

UNIVERSITY OF CALCUTTA

OFFICE OF THE UNIVERSITY ENGINEER 87/1, College Street

Darbhanga Building, GroundFloor

Kolkata-700073

Website :-www.caluniv.ac.in

| Jniv | ersity of Calcutta invite | s sealed tender from resourceful and bonafide contractors for the following work | | | | | |
|--|---|---|--|--|--|--|--|
| • | N.I.T. No: | Eng / ET- 42 /22-23. Date: 20.04.22 | | | | | |
| 2. | Name of the work: | _E.I works for setting up new plant tissue culture & biotechnology laboratory facility at department | | | | | |
| | | ofGeneticsr,Ballygunge science college C.U | | | | | |
| 3. Estimated Cost put to Tender: Rs 245081/-(Two lacs forty five thousand eighty one only) Incl.Taxes | | | | | | | |
| | Earnest Money: | A sum of Rs 4200/-(Four thousand two hundred only)in the form of CTS demand draft in favour of University 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 issuin 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. EMD is not exempted in any case. | | | | | |
| . | Time of completion: | 21days | | | | | |
| 6. | Eligibility Criteria and Documents to be submitted along with Application. | Valid trade License, GST & PAN and credential for satisfactory completion of similar nature of job amounting75 % of the estimated value in a single tender in the last three financial years in Government /Government Undertaking or University of Calcutta.Original documents may be asked for | | | | | |
| | | verification of technical checking on the date of issuing tender paper . Failing to produce original documents, the tender will be rejected. The participant bidder must submit the following documents in sealed envelope in the tender box kept at the Office | | | | | |
| | | the Engineer at the Ground Floor of the Darbhanga Building, University of Calcutta, 87/1, College Street, Kolkata – 70007 within the last date of submission of the tender. 1. NIT documents duly filled and signed by the intending bidder. 2. Bank Draft for EMD in favour of the University of Calcutta. | | | | | |
| | | Self-attested copy of Valid trade License, GST & Pan and credentials for satisfactory completion of similar nature of jobs under Government, Government Undertaking and Universities etc. within last three years. Application through postal service or courier service is not accepted. | | | | | |
| - | a)Last date of submission of application for tender | On 25/04/2022 from 11AM to 4 PM (Must contain above mentioned document. The | | | | | |
| | | application duly signed by Engineer CU should be enclosed with tender documents | | | | | |
| 3. | Issue of tender papers | TO BE DOWNLOADED FROM WEBSITE.(www. caluniv.ac.in) | | | | | |
|). | Last Date and Time of tender Submission | Dully filled and signed tender/quotation to be submitted on 28/04/2022 from 11am to 2.00 PM in to the Tender Box kept the Office of the University Engineer | | | | | |
| 0. | Date and Time of Tender Opening | At or after 28/04/2022 after 3.00 PM at the Office of the University Engineer. Intending bidders are requested to be present at the time of opening tenders/quotations. | | | | | |
| N.I | .T no :Name of work and t | the date of opening should be written on the sealed envelope otherwise tender will not be opened and will be rejected. | | | | | |



UNIVERSITY OF CALCUTTA

Name of the work:_E.I works for setting up new plant tissue culture & biotechnology laboratory facility at department ofGeneticsr,Ballygunge science college C.U

N. I.T. no- Eng / ET- 42 /22-23. Date: 20.04.22

Estimated cost Put to Tender:- Rs 245081/-(Two lacs forty five thousand eighty one only) Incl.Taxes

Name of Agency:-

Address of Agency:-

Rate quoted by Agency:- (in figure and words)

Signature of the Agency with date &stamp:-



UNIVERSITY OF CALCUTTA

N. I.T. no : Eng / ET- 42 /22-23. Date: 20.04.22

Item Rate contract

GENERAL TERMS AND CONDITION

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 yearin sealed envelope in the Tender box kept in the Office of the undersigned with in the specified time mentioned in the NITwhich will be opened by the undersigned or by his representative with in <u>the specified time and date mentioned in the NIT</u>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 10% of the contract value.



5. The allotted time for completion of the work as specified in the NIT 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**. Which will be released after a period of six months from the date of completion of the work on application.

7.A sum of 2% of the estimated amount excl.taxes 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 ducted by the University from the running bills. EMD is not exempted in any case. The earnest money will be returned to unsuccessful tenderers on application after issue of work order to the successful tenderer the EMD will be returned on application after 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 ducted by the University from the running bills.

