



**UNIVERSITY OF CALCUTTA**  
OFFICE OF THE UNIVERSITY ENGINEER  
87/1 College Street  
Darbhanga Building, GroundFloor  
Kolkata-700073  
Website :-www.caluniv.ac.in

**NOTICE INVITING TENDER**

University of Calcutta invites **sealed** tender from resourceful and bonafide contractors for the following work

1.	N.I.T. No	:	Eng /CT- 495 / 19-20. Dated: 04 / 03 / 2020
2.	Name of Work	:	REPAIRING AND RENOVATION OF GREEN HOUSE AT THE GARDEN OF BOTANY DEPARTMENT" IN BALLYGUNGE SCIENCE COLLEGE, 34, B. C. ROAD, KOLKATA - 19.
3.	Estimated Cost put to Tender	:-	488377.00
4.	Earnest Money	:-	A sum of <b>Rs. 24450/- (Rupees twenty four thousand four hundred and fifty only.)</b> in the form of <b>CTS</b> demand draft in favour of University of Calcutta payable at Kolkata is to be attached with the Tender as earnest money failing which the tender will be treated cancelled. The earnest money will be returned to unsuccessful tenders on application after issuing of work order to the successful bidder. In case of successful tender the EMD will be returned on application after an equal amount of security deposit is ducted by the University from the running bills.
5.	Time of completion	:-	45 days
6.	Eligibility Criteria	:-	Valid trade License , GST & Pan and credential for satisfactory completion of similar nature of job. Amounting 75 % of the estimated value in a single tender in the last three financial year . Government, Government Undertaking and University of Calcutta credentials are accepted.(only completion certificate of the work should be treated as Credential.
7.	Last date of receipt of application for tender	:-	NA
8.	Last date of Sale/ issue of tender papers		TO BE DOWNLOADED FROM WEBSITE.(www. caluniv.ac.in)
9.	Last Date and Time of tender Submission	:-	16/03/2020( up to 2.00 PM)
10.	Date and Time of Tender Opening	:-	16/03/2020 on or after 3.00 PM

N.I.T no ,Name of work and the date of opening should be written on the sealed envelope otherwise tender will not be opened thus cancelled.

The undersigned reserves the right to reject any or all Tenders without assigning any reason what so ever.

UNIVERSITY ENGINEER (C.U)



## UNIVERSITY OF CALCUTTA

**Name of the work:** REPAIRING AND RENOVATION OF GREEN HOUSE AT THE GARDEN OF BOTANY DEPARTMENT" IN  
BALLYGUNGE SCIENCE COLLEGE, 34, B. C. ROAD, KOLKATA - 19.

**N. I.T. NO.** - Eng /CT- 495 / 19-20

**Dated :**04 / 03 /2020

**Estimated cost Put to Tender:-Rs 488377.00**

**Name of Agency:-**

**Address of Agency:-**

**Rate quoted by Agency:-** ..... ( %)  
**Percent Above / At par / Below**

**Signature of the Agency with date & stamp:-**



# UNIVERSITY OF CALCUTTA

**N. I.T. No :-** Eng /CT- 495 / 19-20.      **Dated:** 04 / 03/ 2020

## TENDER AND CONTRACT FOR WORK

### GENERAL TERMS AND DIRECTION FOR THE GUIDANCE OF CONTRACT

1. Eligible Tenders will have to download the tender papers from the website & drop the filled tender papers signed with seal and date at every page along with copy of Valid Trade license's, GST & PAN and Credential for satisfactory completion of similar nature of job amounting to at least seventy five percent of the job value in a single tender from any Government, Govt. undertaking or University of Calcutta in the last three financial year in sealed envelope in the Tender box kept in the Office of the undersigned with in the specified time mentioned in the NIT. which will be opened by the undersigned or by his representative with in **the specified time and date mentioned in the NIT.** **The tendered must write the name of the work , NIT no , the date of opening and name of the bidder on the envelop failing which the tender will not be opened thus will be treated as cancelled.**
2. The rate should be quoted after inspection of the site and inclusive of all incidental charges i.e. freight, insurances, labour insurances, handling charges, necessary government taxes, duties etc as well as the Water, Electricity charges which are to be paid as per rules .
3. The contractor shall be responsible to ensure compliance with the provision of minimum wages act 1948 as modified up to date and the rules made in respect of any employees, employed by the contractor directly or through the petty or subcontractor for the purpose of carrying this contract. The contractor shall be responsible for any damage, injury or loss caused by the work or workmen to any person, animal or material during the progress of work.
4. Liquidated damage will be charged to the contractor if they fail to complete the work within the stipulated time, 0.01% per day to a maximum limit of 05 % of the contract value .



5. The allotted time for completion of the work 45 days from the date of receipt of work order .Time is the essence of this contract. Normally no time extension will be granted. In case of prayer for extension of time the University authority has the full right reserved to grant it or discard it.

6. (a) If the successful contractor's bid rate is 80% or less than the estimated amount put to tender the contractor will have to submit a Bank Guarantee amounting to 10% of the Tendered amount before issue of Work order failing which the EMD will be forfeited and the agency may be blacklisted. The Bank Guarantee should be valid till the end of the contract period and shall be renewed accordingly if required. This bank Guarantee is an Additional Performance Security .So provision of deducting Security deposit from bills will hold goods per relevant clause of the contract. The bank Gurrantee shall be returned immediately on successful completion of contract.

(b) The University authority will retain a sum amounting to 10% of the bill of the contract for a period of six months from the date of completion of work as **Security Deposit**. Which will be released after a period of six months from the date of completion of the work on application.

7. A sum of 5% of the estimated amount **as mentioned in the NIT**.in the form of demand draft in favour of UNIVERSITYOF CALCUTTA payable at Kolkata is to be attached with the tender as earnest money failing which the tender will be treated cancelled. The earnest money will be returned to unsuccessful tenderers on application after issue of work order to the successful bidder. For successful tenderer the EMD will be returned on application after an equal amount of security deposit is deducted from the running bills.

