , 50v, Non Polar	Nos.	100			
65	Capacitor	220uf , 50v, Non Polar	Nos.	100			
66	Capacitor	330uf , 50v, Non Polar	Nos.	100			
67	Capacitor	470uf , 50v, Non Polar	Nos.	100			
68	Capacitor	560uf , 50v, Non Polar	Nos.	100			
69	Capacitor	1000uf , 50v, Non Polar	Nos.	100			

70	Capacitor	2200uf , 50v, Non Polar	Nos.	100			
71	Capacitor	1uf , 50v, Polar	Nos.	100			
72	Capacitor	3.3uf , 50v, Polar	Nos.	100			
73	Capacitor	10uf , 50v, Polar	Nos.	100			
74	Capacitor	33uf , 50v, Polar	Nos.	100			
75	Capacitor	47uf , 50v, Polar	Nos.	100			
76	Capacitor	56uf , 50v, Polar	Nos.	100			
77	Capacitor	10uf , 50v, Polar	Nos.	100			
78	Capacitor	22uf , 50v, Polar	Nos.	100			
79	Capacitor	33uf , 50v, Polar	Nos.	100			
80	Capacitor	47uf , 50v, Polar	Nos.	100			
81	Capacitor	56uf , 50v, Polar	Nos.	100			
82	Capacitor	100uf , 50v, Polar	Nos.	100			
83	Capacitor	220uf , 50v, Polar	Nos.	100			
84	Capacitor	330uf , 50v, Polar	Nos.	100			
85	Capacitor	470uf , 50v, Polar	Nos.	100			
86	Capacitor	560uf , 50v, Polar	Nos.	100			
87	Capacitor	1000uf , 50v, Polar	Nos.	100			
88	Capacitor	2200uf , 50v, Polar	Nos.	100			
89	Crocodile Connector	Red Color	Nos.	100			
90	Crocodile Connector	Black Color	Nos.	100			
91	Inductor	1mH	Nos.	100			
92	Inductor	2mH	Nos.	100			
93	Inductor	3mH	Nos.	100			

94	Inductor	5mH	Nos.	100			
95	Inductor	8mH	Nos.	100			
96	Inductor	10mH	Nos.	100			
97	Inductor	12mH	Nos.	100			
98	Inductor	22mH	Nos.	100			
99	Inductor	25mH	Nos.	100			
100	Inductor	47mH	Nos.	100			
101	Inductor	33mH	Nos.	100			
102	Inductor	50mH	Nos.	100			
103	Screw for DC Power Supply	As per Sample	Nos.	100			
104	Transformer	Input: AC220v Output: AC 12v x 2, 2Amp	Nos.	10			
105	Slotted Cap Panel Mount Fuse Holder	As per Sample available in concern lab	Nos.	50			
106	Resistor	1 Ω , 1 Watt	Nos.	200			
107	Resistor	2.2 Ω , 1 Watt	Nos.	200			
108	Resistor	4.7 Ω , 1 Watt	Nos.	200			
109	Resistor	10 Ω , 1 Watt	Nos.	200			
110	Resistor	82 Ω , 1 Watt	Nos.	200			
111	Resistor	47 Ω , 1 Watt	Nos.	200			
112	Resistor	100 Ω , 1 Watt	Nos.	200			
113	Resistor	220 Ω , 1 Watt	Nos.	200			
114	Resistor	330 Ω , 1 Watt	Nos.	200			
115	Resistor	470 Ω , 1 Watt	Nos.	200			
116	Resistor	680 Ω , 1 Watt	Nos.	200			