Amount:-Rs

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

Name of Issuing Bank:--

Branch :-

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 6 <u>months</u> from the date of receipt of the work order. 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 date &stamp:-

Specific Price schedule

B.O.Q FOR EI WORKS FOR SETTING UP NEW PLANT TISSUE CULTURE AND BIOTECHNOLOGY LABORATORY

FACILITY, AT DEPARTMENT OF GENETICS, BALLYGUNGE SCIENCE COLLEGE, C.U

| SI.No. | Description of work | Unit | Rate | Quantity | Amount |
|--------|--|-------|------|----------|--------|
| 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. fittings etc. to light/fan/call bell point with | | | | |
| | Modular type switch (Brand approved by EIC) fixed on | | | | |
| | Modular GI / PVC switch board with top cover plate on wall | | | | |
| | incl. mending good damages to original finish. [PVC 20mm rigid | | | | |
| | conduit and Switch board both on surface] | | | | |
| | Average run 5 mtr | Point | 659 | 8 | 5272 |
| | Average run 6 mtr | Point | 733 | 4 | 2932 |
| 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 | | | | |
| | with indicator & 16A kit-kat flush type fuse (Brand apprd by) | | | | |
| | EIC) on sheet metal switch board embedded in wall incl. S &F | | | | |
| | 240x200x65mm MS (16SWG) switch board and bakelite | | | | |
| | top cover of 3mm thick by Brass screws after making housing | | | | |
| | for switch by cutting bakelite/perspex cover & making necy conn. | Each | 763 | 6 | 4578 |
| 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 | 324 | 5 | 1620 |
| 4 | 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 |
| 5 | 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. | | | | |
| a) | 2 x 22/0.3 (1.5 sqmm) + 1 x 22/0.3 (1.5 sqmm) ECC(LDB to S/Board) | RM | 102 | 31 | 3162 |
| b) | 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC(PDB to 16A plug) | RM | 149 | 109 | 16241 |
| c) | 2 x 84/0.3 (6 sqmm) + 1 x 56/0.3 (4 sqmm) ECC (PDB to CP & AC) | RM | 193 | 67 | 12931 |
| d) | 2 x 36/0.3 (2.5 sqmm) + 1 x 22/0.3 (1.5 sqmm) ECC (PDB to 6A Plug pt) | RM | 119 | 98 | 11662 |
| 6 | CONTROL CABLE | | | | |
| а | Supplying of PVC Arm.cable with Al. conductors of 1.1 KV grade | | | | |
| | conforms to I.S:1554 (part-1) for following cross -section | RM | 242 | 41 | 9922 |
| | B)1x 35sq.mm 3.5 core (do) C)1x16 sq.mm 2 core (do) | RM | 124 | 41 | 9922 5208 |
| b | | | 124 | 42 | 5200 |
| D | Laying of cable as below, on existing Cable Tray and binding with suitable size GI wire. | | | | |
| | B)1x 35sq.mm 3.5 core (do) | RM | 11 | 41 | 451 |
| | C)1x16 sq.mm 2 core (do) | RM | 11 | 42 | 462 |
| c) | S&F compression type gland complete with brass gland rubber | | | | .02 |
| - / | rings for dust & moisture proof entry | | | | |
| | B)1x 35sq.mm 3.5 core (do) | Each | 162 | 2 | 324 |
| | C)1x16 sq.mm 2 core (do) | Each | 115 | 2 | 230 |
| d) | Finishing the end of following cables by crimping method incl S&F | | | | |
| | dowels etc. | | | | |
| | B)1x 35sq.mm 3.5 core (do) | Set | 158 | 2 | 316 |
| | C)1x16 sq.mm 2 core (do) | Set | 58 | 2 | 116 |
| 7 | DISTRIBUTION SYSTEM WITH TRAY | | | | |
| | 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. | | | | |
| | required of the following size. Incl. Al painting of MS support | | | | |
| | With 25x25x3mm angle iron support | | 267 | 10 | 2670 |
| 0 | 300x50x1.25mm (18SWG) | Each | 367 | 10 | 3670 |
| 8 | Supply & Fixing of perforated GI cable tray bend with perforation not | | | | |
| | more than 17.5% suspended from ceiling with two nos. suspenders | | | | |
| | & 25x25x3mm angle iron for supporting the cross member 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 | Each | 706 | 2 | 1412 |
| 9 | Supplying and fixing double-door SPN MCB Distribution | Luch | ,00 | 2 | 1712 |
| 5 | 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 | 1 | 1757 |
| 10 | Supplying and fixing double door Horizontal TPN MCB | | | | |
| | Distribution board with IP-42/43 protection, concealed | | | | |
| Ì | 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 | 1 | 4194 |
| 11 | Supplying and fixing 240/415 V MCB Isolator on | | | | |
| | din rail of existing DBs and necessary connection. | | | | |
| а | 63A DP Legrand (PWD2014/D5/6) | Each | 460 | 1 | 460 |
| b | 100A FP Legrand (DO) | Each | 927 | 2 | 1854 |
| 12 | Supplying and fixing 240/415 V MCB of Breaking | | | | |
| | capacity 10kA & C characteristics on din rail of | | | | |
| | existing DBs and necessary connection | | | | |
| | SP 6-32Amps Legrand | Each | 190 | 60 | 11400 |
| 13 | LUMINAIRES & FAN | | | | |
| a | LED Flat panel light(2'x2') Recess MPLS 02 45W (Any ISI) | Each | 3800 | 4 | 15200 |
| b | LED panel light(Recess square) MPLS 02 12W ISI Make) | Each | 700 | 4 | 2800 |
| c) | Supply & Fixing high speed (rpm 2000) with regulator ceiling fan | | | | |
| | Orient, crompton greaves, Havells, Polar make. | Each | 2186 | 2 | 4372 |
| d) | Fixing only cabin fan on wall/ceiling by S&F rag bolts, nuts & | | | | |
| | washers (6 mm dia x 62 mm long) or as reqd. incl. S&F 24/0.20 | | | 2 | 101 |
| | PVC insulated flexible copper wire 0.5 mt. length . | Each | 92 | 2 | 184 |
| e) | Fixing only bulk head ceiling fitting on wall/ceiling by screws etc. | Each | 56 | 8 | 448 |
| 14 | 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 | 130 | 780 |
| 15 | Connecting the equipments body to earth busbar including | | 0 | 150 | 780 |
| | 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 | 4 | 368 |
| 16 | Supplying & fixing earth busbar of galvanized (Hot Dip) MS flat | | 52 | | |
| | 25 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 | 156 | 1 | 156 |
| 17 | Air conditioninning | | | | |
| | SITC of 3star rating split air conditioner machine with R 32 gas incl.remote | | | | |
| | controller of folowing capacity suitable for operation on 230v +/- 10% volt | | | | |
| | ,50Hz,single phase ac supply with air cooled evaporator with copper coil | | | | |
| | fan & fan motor,air cooled condenser with copper coil,hermatically sealed | | | | |
| | rotary compressor, propeller fans, controls, control panels incl wiring, necy. | | | | |
| | power cable connection from unit to power socket, refrigerant pipe of | | | | |
| | appropriate size between indoor & outdoor unit upto 3 mtr length[both | | | | |
| | suction& delivery, incl gas charging complete as reqd, | | | | |
| | 1.5TR [Make: Hitachi/Daikin/Bluestar} | each | 32443 | 2 | 64886 |
| 18 | Providing & fixing copper pipe thickness with nitrile rubber insulation not | | | | |