**Amount:-Rs**

**D.D No**..... Dated / /20

**Name of Issuing Bank:--**

**B ranch :-**

8. Work is to be carried out as per specification laid in the B.O.Q or PWD specification as per instruction of the University Engineer or his representative.



9. The materials brought to site for execution of the work should by no means be taken out of site without the permission of the Engineer C.U.
10. The rates must be quoted in words in figure otherwise the tender will be cancelled.
11. The University will not be bound to accept the lowest bidder.
12. The University will not supply any materials to the contractor.
13. The contractor will work under the strict supervision of the Engineer/ Sub-Assistant Engineer. The estimate given along with the tender are provisional payment will be made on the actual work done jointly measured by the Engineer or his representative ( Sub-Assistant Engineer)& the contractor or his representative. The contractor will have to submit bill in printed format in duplicate .
14. The contractor will have to take necessary instruction from the Engineer CU/ Sub-Assistant Engineer regarding the execution of work.
15. Defect & liability Period :-The defect & liability period will be for a period of six months from the date of completion of the job. Any defects pointed out during this period has to be mend good by the agency at their own cost failing which the retention money will be forfeited.

Sd/-

University Engineer

Name of the Agency:

Address :-

**SIGNATURE OF THE AGENCY WITH SEAL AND DATE**

**PRICE SCHEDULE FOR THE WORK " REPAIRING AND RENOVATION OF GREEN HOUSE AT THE GARDEN OF BOTANY DEPARTMENT" IN BALLYGUNGE SCIENCE COLLEGE, 34, B. C. ROAD, KOLKATA - 19.**

Sl.no.	Description of work	Unit	Rate	Quantity	Amount
1	Stripping off worn out plaster and raking out joints of walls, ceiling etc. upto any height and in any floor including removing rubish and staking any where within the compound as directed.	Sqm	19	45	855
2	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints or rougening of concrete surface, including throating, nosing and drip course where necessary (ground floor) /with 6:1 cement mortar / 20 mm thick.	Sqm	167	45	7515
3	Rendering the surface of walls and ceiling with wall putty of approved make and brand.. (thickness not less than 1.5 mm.)	Sqm	122	25	3050
4	Supplying, fitting and fixing 1st quality ceramic tiles of any size in walls & floors including borders to match with the existing work, set in sand cement mortar (4:1) including backing concrete (1:2:4) & 4 nos. of key stones (10mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide (if requested) to match the, colour of tiles including roughening of concrete surface./ with sand cement mortar(1:4) 20 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91kg/sqm and joint filling using white cement slurry @0.20 kg/sqm.wall/ area of each tile above 0.09 sqm./ other than colour decorative including white.	Sqm	858	80	68640
5	Applying exterior grade acrylic grade primer of approved quality and brand on plaster or concrete surface to receive decorative texture( matt finish) or smooth finish acrylic exterior paint including scraping and preparing the surface thoroughly complete as per manufacturer specification. gr. floor./ two coats	Sqm	45.1	45	2029.5
6	Protective and decorative acrylic exterior emulsion paint of approved quality as per manufacturer specification as per direction of EIC.over acrylic primer as required/ premium 100% acrylic emulsion two coats	Sqm	84	45	3780
7	Priming one coat on steel or other metal surface with synthetic oil bound primer of approved quality including smoothening surfaces by sand papering etc.	Sq.M	29	55	1595
8	Painting with best quality synthetic enamel paint of approved make and brandincluding smoothening surface by sand papering etc. including using of approved putty on timberor plaster surface.. Two coats/ over door & window	Sq.M	81	55	4455
9	Supplying, fitting and fixing PVC pipes of approved make of schedule 80 conforming to ASTM D -1785 and thread to match with GI pipes as per IS : 1239 (part - I ) with all necessary accessories.. Complete in all respect includingcost of all necessary fittings.				0
	a. 25 mm dia.	metre	177	30	5310
	b. 15 mm dia.	metre	101	50	5050
10	Supplying, fitting & fixing of Peet's valve fully gun metal standard pattern best quality of approved brand bearing ISI mark with fittings./ 25 mm dia.	each	912	4	3648

11	Suplying, fitting and fixing of C.P bib cock/ stop cock of approved make and brand.	each	861	6	5166
12	Arrangement for facility of evaporate cooling system made of cellure cooling padswith sprinlers for irrigation, pump for cooling systems.etc. complete for green house including supply and fixing of pvc tank with all fittings.	One item		L.S.	135000
13	Supplying, fitting and fixing polycarbonate sheet of approved make and brand conforming to IS 14443-1997 and having 50 micron UV protection layer under co-extrusion technology , fire rating being B-sl as per ENIn3501-1 certificatoin , fitted and fixed with 60 mm wide aluminium cahhel section top and bottom member in dry glaze sandwitch system ..... washer complete srrictly as per Manufactureers specification and direction of EIC./ with 2wall 8 mm overall thickness	sqm	1326	140	185640
				<b>Total</b>	<b>431733.5</b>
				Add GST @ 12%	51808.02
					483541.5
				Add Lab. Welfare cess @ 1%	4835.415
				<b>Total</b>	<b>488376.9</b>

**Name and address of the Agency:**

**Amount /Rate Quoted by the Agency**

**Signature of the Agency with Date& seal.**



UNIVERSITY OF CALCUTTA

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Darbhanga Building  
87/1 College Street  
Kolkata- 700073

NOTICE INVITING TENDER

University of Calcutta invites sealed tender from resourceful and bonafide contractors for the following work