117	Resistor	820Ω , 1 Watt	Nos.	200			
118	Resistor	560Ω , 1 Watt	Nos.	200			
119	Resistor	1kΩ , 1 Watt	Nos.	200			
120	Resistor	2.2kΩ , 1 Watt	Nos.	200			
121	Resistor	3kΩ , 1 Watt	Nos.	200			
122	Resistor	4kΩ , 1 Watt	Nos.	200			
123	Resistor	5.6KΩ , 1 Watt	Nos.	200			
124	Resistor	8.5KΩ , 1 Watt	Nos.	200			
125	Resistor	10KΩ , 1 Watt	Nos.	200			
126	Resistor	15KΩ , 1 Watt	Nos.	200			
127	Resistor	22KΩ , 1 Watt	Nos.	200			
128	Resistor	33KΩ , 1 Watt	Nos.	200			
129	Resistor	68kΩ , 1 Watt	Nos.	200			
130	Resistor	220KΩ , 1 Watt	Nos.	200			
131	Resistor	100KΩ , 1 Watt	Nos.	200			
132	Resistor	470KΩ , 1 Watt	Nos.	200			
133	Resistor	3.3KΩ , 1 Watt	Nos.	200			
134	Resistor	150KΩ , 1 Watt	Nos.	200			
135	Resistor	6.8KΩ , 1 Watt	Nos.	200			
136	Resistor	560KΩ , 1 Watt	Nos.	200			
137	Resistor	12KΩ , 1 Watt	Nos.	200			
138	Resistor	1Ω , 1/2 Watt	Nos.	200			
139	Resistor	2.2Ω , 1/2 Watt	Nos.	200			
140	Resistor	4.7Ω , 1/2 Watt	Nos.	200			

141	Resistor	10 Ω , 1/2 Watt	Nos.	200			
142	Resistor	82 Ω , 1/2 Watt	Nos.	200			
143	Resistor	47 Ω , 1/2 Watt	Nos.	200			
144	Resistor	100 Ω , 1/2 Watt	Nos.	200			
145	Resistor	220 Ω , 1/2 Watt	Nos.	200			
146	Resistor	330 Ω , 1/2 Watt	Nos.	200			
147	Resistor	470 Ω , 1/2 Watt	Nos.	200			
148	Resistor	680 Ω , 1/2 Watt	Nos.	200			
149	Resistor	820 Ω , 1/2 Watt	Nos.	200			
150	Resistor	560 Ω , 1/2 Watt	Nos.	200			
151	Resistor	1k Ω , 1/2 Watt	Nos.	200			
152	Resistor	2.2k Ω , 1/2 Watt	Nos.	200			
153	Resistor	3k Ω , 1/2 Watt	Nos.	200			
154	Resistor	4k Ω , 1/2 Watt	Nos.	200			
155	Resistor	5.6K Ω , 1/2 Watt	Nos.	200			
156	Resistor	8.5K Ω , 1/2 Watt	Nos.	200			
157	Resistor	10K Ω , 1/2 Watt	Nos.	200			
158	Resistor	15K Ω , 1/2 Watt	Nos.	200			
159	Resistor	22K Ω , 1/2 Watt	Nos.	200			
160	Resistor	33K Ω , 1/2 Watt	Nos.	200			
161	Resistor	68k Ω , 1/2 Watt	Nos.	200			
162	Resistor	220K Ω , 1/2 Watt	Nos.	200			
163	Resistor	100K Ω , 1/2 Watt	Nos.	200			
164	Resistor	470K Ω , 1/2 Watt	Nos.	200			

165	Resistor	3.3K Ω , 1/2 Watt	Nos.	200			
166	Resistor	150K Ω , 1/2 Watt	Nos.	200			
167	Resistor	6.8K Ω , 1/2 Watt	Nos.	200			
168	Resistor	560K Ω , 1/2 Watt	Nos.	200			
169	Resistor	12K Ω , 1/2 Watt	Nos.	200			
170	Power Resistor	10W, 10 Ω	Nos.	100			
171	Power Resistor	10W, 100 Ω	Nos.	100			
172	Power Resistor	5W, 10 Ω	Nos.	100			
173	Power Resistor	5W, 100 Ω	Nos.	100			
174	Power Cord	As Per Sample Available in concern Lab	Nos.	10			
175	CMOS Cell	No. 2032 or equivalent	Nos.	20			
176	Flexible Wire	1.5mm	Roll	1			
177	2 Pin Power Plug	10 Amp	Nos.	10			
Sub Total Amount (Rs.) inclusive of All Taxes)							
Electronics lab							
178	Resistor	100 Ω (1/4W)	Nos.	1,000			
179	Resistor	180 Ω (1/4W)	Nos.	1,000			
180	Resistor	220 Ω (1/4W)	Nos.	500			
181	Resistor	270 Ω (1/4W)	Nos.	1,000			
182	Resistor	330 Ω (1/4W)	Nos.	500			
183	Resistor	390 Ω (1/4W)	Nos.	500			
184	Resistor	680 Ω (1/4W)	Nos.	1,000			
185	Resistor	820 Ω (1/4W)	Nos.	1,000			
186	Resistor	1K Ω (1/4W)	Nos.	3,000			