| | | 1 | ı ı | | 1 |
|----------------------|---|------|------|----|--------|
| | less than 0.6 mm& suitable size as required for supply& return refrigerant | | | | |
| | with suitable insulation for above Acs as per specification of manufacturer | | | | |
| | complete in all respect as required[in excess of 3.00 mtr length/Machine | | | | |
| | 1/4"[OD-6.35mm] | Rft | 231 | 18 | 4158 |
| 19 | Supplying & laying 20mm dia ISI marked PVC flexible pipe along with acce- | | | | |
| | ssories on surface of the wall to drain out condensed water from indoor | | | | |
| | unit as required. | Rft | 59 | 40 | 2360 |
| 20 | S&F factory fabricatedM.S structure for resting/Placing of 1.5TR capacity | | | | |
| | split A.C outdoor unit on existing bldg. & fixed by MS fastner. | item | 1060 | 2 | 2120 |
| 21 | S&F4C flexible copper cable of size 4sq.mm,from indoor to outdoor unit | | | | |
| | incl.connection,commissioning testing etc as reqd.[Polycab/Havells] | RM | 166 | 27 | 4482 |
| 22 | Hire & labour charges for shuttering with centering &necy. Staging upto | | | | |
| | 4mtr using approved stout props &thick hard wood planks of apprd | | | | |
| | thickness with reqd.bracing for concrete slab,beams & coloumns,lintels | | | | |
| | curved or straightworks (upto roof of G/F) | | | | |
| | When the height of a particular floor is more than 4mtr the equivalent flr | | | | |
| | height shall be taken as 4mtr 7 extra for works beyond the initial 4mtr | | | | |
| | shall be allowed under 12(e) for every 4mtr or part thereof.extra for | | | | |
| | staging beyond 4mtr in any floor.(H=12mtr,B=2mtr,L=1.5mtr) Vol=36cum | Cum | 68 | 15 | 1020 |
| | (A) TOTAL BASIC COST :(Excluding G.S.T) | | | | |
| | B)G.S.T 18% EXTRA ON TOTAL TENTATIVE BASIC COST(A)as applicable | | | | 37385 |
| C) GRAND TOTAL=(A+B) | | | | | 245081 |
| | Specification/Make of the items to be used: | | | | |

Specification/Make of the items to be used:

Cable:Havells/KEIXLPE

Wires:Havells/Polycab/KEI......HRFR

DB : Legrand/L&T/ABB ...Double Door

MCCBs & MCBs : Legrand/L&T/ABB

Ceiling/ wall Fan : Orient/Polar/CG

: Philips/Havells/C&G Luminaires

SFU : L&T

Name of the contractor:

Address of the contractor:

Rate quoted by the contractor:

Signature with date & seal:

Name of the Agency:

Address of the Agency:

Amount quoted by the Agency:

Signature of the Agency with date and stamp.