1.	N.I.T. No	:	Eng/ET- 496/19-20	Dated: 04 / 03 /2020
2.	Name of Work	:	Strengthening of incoming & outgoing cable of a part of Botany ,Eastern wing, incl new distribution system, to sustain the enhanced load of laboratories & common instrument room,new wiring for common instrument room etc...	
3.	Estimated Cost put to Tender	:-	Rs252381/- ( Two lacs fifty two thousand three hundred & eighty one only)incl.taxes	
4.	Earnest Money	:-	A sum of Rs12700/- ( <b>Rupees Twelve Thousand seven hundred Only</b> ) in the form of CTS demand draft in favour of University of Calcutta payable at Kolkata is to be attached with the Tender as earnest money failing which the tender will be treated cancelled. The earnest money will be returned to unsuccessful tenders on application after issuing of work order to the successful bidder. In case of successful tender the EMD will be returned on application after an equal amount of security deposit is deducted by the University from the running bills/final bill as per norms.	
5.	Time of completion	:-	25days	
6.	Eligibility Criteria	:-	Valid trade License , GST & Pan and credential for satisfactory completion of similar nature of job. Amounting 75 % of the estimated value in a single tender in the last three financial year . Government, Government Undertaking and University of Calcutta credentials are accepted. (Only completion certificate of the work should be treated as Credential.	
7.	Issue of tender papers	:-	TO BE DOWNLOADED FROM WEBSITE (www.caluniv.ac.in).	
8.	Last Date and Time of tender submission	:-	<b>16 / 03 /20( up to 2.00 PM)</b>	
9.	Date and Time of tender opening	:-	<b>On 16 / 03 /20 (at 3.00 PM) or after</b>	

N.I.T no. Name of work and the date of opening should be written on the sealed envelope otherwise tender will not be opened thus cancelled.

UNIVERSITY ENGINEER (C.U)





# UNIVERSITY OF CALCUTTA

NOTICE INVITING TENDER No: Eng/ET- 496/19-20

Dated: 04 / 03 /2020

Name of the work: - Strengthening of incoming & outgoing cable of a part of Botany ,Eastern wing, incl new distribution system, to sustain the enhanced load of laboratories & common instrument room,new wiring for common instrument room etc.

Name of Agency:-

Address of Agency:-

Rate quoted by Agency: - ..... ( %)  
Percent Above / At par / Below

Signature of the Agency with date & stamp:-



# UNIVERSITY OF CALCUTTA

Tender No: - Eng/ET- 496/19-20

Dated: 04 / 03 /2020

## TENDER AND CONTRACT FOR WORK

### GENERAL TERMS AND DIRECTION FOR THE GUIDANCE OF CONTRACT

1. Eligible Tenders will have to download the tender papers from the website & drop the filled tender papers signed with seal and date at every page along with copy of Valid Trade license's, GST & PAN and Credential for satisfactory completion of similar nature of job amounting to at least seventy five percent of the job value in a single tender from any Government, Govt. undertaking or University of Calcutta in the last three financial year(only completion certificate of the work should be treated as Credential) in sealed envelope in the Tender box kept in the Office of the undersigned. The tendered must write the name of the work, NIT no, the date of opening and name of the bidder on the envelop failing which the tender will not be opened thus will be treated as cancelled.
2. The rate should be quoted after inspection of the site and inclusive of all incidental charges i.e. freight, insurances, labour insurances, handling charges, necessary government taxes, duties etc. as well as the Water, Electricity charges which are to be paid as per rules.
3. The contractor shall be responsible to ensure compliance with the provision of minimum wages act 1948 as modified up to date and the rules made in respect of any employees, employed by the contractor directly or through the petty or subcontractor for the purpose of carrying this contract. The contractor shall be responsible for any damage, injury or loss caused by the work or workmen to any person, animal or material during the progress of work.
4. Liquidated damage will be charged to the contractor if they fail to complete the work within the stipulated time, 0.01% per day to a maximum limit of 05 % of the contract value.
5. The allotted time for completion of the work is 45days from the date of receipt of work order. Time is the essence of this contract. Normally no time extension will be granted. In case of prayer for extension of time the University authority has the full right reserved to grant it or discard it.
6. (a) If the successful contractor's bid rate is 80% or less than the estimated amount put to tender the contractor will have to submit a Bank Guarantee amounting to 10% of the Tendered amount before issue of Work order failing which the EMD will be forfeited and the agency may be blacklisted. The Bank Guarantee should be valid till the end of the contract period and shall be renewed accordingly if required. This bank Guarantee is an Additional Performance Security .So provision of deducting Security deposit from bills will hold goods per relevant clause of the contract. The bank Guarantee shall be returned immediately on successful completion of contract.



(b) The University authority will retain a sum amounting to 10% of the bill of the contract for a period of six months from the date of completion of work as Security Deposit. This will be released after a period of six months from the date of completion of the work on application.

7. A sum of 5% of the estimated amount put to tender (as mentioned earlier) in the form of demand draft in favour of UNIVERSITY OF CALCUTTA payable at Kolkata is to be attached with the tender as earnest money failing which the tender will be treated cancelled. The earnest money will be returned to unsuccessful tenderers on application & after issue of work order to the successful bidder. For successful tenderer the EMD will be returned on application after an equal amount of security deposit is deducted from the running bills.

D.D No..... Dated / /20

Name of Issuing Bank:--

Branch :-

Amount: - Rs ..... /-(Rupees .....)

8. Work is to be carried out as per specification laid in the B.O.Q or PWD specification as per instruction of the University Engineer or his representative.

9. The materials brought to site for execution of the work should by no means be taken out of site without the permission of the Engineer C.U.

10. The rates must be quoted in words in figure otherwise the tender will be cancelled.

11. The University will not be bound to accept the lowest bidder.

12. The University will not supply any materials to the contractor.

13. The contractor will work under the strict supervision of the Engineer. The estimate given along with the tender are provisional, payment will be made on the actual work done jointly measured by the consultant & the contractor. The contractor will have to submit bill in printed format in duplicate.

14. The contractor will have to take necessary instruction from the Engineer, CU / his representative regarding the execution of work.

15. The contractor has to produce user end completion certificate before claiming of final bill.

16. The eligible Contractor who does not have ESI for their workers will have to possess workmen's compensation policy for their workers before starting the job.