187	Resistor	2.2K Ω (1/4W)	Nos.	3,000			
188	Resistor	2.7K Ω (1/4W)	Nos.	1,000			
189	Resistor	3.3K Ω (1/4W)	Nos.	3,000			
190	Resistor	4.7K Ω (1/4W)	Nos.	3,000			
191	Resistor	10K Ω (1/4W)	Nos.	3,000			
192	Resistor	47K Ω (1/4W)	Nos.	1,000			
193	Resistor	100K Ω (1/4W)	Nos.	1,000			
194	Resistor	220K Ω (1/4W)	Nos.	1,000			
195	Resistor	270K Ω (1/4W)	Nos.	1,000			
196	Resistor	1M Ω (1/4W)	Nos.	1,500			
197	Resistor	2.2M Ω (1/4W)	Nos.	500			
198	Resistor	22 Ω (1/2W)	Nos.	1,500			
199	Resistor	82 Ω (1/2W)	Nos.	1,500			
200	Resistor	120 Ω (1/2W)	Nos.	1,500			
201	Resistor	180 Ω (1/2W)	Nos.	1,500			
202	Resistor	47 Ω (1/2W)	Nos.	1,500			
203	Resistor	1M Ω (1/4W)	Nos.	1,000			
204	Resistor	1 Ω , 1 Watt	Nos.	200			
205	Resistor	100 Ω , 1 Watt	Nos.	200			
206	Resistor	220 Ω , 1 Watt	Nos.	200			
207	Resistor	0.5K Ω , 1 Watt	Nos.	200			
208	Resistor	1k Ω , 1 Watt	Nos.	200			
209	Resistor	2.2k Ω , 1 Watt	Nos.	200			
210	Resistor	3.3K Ω , 1 Watt	Nos.	200			

211	Resistor	5.6K Ω , 1 Watt	Nos.	200			
212	Resistor	6.8K Ω , 1 Watt	Nos.	200			
213	Resistor	7.5K Ω , 1 Watt	Nos.	200			
214	Resistor	10K Ω , 1 Watt	Nos.	200			
215	Resistor	22K Ω , 1 Watt	Nos.	200			
216	Resistor	33K Ω , 1 Watt	Nos.	200			
217	Resistor	100K Ω , 1 Watt	Nos.	200			
218	Resistor	220K Ω , 1 Watt	Nos.	200			
219	Resistor	470K Ω , 1 Watt	Nos.	200			
220	Resistor	560K Ω , 1 Watt	Nos.	200			
221	Variable Resistor	5K Ω	Nos.	100			
222	Variable Resistor	10K Ω	Nos.	100			
223	Variable Resistor	100K Ω	Nos.	100			
224	Variable Resistor	500K Ω	Nos.	100			
225	Variable Resistor	1M Ω	Nos.	100			
226	Disk Capacitor	1nF	Nos.	600			
227	Disk Capacitor	10nF	Nos.	600			
228	Disk Capacitor	100nF	Nos.	600			
229	Electrolytic Capacitor	10uF	Nos.	600			
230	Electrolytic Capacitor	22uF	Nos.	400			
231	Electrolytic Capacitor	1uF	Nos.	500			
232	Electrolytic Capacitor	100uF	Nos.	600			
233	Zener Diodes	08V	Nos.	150			
234	Zener Diodes	10V	Nos.	150			

235	Zener Diodes	16V	Nos.	150			
236	Diodes	IN4007	Nos.	300			
237	JFET	J305	Nos.	500			
238	Transistor (PNP)	2N3906	Nos.	400			
239	Transistor (NPN)	2N3904	Nos.	600			
240	Transistor (NPN)	Tip31	Nos.	150			
241	Transistor (PNP)	Tip30	Nos.	150			
242	Transistor (NPN)	2N2222	Nos.	250			
243	Transistor (NPN)	Tip 122	Nos.	150			
244	Operational Amplifier	LM741	Nos.	300			
245	Timer	NE555	Nos.	300			
246	DC Battery	9V	Nos.	50			
247	Multi Meter Probes		Nos.	20			
248	Digital Multimeter fuse	0.5 Amp	Nos.	20			
249	Jumper wire		Kg	8			
250	DC Battery	1.5V	Nos.	50			
Sub Total Amount (Rs.) inclusive of All Taxes)							
Control and Instrumentation lab							
251	Lighters	N/A	Nos.	20			
252	IC 0804	ADC	Nos.	50			
253	Glass Fuse	6A	Nos.	100			
254	Torch + cells	N/A	Nos.	20			
255	Multimeter Probes	N/A	Nos.	40			
256	Banana Cables	N/A	Nos.	40			