17. Guarantee/Warranty period of the work will be 6(Six) months from the date of completion of the work.

Sd/-

University Engineer

Name of the Agency:-

Address:-

Signature of the contactor with seal & date:

B.O.QFOR STRENGTHENING OF INCOMING & OUTGOING CABLE OF A PART OF BOTANY, EASTERN WING,  
INCL NEW DISTRIBUTION SYSTEM,TO SUSTAIN THE ENHANCED LOAD OF THE LABORATORIES AND COMMON  
INSTRUMENT ROOM ,NEW WIRING FOR COMMON INSTRUMENT ROOM ETC.

Sl.No.	Description of work	Unit	Rate	Quantity	Amount	pwd 17
1	Supplying of PVC <b>Arm.cable with Al. conductors of 1.1 KV grade</b> conforms to I.S:1554 (part-1) for following cross -section					
	A)1x70 sq.mm 3.5 core Make: Mescab/Havells/Polycab	RM	422	22	9284	p/list18
	B)1x 35sq.mm 3.5 core (do)	RM	239	77	18403	do
	C)1x16 sq.mm 2 core (do)	RM	126	75	9450	do
2	Laying of cable as below, on existing Cable Tray and binding with suitable size GI wire.					
	A)1x70 sq.mm 3.5 core (do)	RM	15	22	330	F3/6
	B)1x 35sq.mm 3.5 core (do)	RM	11	77	847	do
	C)1x16 sq.mm 2 core (do)	RM	11	75	825	do
3	S&F compression type gland complete with brass gland rubber rings for dust & moisture proof entry					
	A)1x70 sq.mm 3.5 core (do)	Each	212	2	424	F4/7
	B)1x 35sq.mm 3.5 core (do)	Each	162	6	972	do
	C)1x16 sq.mm 2 core (do)	Each	115	6	690	do
4	Finishing the end of following cables by crimping method incl S&F dowels etc.					
	A)1x70 sq.mm 3.5 core (do)	Set	263	2	526	F5/8b
	B)1x 35sq.mm 3.5 core (do)	Set	158	6	948	do
	C)1x16 sq.mm 2 core (do)	Set	58	6	348	do
5	Distribution board for MCCB incomer with IP-42/43 protection, on angle iron frame on wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment					
6	Enclosure(607914)Legrand upto 160A 8Way Supplying and fixing 415 V Four Pole MCCB of Breaking capacity 25kA/35kA with fixed thermal and fixed magnetic / adjustable thermal and fixed magnetic setting in existing DBs / enclosure and necessary connection	Each	10683	1	10683	D11/15
	Legrand 160A FP	Each	9759	1	9759	D8/10
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection					
	Legrand 63A TP	Each	1432	8	11456	D6/7
8	Supplying and fixing double-door SPN MCB Distribution Board with IP-42/43 protection, concealed in wall after					

	cutting the wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment.					
	Legrand(Encl.607712) 2+12way (PWD2014/D9/13)	Each	1757	3	5271	D9/13
9	Supplying and fixing double door Horizontal TPN MCB Distribution board with IP-42/43 protection, concealed in wall after cutting the wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment					
	Legrand(encl.607717) 8way	Each	4194	2	8388	D10/14
10	Supplying and fixing 240/415 V MCB Isolator on din rail of existing DBs and necessary connection.					
	63A DP Legrand (PWD2014/D5/6)	Each	460	3	1380	D5/6
	100A FP Legrand (DO)	Each	927	3	2781	do
11	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection	Each	190	60	11400	D6/7
12	Supplying and fixing 415V, TPN SFU with sheet steel enclosure on flat iron/angle iron frame on wall with nuts bolts etc incl. S & F 3 nos. DIN type HRC fuse as per rating.(L&T/Siemens)					
	160A	Each	7908	2	15816	D3/4a
13	Supplying and fixing sheet steel (16SWG) cable end box on TPN SFU enclosure with nuts bolts etc incl. powder coated painting.					
	160A	Each	567	4	2268	D5/5
14	<b><u>INTER CONNECTION BETWEEN MAIN L.T BUSBAR TO FSU INCOMING</u></b> Inter-connection between Bus-bar to TPNFSU by <b>Havell's single core copper conductor (flexible) of following cross-section incl.</b> S&F proper copper socketing and crimping & flexible pipe. a)50 sq.mm	RM	500	10	5000	P/list11
15	Supply & Fixing of perforated GI cable tray with perforation more than 17.5% suspended from ceiling with two nos. suspend & 25x25x3mm angle iron for supporting the cross member incl. GI connector, 6mm dia MS suspender, bolts & nuts, steel fastener etc. as required of the following size. Incl. AI painting of MS support 300x50x1.25mm (18SWG)	each	367	10	3670	D14/34 a sch17
16	Distribution wiring in 2 x 22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in 20mm size PVC rigid conduit 'FR' (Precision make), with 1x22/0.3 (1.5 sqmm) single core					

	stranded 'FR' PVC insulated & unsheathed copper wire for ECC, to light/fan/call bell points with Piano Key type switch fixed on MS CRC sheet metal (16 SWG) switch board cum JB on wall complete with 2 no. suitable size "Ph & N" copper bar incl. bakelite/Perspex (wall matching color) top cover 3 mm thick and incl. 175mmx100mmx65mm inspection box, making earthing attachment, painting the MS box and mending good the damages to original finish(Ave run 6mtr)	Each	612	21	12852	E24/E2
17	Supply & Fixing 240 V, 3 nos. 6A, & 1 no. 20A plug socket with separate 3 nos. 6 A & 1 no. 20A Piano key type switch, indicator & 20A switch type SP MCB (Brand approved by EIC) on sheet metal switch board embedded in wall incl. S & F 240x200x65mm MS (16SWG) switch board and bakelite/perspex top cover of 3mm thick by Brass screws after making housing for switch by cutting bakelite/perspex cover and making necessary connections as required.	Each	752	6	4512	E7/26
18	Supply & Fixing 240 V, 20A, plug socket with separate 20 A Piano key type switch (Brand approved by EIC) on sheet metal switch board <b>embedded in wall incl. S &amp; F 150x100x65 MS (16SWG) switch board and bachelite top cover of 3mm thick</b> and making necessary connections as required	Each	287	6	1722	E6/21
19	PVC insulated & unsheathed copper wire (Brand approved by EIC) in 20mm size PVC rigid conduit 'FR (Precision make) incl. necy. fittings as required					
	2 x 22/0.3 (1.5 sqmm) + 1 x 22/0.3 (1.5 sqmm) (DB to SB1,SB2 )	RM	102	63	6426	E14/1a
	2 x 36/0.3 (2.5 sqmm) + 1 x 22/0.3 (1.5 sqmm) ECC (DB to PP1 &PP2)	RM	119	48	5712	E14/E1/ii
	2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC ( DB to CP1,2,3,4)	RM	149	113	16837	E14/E1/iii
	2 x 84/0.3 (6 sqmm) + 1 x 56/0.3 (4 sqmm) ECC (DB to Stbl o/p)	RM	193	57	11001	E14/E1/iv
20	Supply & Fixing 240 V, 25A Modular type socket, 25 A, Modular type starter (Brand approved by EIC) with 25A Modular switch type DP MCB (C-Curve) and 6 Module GI Modular type switch board with 6 Module top cover plate flushed in wall incl. S&F switch board and cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	Each	1047	4	4188	E19/18
21	Fixing only single/twin fluorescent light fitting suspended 25 cm bellow the ceiling with 2 No. 20 mm dia EI conduit (14 SWG) supports fixed with "L" type MS clamp whose one side fixed on ceiling with suitable size 4 nos. fastener and other side connected with the conduit with suitable size of bolts and nuts incl. S&F EI conduit, "L" type (125mmx125mm) 6mm thick and 25mm with MS					C2/17 do

	clamps and connecting the length of PVC insulated wire and mending good damages to original finish and painting etc. by 2x24/0.20 mm (1.5sqmm.) flexible copper wire of 1.10 mt. length.	Each	199	4	796	Pwd17/27
22	TMC 501 P 2x LED Mounting rails for TLED Lamp	Each	600	10	6000	Philips P/
23	20Watt LED tube light. ( Lab & instt.room)	Each	400	20	8000	P/list17
24	Refixing of corridor luminaires after made necy.repairing incl.S&F ballast,starter,lock holder as on where necy basis with new ordinary tube light of 36W	Each	450	22	9900	
25	Supply & Fixing Socket type fan regulator (Step type) (Brand approved by EIC) on existing sheet metal switch board with bakelite/perspex top cover by screw after making housing for regulator knob by cutting bakelite/perspex top cover incl. making necy. connections etc	Each	236	4	944	E6/18A
26	Earth Continuity Conductor : Connecting the equipments to earth busbar including S & F GI (Hot Dip) wire of size as below on wall/floor with staples buried inside wall/floor as required and making connection to equipments with bolts, nuts, washers, cable lugs etc. as required and mending good damages No. 10 SWG	RM	6	90	540	G2/5/17
27	Connecting the equipments body to earth busbar including S&F 20 mm x 3 mm galvanised (Hot Dip) MS flat on wall/floor with GI saddles as required and connection to equipments incl. drilling holes, with bolts, nuts, washers etc.	RM	92	30	2760	G3/c/17
	<b>(A) TOTAL BASIC COST :</b>				223109	
	<b>(B)G.S.T @12% ON TOTAL TENTATIVE BASIC COST(A)(Subject to verification of accounts dept)</b>				26773	
	<b>TOTAL BASIC COST +GST(A+B)</b>				249882	
	<b>(C) ADD 1% L.W CESS ON C</b>				2499	
	<b>TOTAL COST :(A+B+C)=Rs(223109+26773+2499)= RS</b>				252381	
	<b>(Rs.TWO LAC FIFTY TWO THOUSAND THREE HUNDRED &amp;EIGHTY ONE ONLY)</b>					

**Name of contractor:**

Address of contractor:

Rate quoted by the contractor:

Signature of the contractor:





**UNIVERSITY OF CALCUTTA**  
OFFICE OF THE UNIVERSITY ENGINEER  
87/1 College Street  
Darbhanga Building, GroundFloor  
Kolkata-700073  
Website :-www.caluniv.ac.in

**NOTICE INVITING TENDER**

University of Calcutta invites **sealed** tender from resourceful and bonafide contractors for the following work

1.	<b>N.I.T. No</b>	:	<b>Eng /ET- 497/19-20.</b>	<b>Dated 04 / 03 / 2020</b>
2.	<b>Name of Work</b>	:	E.I Works for the renovation of high tech green house facility,Department of Botany,Ballygunge science college,University of Calcutta	
3.	<b>Estimated Cost put to Tender</b>	:-	<b>345472/=( Three lacs fortyfive thousand four hundred seventy two only)</b>	
4.	<b>Earnest Money</b>	:-	A sum of <b>Rs17500/-(Rupees Seventeen thousand five hundred only)</b> . in the form of <b>CTS</b> demand draft in favour of University of Calcutta payable at Kolkata is to be attached with the Tender as earnest money failing which the tender will be treated cancelled. The earnest money will be returned to unsuccessful tenders on application after issuing of work order to the successful bidder. In case of sucessful tender the EMD will be returned on application after an equal amount of security deposit is ducted by the University from the running bills.	
5.	<b>Time of completion</b>	:-	60 days	
6.	<b>Eligibility Criteria</b>	:-	<b>Valid trade License , GST &amp; Pan and credential for satisfactory completion of similar nature of job. Amounting 75 % of the estimated value in a single tender in the last three financial year . Government, Government Undertaking and any state run University credentials are accepted.(only completion certificate of the work should be treated as Credential.</b>	
7.	<b>Last date of receipt of application for tender</b>	:-	NA	
8.	<b>Last date of Sale/ issue of tender papers</b>		TO BE DOWNLOADED FROM WEBSITE.(www. caluniv.ac.in)	
9.	<b>Last Date and Time of tender Submission</b>	:-	16 / 03 /20(up to 2pm)	
10.	<b>Date and Time of Tender Opening</b>	:-	After 3:00 PM 16 / 03 /2020	