257	Resistor(1W)	10 Ω	Nos.	200			
258	Resistor(1W)	100 Ω	Nos.	200			
259	Resistor(1/4W)	47 Ω	Nos.	200			
260	Resistor(1/4W)	1kΩ	Nos.	200			
261	Resistor(1/4W)	2kΩ	Nos.	200			
262	Resistor(1/4W)	1.5kΩ	Nos.	200			
263	Resistor(1/4W)	3.9kΩ	Nos.	200			
264	Resistor(1/4W)	4kΩ	Nos.	200			
265	Resistor(1/4W)	5kΩ	Nos.	200			
266	Resistor(1/4W)	10kΩ	Nos.	200			
267	Resistor(1/4W)	12kΩ	Nos.	200			
268	Resistor(1/4W)	15kΩ	Nos.	200			
269	Resistor(1/4W)	25kΩ	Nos.	200			
270	Resistor(1/4W)	33kΩ	Nos.	200			
271	Resistor(1/4W)	50kΩ	Nos.	200			
272	Resistor(1/4W)	100kΩ	Nos.	200			
273	Resistor(1/4W)	1MΩ	Nos.	200			
274	Variable Resistor	5kΩ	Nos.	50			
275	Variable Resistor	10kΩ	Nos.	50			
276	Variable Resistor	15kΩ	Nos.	50			
277	Variable Resistor	50kΩ	Nos.	50			
278	Variable Resistor	100kΩ	Nos.	50			
279	Capacitor	1nF	Nos.	100			
280	Capacitor	100nF	Nos.	100			

281	Capacitor	1uF	Nos.	100			
282	Capacitor	0.1uF	Nos.	100			
283	Variable Capacitor	1uF	Nos.	50			
284	Variable Capacitor	10pF	Nos.	50			
285	Variable Capacitor	50pF	Nos.	50			
286	Variable Capacitor	100pF	Nos.	50			
287	Electrolytic Capacitor	0.1uF	Nos.	50			
288	Electrolytic Capacitor	1uF	Nos.	50			
289	Inductor	1uH	Nos.	100			
290	Temperature Sensor	LM35	Nos.	50			
291	Operational Amplifier	(uA741)	Nos.	50			
292	Operational Amplifier	(LM741)	Nos.	50			
293	Transistor (NPN)	2N3904	Nos.	50			
294	Transistor (NPN)	2N3906	Nos.	50			
295	Light Sensor	LDR	Nos.	50			
296	Jumper Wire kg	N/A	Nos.	1			
297	DP to VGA Convertor	N/A	Nos.	5			
298	CTC spray	N/A	Nos.	2			
299	WD 40	N/A	Nos.	2			
Sub Total Amount (Rs.) inclusive of All Taxes)							
Microwave / RF/ Antenna lab							
300	Transparent Silicon Rod	Transparent Monocrystalline Silicon Quartz Rod	Nos.	20			

301	CMOS Cell	No. 2032 or equivalent	Nos.	20			
302	Cable Tie 12"	12" (100 Nos. containing in one Pack)	Pkt.	3			
303	Soldering Wire	60/40 0.8mm 100G Tin Lead Rosin Core Solder Flux Soldering Wire or equivalent	Nos.	2			
304	DC Battery	9V, Non- Rechargeable, Heavy Duty.	Nos.	10			
305	Cell	1.5 V, AA Size or equivalent	Nos.	4			
306	Thinner	Nil	Nos.	2			
307	WD 40	Nil	Nos.	3			
308	Furniture Polish	Nil	Nos.	4			
Sub Total Amount (Rs.) inclusive of All Taxes)							
Power Transmission Lab							
309	Transparent Silicon Rod	Transparent Monocrystalline Silicon Quartz Rod	Nos.	20			
310	CMOS Cell	No. 2032 or equivalent	Nos.	20			
311	Glass Fuse	5 x 20mm , 10A	Nos.	100			
312	Glass Fuse	5 x 20mm , 4A	Nos.	100			
313	Glass Fuse	5 x 20mm , 630mA	Nos.	100			
314	Cable Tie 12"	12" (100 Nos. containing in one Pack)	Pkt.	3			