**N.I.T no ,Name of work and the date of opening should be written on the sealed envelope otherwise tender will not be opened thus cancelled.**

**The undersigned reserves the right to reject any or all Tenders without assigning any reason what so ever**

UNIVERSITY ENGINEER (C.U)



# UNIVERSITY OF CALCUTTA

**Name of the work:** E.I Works for the renovation of high tech green house facility, Department of Botany, Ballygunge science college, University of Calcutta

**N. I.T. no-** Eng /ET- 497/19-20.

**Dated** 04 / 03 / 2020

**Estimated cost Put to Tender:** 345472/=( Three lacs fortyfive thousand four hundred seventy two only)

**Name of Agency:-**

**Address of Agency:-**

**Rate quoted by Agency:-** ..... ( %)  
**Percent Above / At par / Below**

**Signature of the Agency with date & stamp:-**



# UNIVERSITY OF CALCUTTA

N. I.T. NO- Eng /ET- 497/19-20. Dated 04 / 03 / 2020

## TENDER AND CONTRACT FOR WORK

### GENERAL TERMS AND DIRECTION FOR THE GUIDANCE OF CONTRACT

1. Eligible Tenders will have to download the tender papers from the website & drop the filled tender papers signed with seal and date at every page along with copy of Valid Trade license's, GST & PAN and Credential for satisfactory completion of similar nature of job amounting to at least seventy five percent of the job value in a single tender from any Government, Govt. undertaking or University of Calcutta in the last three financial year in sealed envelope in the Tender box kept in the Office of the undersigned with in the specified time mentioned in the NIT. which will be opened by the undersigned or by his representative with in **the specified time and date mentioned in the NIT.** **The tendered must write the name of the work , NIT no , the date of opening and name of the bidder on the envelop failing which the tender will not be opened thus will be treated as cancelled.**
2. The rate should be quoted after inspection of the site and inclusive of all incidental charges i.e. freight, insurances, labour insurances, handling charges, necessary government taxes, duties etc as well as the Water, Electricity charges which are to be paid as per rules .
3. The contractor shall be responsible to ensure compliance with the provision of minimum wages act 1948 as modified up to date and the rules made in respect of any employees, employed by the contractor directly or through the petty or subcontractor for the purpose of carrying this contract. The contractor shall be responsible for any damage, injury or loss caused by the work or workmen to any person, animal or material during the progress of work.
4. Liquidated damage will be charged to the contractor if they fail to complete the work within the stipulated time, 0.01% per day to a maximum limit of 05 % of the contract value .



5. The allotted time for completion of the work 45 days from the date of receipt of work order. Time is the essence of this contract. Normally no time extension will be granted. In case of prayer for extension of time the University authority has the full right reserved to grant it or discard it.

6. (a) If the successful contractor's bid rate is 80% or less than the estimated amount put to tender the contractor will have to submit a Bank Guarantee amounting to 10% of the Tendered amount before issue of Work order failing which the EMD will be forfeited and the agency may be blacklisted. The Bank Guarantee should be valid till the end of the contract period and shall be renewed accordingly if required. This bank Guarantee is an Additional Performance Security. So provision of deducting Security deposit from bills will hold goods per relevant clause of the contract. The bank Gurrantee shall be returned immediately on successful completion of contract.

(b) The University authority will retain a sum amounting to 10% of the bill of the contract for a period of six months from the date of completion of work as **Security Deposit**. Which will be released after a period of six months from the date of completion of the work on application.

7. A sum of 5% of the estimated amount i.e. value **as mentioned in the NIT** in the form of demand draft in favour of UNIVERSITY OF CALCUTTA payable at Kolkata is to be attached with the tender as earnest money failing which the tender will be treated cancelled. The earnest money will be returned to unsuccessful tenderers on application after issue of work order to the successful bidder. For successful tenderer the EMD will be returned on application after an equal amount of security deposit is deducted from the running bills.

**Amount:-Rs**

**D.D No.**..... Dated / /20

**Name of Issuing Bank:--**

**B ranch :-**

8. Work is to be carried out as per specification laid in the B.O.Q or PWD specification as per instruction of the University Engineer or his representative.



**9.**The materials brought to site for execution of the work should by no means be taken out of site without the permission of the Engineer C.U.

**10.** The rates must be quoted in words in figure other wise the tender will be cancelled.

**11.** The University will not be bound to accept the lowest bidder.

**12.**The University will not supply any materials to the contractor.

**13.** The contractor will work under the strict supervision of the Engineer/ Sub-Assistant Engineer. The estimate given along with the tender are provisional payment will be made on the actual work done jointly measured by the Engineer or his representative( Sub-Assistant Engineer)& the contractor or his representative. The contractor will have to submit bill in printed format in duplicate .

**14.** The contractor will have to take necessary instruction from the Engineer CU/ Sub-Assistant Engineer regarding the execution of work.

**15.**Defect & liability Period :-The defect & liability period will be for a period of six months from the date of completion of the job. Any defects pointed out during this period has to be mend good by the agency at their own cost failing which the retention money will be forfeited.

Sd/-

University Engineer

Name of the Agency:

Address :-

**SIGNATURE OF THE CONTRACTOR WITH SEAL AND DATE**

**BOQ FOR E.I WORKS FOR RENOVATION OF HIGH TECH GREEN HOUSE FACILITY,OF DEPARTMENT OF BOTANY,BALLYGUNGE SCIENCE COLLEGE,UNIVERSITY OF CALCUTTA**

Sl.No.	Description of work	Unit	Rate	Quantity	Amount	PWD
1	Distribution wiring in 1.1 KV grade 2x22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed copper wire (Brand approved by EIC) in suitable size PVC casing-capping (Precision make) with 1x22/0.3 (1.5 sqmm) single core stranded 'FR' PVC insulated & unsheathed copper wire for ECC, incl. necy. PVC clips, fittings etc. to light/fan/call bell point with piano key type switch (Anchor make) fixed on sheet steel fabricated switch board with Perspex/bakelite top cover on wall incl. necy. connections and making earthing attachment and mending good damages to building works. [PVC casing-capping and Switch board both on surface Average run 6 mtr	Each	650	32	20800	E11/2 sch17
2	Supply & Fixing 240 V, 3 nos. 6A, & 1 no. 20A plug socket with separate 3 nos. 6 A & 1 no. 20A Piano key type switch, indicator & 20A switch type SP MCB (Brand approved by EIC) on sheet metal switch board embedded in wall incl. S & F 240x200x65mm MS (16SWG) switch board and bakelite/perspex top cover of 3mm thick by Brass screws after making housing for switch by cutting bakelite/perspex cover and making necessary connections as required .	Each	752	10	7520	E7/26
3	Supply & Fixing 240 V, 20A, plug socket with separate 20 A Piano key type switch (Brand approved by EIC) on sheet metal switch board embedded in wall incl. S & F 150x100x65mm MS (16SWG) switch board and bakelite/perspex top cover of 3mm thick by Brass screws after making housing for switch by cutting bakelite/perspex cover and making necessary connections as required	Each	287	5	1435	E6/22
4	Distribution wiring in 1.1 KV single core stranded FR PVC insulated & unsheathed copper wire (Brand approved by EIC) in 20mm size PVC rigid conduit 'FR (Precision make) incl. necy. fittings as required(PWD17/E14/E1)					
i	2x22/0.3(1.5sq.mm)+1x22/0.3(1.5sq.mm)ECC	RM	102	33	3366	E14/E1]
ii	2 x 36/0.3 (2.5 sqmm) + 1 x 22/0.3 (1.5 sqmm) ECC	RM	119	59	7021	E14/E1/ii]
iii	2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	RM	149	107	15943	E14/E1/iii
iv	2 x 84/0.3 (6 sqmm) + 1 x 56/0.3 (4 sqmm) ECC	RM	193	63	12159	E14/E1/iv
5	Supplying and fixing double door Horizontal TPN MCB Distribution board with IP-42/43 protection, concealed in wall after cutting the wall & mending good the damages to original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachme Legrand (8way Encl.607717)	Each	4194	1	4194	D10/14]
6	Supplying and fixing double-door SPN MCB Distribution Board with IP-42/43 protection, concealed in wall after cutting the wall & mending good the damages to					

	original finish incl. Inter connection with suitable size of copper wire and neutral link & provision for earthing attachment					
	(2+12) Way Legrand(Encl607712)	Each	1757	1	1757	D9/13
7	Supplying of PVC <b>Arm.cable with Al. conductors of 1.1 KV grade</b> conforms to I.S:1554 (part-1) for following cross -section					
a)	1x 35sq.mm 3.5 core	RM	412	45	18540	Havells P/
b)	1x16 sq.mm 2 core	RM	215	41	8815	list 2014
8	Laying of cable as below, on existing Cable Tray and binding with suitable size GI wire.					
a)	1x 35sq.mm 3.5 core	RM	11	45	495	/F3/6
b)	1x16 sq.mm 2 core	RM	11	41	451	Do
9	S&F compression type gland complete with brass gland rubber rings for dust & moisture proof entry					
a)	1x 35sq.mm 3.5 core	Each	162	4	648	F4/7]
b)	1x16 sq.mm 2 core	Each	115	2	230	Do
10	Finishing the end of following cables by crimping method incl S&F dowels etc.					
a)	1x 35sq.mm 3.5 core	Each	158	4	632	F5/8/B/iv
b)	1x16 sq.mm 2 core	Each	58	2	116	& xv
11	Supplying and fixing 240/415 V MCB Isolator on din rail of existing DBs and necessary connection [PWD17/D5/6]					
	DP 63A	Each	460	1	460	D5/6
	FP 100A	Each	927	1	927	Do
12	Supplying and fixing 240/415 V MCB of Breaking capacity 10KA / C characteristics on din rail of existing DBs & necy conn. 6-32A...SP	Each	190	36	6840	D6/7
13	Supply & Fixing of perforated GI cable tray with perforation not more than 17.5% suspended from ceiling incl. S&F GI connector, 6mm dia MS suspender, bolts & nuts, steel fastener etc. as required of the following size. Incl. Al painting of MS support. 300x50x1.25mm (18SWG) (PWD 17/D14/34ii)	Each	367	8	2936	D14/34ii
14	Supply & Fixing 240 V, 25A Modular type socket, 25 A, Modular type starter (Brand approved by EIC) with 25A Modular switch type DP MCB (C-Curve) and 6 Module GI Modular type switch board with 6 Module top cover plate flushed in wall incl. S&F switch board and cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	Each	1047	2	2094	E19/18)
15	Supply & Fixing 240 V, 25A Modular switch type SP MCB© ( approved by EIC) on existing GI Modular type switch board with top cover plate and making necy connections with PVC Cu.wire and earth continuity wire..	Each	159	2	318	/E19/19A
16	Fixing only single/twin fluorescent light fitting suspended 25cm bellow the ceiling with 2 No. 20 mm dia EI conduit (14 SWG) supports fixed with "L" type MS clamp whose one side fixed on ceiling with suitable size 4 nos. fastener and other side connected with the conduit with suitable size of bolts and nuts incl. S&F					