315	Soldering Wire	60/40 0.8mm 100G Tin Lead Rosin Core Solder Flux Soldering Wire or equivalent	Nos.	2			
316	DC Battery	9V 6F22, Non- Rechargeable, Heavy Duty. Or equivalent	Nos.	10			
317	Cell	1.5 V, AA Size or equivalent	Nos.	4			
Sub Total Amount (Rs.) inclusive of All Taxes)							
Digital Logic Designs (DLD) lab							
318	IC 7400	NAND Gate	No's	50			
319	IC 7402	NOR Gate	No's	50			
320	IC 7404	NOT Gate	No's	50			
321	IC 7408	AND Gate	No's	50			
322	IC 7432	OR Gate	No's	50			
323	IC 7447	BCD to 7seg Decoder	No's	20			
324	IC 7476	JK-Flip Flop	No's	30			
325	IC 7483	4-Bit Binary Full Adder	No's	30			
326	IC 7485	4-Bit Comparator	No's	40			
327	IC 7486	XOR Gate	No's	50			
328	IC 7495	Shift Register	No's	30			
329	IC 74139	De MUX	No's	20			
330	IC 74147	10 to 4Line priority Encoder	No's	30			

331	IC 74148	8 to3-LINE PRIORITY ENCODERS	No's	30			
332	IC 74153	4:1 MUX	No's	30			
333	IC 74157	2 to 1-Line Data Selector	No's	30			
334	IC 7474	D-Flip Flop	No's	30			
335	Fuse	One Amp	No's	2			
Sub Total Amount (Rs.) inclusive of All Taxes)							
Computer Lab							
336	Network Connector	RJ 45 Connector	No's	50			
337	Cable Tie	6 Inch (100 nos. containing in One Pack)	Pkt.	2			
338	Paint Brush	2 Inch	No.	1			
Sub Total Amount (Rs.) inclusive of All Taxes)							
Circuit Analysis lab							
339	Resistor	1 Ω (1W)	No's	1,000			
340	Resistor	4.7 Ω (1W)	No's	1,000			
341	Resistor	10 Ω (1W)	No's	1,000			
342	Resistor	22 Ω (1W)	No's	1,000			
343	Resistor	47 Ω (1W)	No's	1,000			
344	Resistor	82 Ω (1W)	No's	1,000			
345	Resistor	100 Ω (1W)	No's	1,000			

346	Resistor	180Ω (1W)	No's	1,000			
347	Resistor	220Ω (1W)	No's	1,000			
348	Resistor	330Ω (1W)	No's	1,000			
349	Resistor	470Ω (1W)	No's	1,000			
350	Resistor	560Ω (1W)	No's	2,000			
351	Resistor	680Ω (1W)	No's	1,000			
352	Resistor	820Ω (1W)	No's	1,000			
353	Resistor	1KΩ (1/4W)	No's	2,000			
354	Resistor	1.2KΩ (1/4W)	No's	2,000			
355	Resistor	1.5KΩ (1/4W)	No's	3,000			
356	Resistor	1.8KΩ (1/4W)	No's	2,000			
357	Resistor	2.2KΩ (1/4W)	No's	2,000			
358	Resistor	2.7KΩ (1/4W)	No's	2,000			
359	Resistor	3.3KΩ (1/4W)	No's	2,000			
360	Resistor	4.7KΩ (1/4W)	No's	1,500			
361	Resistor	5.6KΩ (1/4W)	No's	1,000			
362	Resistor	8.2KΩ (1/4W)	No's	1,000			
363	Resistor	47KΩ (1/4W)	No's	1,000			
364	Resistor	56KΩ (1/4W)	No's	1,500			
365	Resistor	68KΩ (1/4W)	No's	1,000			

366	Resistor	82KΩ (1/4W)	No's	1,500			
367	Resistor	220KΩ (1/4W)	No's	1,000			
368	Resistor	470KΩ (1/4W)	No's	1,000			
369	Electrolytic Capacitor	1UF (16V)	No's	500			
370	Electrolytic Capacitor	10UF (16V)	No's	500			
371	Electrolytic Capacitor	22UF (16V)	No's	500			
372	Electrolytic Capacitor	100UF (16V)	No's	500			
373	1mH Inductor	ceramic	No's	300			
374	2mH Inductor	ceramic	No's	300			
375	5mH Inductor	ceramic	No's	300			
376	10mH Inductor	ceramic	No's	300			
377	50mH Inductor	ceramic	No's	300			
378	DC Battery	9V	No's	40			
379	Multi Meter Probes	-	No's	10			
380	Jumper wire in Kg	-	No's	4			
381	voltage regulator 7905	-	No's	30			
382	voltage regulator 7805	-	No's	30			
383	voltage regulator 7812	-	No's	30			

384	Resistor	5.6K Ω (1/4W)	No's	1,000			
385	Resistor	8.2K Ω (1/4W)	No's	1,000			
386	voltage regulator 7912	-	No's	30			
387	voltage regulator LM337	-	No's	30			
388	voltage regulator LM337	-	No's	30			
389	Opam	TL071CP or equivalent	No's	30			
390	Signal & Clock generator	XR2206CP or equivalent	No's	10			
391	Round Hader pins	-	No's	30			
Sub Total Amount (Rs.) inclusive of All Taxes)							
VLSI/ Microprocessor Systems and Interfacing (MSI)/ Digital Image Processing (DIP) lab							
392	SIP Resistor	10k Ω (7 pin)	No's	20			
393	LCD	16x2 character display LCD	No's	10			
394	DC socket	12V	No's	10			
Sub Total Amount (Rs.) inclusive of All Taxes)							
RTES/ Digital Systems Design (DSD) / Computer Architecture (CA) lab							
395	Resistor	330 ohm	No's	400			

396	Jumper Wires	40 Pin – 20 cm pin to hole Jumper wires	No's	50			
397	RGB LED	5 mm Red ED	No's	200			
398	Variable Resistor	10 k ohm	No's	200			
399	Bread Board	MB-102	No's	20			
400	IC	MCP 3001	No's	50			
401	LCD	16*2	No's	20			
Sub Total Amount (Rs.) inclusive of All Taxes)							
DCCN Lab							
402	Cable tie 6"	6" (100 Nos. containing in one Pack)	Pack	3			
403	Thiner		No's	1			
404	Crimping Tool		No's	1			
Sub Total Amount (Rs.) inclusive of All Taxes)							
Electric Machines lab							
405	Push Button	LA38 /203/209B Or equivalent	No's	30			
406	Carbon Brush	16mm	No's	50			
407	Batteries	9V	No's	50			

408	Cells	1.5V	No's	50			
409	Resistances	22K /20W	No's	100			
410	Capacitor	470UF/440V	No's	50			
Sub Total Amount (Rs.) inclusive of All Taxes)							

Bid Evaluation Criteria

All bids shall be evaluated in accordance with the following evaluation criteria and other terms & conditions set forth in this bidding document.

- The bids shall be evaluated to strictly ensure that the quoted brand/ model meet all the BoQ/ specification requirements given in the tender document for each item.
- In addition to the BoQ requirements, vendors must meet the vendor qualification criteria /company profile requirements (if any), as set forth in this tender document.
- Supporting literature of the quoted model must be attached for verification & technical evaluation of the required specification by the technical committee. In case of any clash is found between the quoted model and the supported literature may lead to rejection of bid.

Special Terms and conditions:

- i. Please submit bid (rates) on our prescribed BoQs Form and clearly mention the quoted model / brands, with complete terms and conditions signed, stamped with bids, otherwise your bid (s) may be rejected.
- ii. Bidders are required to visit Concerned Lab (As mentioned in BoQs), Department of Electrical & Computer Engineering (B-Block), CUI Lahore Campus to inspect the samples before quoting the rates.
- iii. Purchase / work order (s) will be awarded on **Sub Total Basis (Lab Wise)** as mentioned in BoQs.
- iv. **Multiple rates of an item may also lead to the rejection of bid / item.**