	Elbox type clamp.Connecting the length of Pvc insulated wire mending good damages to original finish and painting etc. by 2x/0.20 mm (1.5sqmm.) flexible copper wire of 1.10 mt.	Each	199	25	4975	C2/17
17	Lowering & refixing of existing luminares complete with set,light rubber bush etc.incl making necy connection & disconn.as reqd	Each	35	25	875	C3/22
18	Supply & Fixing 240V6A plug socket without switch & plug top on existingswitch board having bacelite cover by screws after making housing for socket & making necy connection.	Each	36	2	72	E5/15a
19	Supply & Fixing 240V6A piano key type switch (brnd apprpd) on existing switch board having bacelite cover by screws after making housing for socket & making necy connection.	Each	27	2	54	E5/14
20	<b>LUMINAIRES</b>					
a)	TMC 501 P 2x LEDMounting rails for TLED Lamps	Each	600	25	15000	Plist 14
b)	TLED Essential 20Watt	Each	400	50	20000	do
c)	Photosynthetically active radiation lamp code 016166-00700A/40w specific action spectralamps for photosynthesis with electronic gear for reasearch	Each	800	6	4800	m/price
21	<b>Control Panel</b>					
a)	Monitor control panel ,which includes,Light,Temparature & Humidity control system with Microprocessor; a) Technical feature of photo periodic Timer Cycle:24hrs minimum ON/OFF periods 30mins Accuracy+/- 10sec/day input 200-240V AC single phase Ambient 5degree to 45deg C RH upto 85% normally					
b)	Technical feature of Temp.Control System Temp Range 0.1 to 59.9deg C Accuracy+/- 1 deg C Hysteresis 0.4deg with Pt 100 T/C with 5mtr cord input 200-240V AC single phase Ambient 5degree to 45deg C RH upto 85% normally					
c)	RH control system:to maintain RH in the range of +/- Range 30% to 90% Real RH+/-2% input 200-240V AC single phase Ambient 5degree to 45deg C RH upto 95% normally Piltz Timer for humidity ...1no	set	117,000	1	1,17,000	m/price
22	Fixing only exhaust fan after making hole in wall and making good damages and smooth cement finish etc. as practicable as possible and providing necy. length of PVC insulated wire and making connection for exhaust of following diameter: (a)30 cm (12") supplying of 1ph 12" 48watt,920rpm heavy duty exhaust fan EPC	Each	329	2	658	C4/28a
23	make	Each	2860	2	5720	p/list 14
	<b>AIR CONDITIONER MACHINE</b>					
	Supplying of 1.5 Tx3 star rated HI Wall split A.C machine,copper Fixed speed split air conditioner.(Make:Bluestar/Daikin/Hitachi) Installation,Testing,commissioning of said machines with all necy.	Each	40690	2	81380	plist18



	items like plywood,screw,nut bolts ,16A plug top of crabtree make etc.	Each	2500	2	5000	do
	Addl.copper pipe for refrigerant if require	RFT	225	33	7425	do
	Hard PVC drain pipe upto ground level with suitable U trap	RFT	40	20	800	do
24	Supplying and fixing 415V, TPN SFU open execution in existing SS enclosure/cubical with nuts bolts etc incl.S&F 3nos DIN type HRC fuse as per rating.					
	63A Make ; L&T	Each	2402	2	4804	D4/4b
	<b><u>INTER CONNECTION BETWEEN MAIN L.T BUSBAR TO FSU INCOMING</u></b>					
	Inter-connection between Bus-bar to TPNFSU by <b>Havell's single core copper conductor (flexible) of following cross-section incl. S&amp;F proper copper socketing and crimping &amp; flexible pipe.</b>					
	c)25 sq.mm	RM	249	15	3735	Havells 14
25	Earthing Installation – with Copper Plate electrode					
a)	Earthing with Copper plate (610x610x3mm size) having weight of 9.84 Kg and 1 No. 25x5mm Copper strip (3.20 mt long) & 1 no. 6 sqmm PVC insulated stranded Copper wire (4 Mt long) incl. S & F 15 mm dia GI pipe (ISI-Medium) protection (4 mt. long) to be filled with bitumen, partly under the ground level & partly above ground level to an average depth of 3.65 Mts. below the ground level and restoring the surface duly rammed incl. providing 3.0 mt long, 25 mm dia GI pipe (ISI-Medium) for periodic treatment, incl. providing masonry enclosure on the top of the earth electrode of overall size 86.36x86.36x46cm deep (below Ground level) complete with cemented brick work (1:6) of 25 cm width, duly plastered with cement mortar (inside) CI hinged inspection cover of size 36.56x35.56cm with locking arrangement, GI reducer and treatment of soil by using salt & charcoal or coke for plate electrode	SET	10466	2	20932	G3/7
b)	Connecting the equipments body to earth busbar including S & F 25 mm x 6 mm galvanised (Hot Dip) MS flat on wall/floor with GI saddles as required and connection to equipments incl. drilling holes, with bolts, nuts, washers etc.	RM	149	50	7450	G3/5d
c)	Supplying & fixing earth busbar of galvanized (Hot Dip) MS flat 40 mm x 6 mm on wall having clearance of 6 mm from wall including providing drilled holes on the busbar complete with GI bolts, nuts, washers, spacing insulators etc. as required	RM	194	2	388	G2/4b
	Supplying & fixing medium gauge GI Pipe ( ISI-Medium) Protection with necessary fittings and jointing metarials as required.40mm dia.(For earth strip & Cable protection)	RM	246	14	3444	F6/11c
d)	Connecting the equipments to earth busbar including S & F GI (Hot Dip) wire of size as below on wall/floor with staples buried inside wall/floor as required and making connection to equipments with bolts, nuts, washers, cable lugs etc. as required and mending good damages					
	No. 6 SWG	RM	13	15	195	G2/5a
	<b>(A) TOTAL BASIC COST :</b>				305404	
	<b>(B)G.S.T @12% ON TOTAL TENTATIVE BASIC COST(A)</b>				36648	

<b>TOTAL BASIC COST +GST(A+B)</b>	<b>342052</b>
<b>(C) ADD 1% L.W CESS ON C :</b>	<b>3420</b>
<b>TOTAL COST :(A+B+C)=Rs(305404+36648+3420)=</b>	<b>345472</b>
<b>Three lacs forty five thousand four hundred &amp; seventy two only.</b>	

**Name of contractor:**

Address :

Rate quoted by the contractor:

Signature of contractor with date: