NATIONAL INSTITUTE OF TECHNOLOGY, CALICUT
NIT Campus P.O., Calicut, Kerala, 673 601, INDIA

Date: 09-11-2026

Engg/EMU/TA-1/0003/HE Lab Extension/QN-E012/2026-27

Quotation Notice

Sealed item rate quotations are invited by the Superintending Engineer, Engineering Unit, on behalf of **The Director, National Institute of Technology Calicut, Kozhikode, Kerala,** for the following work from experienced contractors who have carried out similar works and have registered with Kerala PWD, Kerala State Electrical Licensing Board (**Class B and above**), CPWD, MES, PSUs, or any government organisation.

ELECTRICAL WORK

No	Name of Work	PAC	EMD
1.	**Electrical works for Heat Engine Lab Extension-MED**	**Rs 73,700/-**	**Rs 1,480/-**

1. Quotation forms can be obtained from the Engineering Unit Office, on all working days from **09-11-2026 to 23-11-2026** up to **01:00 P.M** on production of original Kerala P.W.D/C.P.W.D/MES/KEI Registration with a copy. Bidders can also download the same from the institute website https://nitc.ac.in/purchase-section/quotations

2. The last date and time for receipt of the completed quotation form for all items is **23-11-2026, 01:00PM**. (If the last date happens to be a holiday for the Institute, quotations will be accepted until **01:00PM** on the next working day.) The quotation will be opened at 02.00PM on the same day.

3. The period of completion of work is **30 Days** from the date of site handing over.

4. The contractor's rates for each item must include the cost of materials, their transportation and storage at the site, all taxes and duties, including GST, water and electricity charges, etc., and all operations contemplated in the schedule and specifications. The institute will not provide Form 'C' or any other such certificates to the contractor.

   The rate quoted by the contractor as per this quotation is final and binding on the contractor; there is no revision of rates at a later stage, and there is no payment to the contractor towards cost escalation at a later stage.

   All the work as per the BoQ is to be completed in line with the CPWD specifications, ensuring the functional requirements of the particular item and as per the instruction

of the engineer in-charge. All the activities as per the CPWD specifications are to be treated as included in the rate and are to be followed while executing the work.

All works should be executed as per the work procedures and quantity mentioned by IS standards / CPWD specifications.

5. The EMD is required to be remitted to the State Bank of India account under the UPI identification **emd5027.597@sbi**, mentioning the Quotation reference number in 'Remarks', and the UTR transaction ID/receipt should be submitted to the office of the undersigned before the date of the opening of the quotation.

   The EMD amount can also be paid by Fixed Deposit Receipt from a Scheduled Commercial Bank, or Bank Guarantee from a Scheduled Commercial Bank, assigned in favour of the **Director, National Institute of Technology Calicut, NIT Campus P.O, Calicut – 673 601, Kerala** and made payable at State bank of India, NIT Calicut branch, Chathamangalam. The original of the same should be submitted to the office of the undersigned before the date of the opening of the quotation.

   The quotation received without EMD or with EMD in any other form than as stated above is liable to be rejected. The EMD will be refunded to the unsuccessful bidder within one month of the acceptance of the quotation.

   This being a Work Contract, the MSME Act will be applicable accordingly.

6. Within **07 (seven) days** of the award of the contract, the Contractor shall furnish to the Institute a Performance Guarantee (Security Deposit) in the form of an Fixed Deposit Receipt from a Scheduled Commercial Bank, or Bank Guarantee from a Scheduled Commercial Bank, in favour of the **Director, National Institute of Technology Calicut, NIT Campus P.O, Calicut – 673 601, Kerala**, for a sum equivalent to 5% of the contract value or as specified in the work order, valid up to the completion of the defect liability period of **One Year** from period of completion of work.

   The SD can also be remitted to the State Bank of India account under the UPI identification **sd3926.901@sbi**, mentioning the Quotation reference number in 'Remarks', and the UTR transaction ID/receipt should be submitted to the office of the undersigned within **07 (seven) days** of award of the contract.
   EMD already deposited along with the quotation shall be returned upon furnishing the performance guarantee.

   If the selected bidder fails to furnish the prescribed performance guarantee within the prescribed period, without any specific reason (unless the reasons are intimated to the Institute and approved), the Institute shall, without prejudice to any other right or remedy, be at liberty to forfeit the earnest money absolutely and shall debar the party from participation in any of the quotations/tenders of the Institute for the next 03 (three) years.

Similarly, if the party fails to start the works within the prescribed time limits, the institute, upon issuing a one-week notice period, has the liberty to terminate the contract, execute the works at the risk and cost of the party, and proceed with the penalising action as desired by the Institute.

7. The Contractor shall commence work within **10 days** from the date of issue of the work order. This date shall be treated as the date of commencement of the work. **Time is the essence of the contract.** All works as per this contract shall be completed within **"Time of Completion"** from the date of commencement of the work as decided by the Institute.

   The party shall maintain a hindrance register at the site to record any hindrances or issues that arise and affect the works that are beyond the control of the contractor. This register shall be countersigned by the EIC (Engineer-in-Charge) or his representative assessing the situation.

8. Payments of the bills shall be made by the Institute following the procedures and guidelines issued by the Institute from time to time. This will be against the bills submitted by the party and duly accepted and certified by the EIC or the person authorised by EIC

   For works with completion period less than 03 months or value less than 75 lakhs, only one bill - final bill - will be entertained.

   The bills shall be submitted along with supporting documents like Measurement books (computerized/manual) as prescribed and other documents as instructed by EIC and as per the agreement/tender conditions. For the preparation of the Measurement books and connected works, necessary assistance shall be provided by the contractor. No claim in this regard will be entertained.

   All statutory deductions will be made from the bill as per the direction of the Government.

9. Retention money at the rate of 2.5% of each running bill amount shall be deducted from each running account payment. The Retention Money shall not bear any interest. Retention amount will be released on successful completion of the DLP period or as desired by the EIC.

10. Schedule of Quantities

    A schedule of approximate quantities of various items is given in the tender schedule. It shall be definitely understood that the Institute does not accept any responsibility for the correctness or completeness of the schedule in respect of items and quantities, and this schedule is liable to alterations by omissions, deductions, or additions at the discretion of the Institute without affecting the terms of the contract, and the contractor's quoted rate is valid for all such variations. The Institute reserves the right to completely delete any item from the scope of the work without affecting the terms

of the contract/ utilize the full item as per BoQ anywhere within the NITC campus installation.

11. The Quotation shall quote in such a manner that the rates quoted shall be in line with the market rate/DSR. No abnormal quoting will be entertained. If the institute feels any particular item rate or the whole rate is abnormally quoted the tenderer should submit the rate analysis following the DSR rate analysis method or standard practice which will be reviewed during tender valuation. In any case, if a particular item or number of items is found not acceptable and practically executable in such cases the entire Quotation will be rejected without any further clarification or intimation.

12. The entire work shall be completed and handed over within the agreed time limit. The institute shall levy liquidated damages by way of compensation a sum of **2% (Two percent)** per month of delay to be computed on a per-day basis based on the quantum of damage suffered due to the stated delay on the part of the Contractor, subject to a maximum of 10% (ten percent) of the total value of work. After a delay of 200 days or the contract period, whichever is earlier, the Institute reserves the right to terminate the Contract.

13. Conditional quotations will not be acceptable. The conditions laid down by the Institute are final and binding on all Contractors.

14. The contractor shall comply with the statutory laws, rules, and regulations as applicable pertaining to the labour provided by him at the work site under this contract/work order.

15. The contractor shall also follow the rules and regulations, working schedule, etc. as notified by the Institute, without affecting the day to day functioning of the Institute.

    The contractor, after completion of work, shall clean and clear the site of all debris and remove all unused materials other than those supplied by the department and all plant and machinery, equipment, tools, etc., belonging to him within one week from the date of completion of the work, and the site shall be handed over to the Institute, or otherwise the same will be removed by the Institute at his cost or disposed of as per departmental procedure.

16. The Director of the Institute reserves the right to accept or reject any quotations without assigning any reasons.

17. Clearing of site/ debris shall be on account of the contractor.

18. The Courts at Calicut alone shall have exclusive jurisdiction in all matters arising out of this contract/work order.

Superintending Engineer
Engineering Unit, NIT Calicut

QUOTED RATE OF CONTRACTOR

Name of Work : Electrical works for Heat Engine Lab Extension- MED
Quotation Ref. No: Engg/EMU/TA-1/0003/HE Lab Extension/2026/QN-E012/26-27 Dated: 09-11-2026
File Ref. No: Engg/EMU/TA-3/0003/HE Lab Extension/2026-27

I/We agree to undertake to execute the work at a total amount of Rs _____ _____ (in figures and words) less cost of all departmental materials specified to the supplied and recovered at the rates given in the conditions enclosed.

Signature of contractor

Name of contractor:
Reg No:
PAN:
Aadhaar:
GSTIN:
Phone Number:
Mail id :
Address of contractor:

*** The bidder must enclose all the necessary experience certificates and documents of the details furnished above**

Annexure I

Preferred makes of materials:

No.	Material Description	Preferred Manufacturer/Brand Name
1	Cement (PPC/OPC)	ACC, UltraTech, Zuari, Dalmia, JSW, Ramco, Malabar Cements, Ambuja, JK Cement
2	White Cement	Birla White, JK White, India Cements
3	Structural Steel/Mild Steel rolled/hollow sections	SAIL, Tata Steel, Vizag (RINL) Steel, JSW Steel, Jindal Steel, APL Apollo
4	GI(HFS/CDS) / GP(HFW/HFIW/ERW) steel hollow sections	Tata, Jindal, Prakash Surya, Tamil Nadu Tubes, APL Apollo
5	Vitrified, Double Charge Vitrified, Glazed Vitrified (Polished / Matt / Digital) Tiles	Kajaria, Somany, RAK, Asian Granito, Johnson, Orient Bell
6	Tile Adhesive	Roff, Ultratech, Myk Laticrete, Ardex Endura, Ramco, Saint-Gobain Weber, Somany, JK TileMaxx, JSW Tylfix, ACC Suraksha
7	Epoxy Tile Grout	Saint-Gobain Weber, Myk Laticrete, Roff, UltraTech, JSW, Ramco
8	Flush door shutters	Archidply, Greenply, Greenlam, Duroply, Century, Greenpanel, Jain Doors Pvt. Ltd., Feroke Boards Ltd.
9	FRP doors, shutters & frames	Jayna, Fiberways, Jain Doors Pvt. Ltd.
10	Commercial Board / Plywood / Veneers	Archidply, Greenply, Duroply, Century, Merino, Greenlam, Greenpanel
11	Floor spring & door closer	Godrej, Dormakaba, Ebco, Dorset, Kich, Doorking, Everite, L&K
12	SS fittings for doors & windows	Jindal, Dormakaba, Kich, Dorset, Godrej, Ozone, Define
13	Brass fittings for doors & windows	Harrison, Godrej, Ashish, L&K
14	Aluminum Door Fittings	Classic, Everest, Argent
15	Waterproofing chemicals	Fosroc, Sika, Pidilite, Ultratech, Mapei
16	Ready-mix plaster	UltraTech Readiplast, JSW Enduroplast, ACC Suraksha, Ramco Super Plaster Eco, Mapei Mapewell Ready Mix

17	Microconcrete	Fosroc Renderoc, SikaRep Microcrete-4, UltraTech Microkrete, JSW Microconcrete, Ramco Microconcrete
18	Cement-based wall putty	Birla Wall Care, JK White, Asian Paints, Berger
19	Paint finishes	
a.	Priming coat (Cement, Wood, Metal)	Asian Paints, Berger, JSW-AkzoNobel-Dulux-ICI, Birla Opus, Kansai Nerolac, Jotun, Nippon, Indigo, MRF
b.	Interior Paints	
	100% premium acrylic smooth emulsion	Asian Paints Royale, Berger Silk Glamor, JSW Halo, Birla Opus One Pure Legend/Elegance, Nerolac Impressions, Jotun Fenomastic Wonderwall/Hygiene, Nippon Satin Glo+/Glo Prime/Spotless Nxt/Aircare VG, Indigo Platinum, MRF Ruca
	Premium acrylic smooth emulsion	Asian Paints Apcolite, Berger Easyclean/Rangoli, JSW Aurus, Birla Opus Calista Ever Clear/Wash, Nerolac Impression/Beauty, Jotun Fenomastic My Home, Nippon Matex Gold/Ez Wash, Indigo Gold, MRF Aquafresh/Altura
	Acrylic smooth emulsion	Asian Paints Tractor Emulsion, Berger Bison, JSW Pixa, Birla Opus Calista Ever Stay/Style Color Smart, Nerolac Beauty, Jotun Fenomastic Pure Colours, Nippon Breeze/Atom/Ultra, Indigo Silver, MRF Visa
	Acrylic distemper	Asian Paints Tractor Aqualock/Uno, Berger Bison, JSW Joie, Birla Opus Style Super, Nerolac Beauty, Jotun Durosan, Indigo Gold/Silver/Bronze
c.	Exterior Paints	
	100% premium acrylic smooth emulsion	Asian Paints Ultima, Berger Weathercoat Longlife15, JSW Halo Exceed Mega, Birla Opus One True Vision/Life, Nerolac Excel Everlast12, Jotun Jotashield ColourXtreme, Nippon Weatherbond Pro/Advance12, Indigo Platinum D&W Exterior Laminate
	Premium acrylic smooth emulsion	Asian Paints Apex, Berger Weathercoat, JSW Aurus, Birla Opus True Flex/True Look/Calista Neo Star, Nerolac Excel, Jotun Jotashield Nuovo/ColourLast, Nippon Weatherbond8/Durafresh Solo, Indigo Platinum Premium XT, MRF Aquafresh/Altura
	Acrylic smooth emulsion	Asian Paints Ace, Berger Wallmasta, JSW Pixa, Birla Opus Style Power Bright, Nerolac Suraksha, Jotun Easycoat, Nippon Atom/Sumo Xtra/Samurai, Indigo Gold, MRF Campus

	Textured exterior paint	Asian Paints Ultima Allura, Berger Florentina/Solitaire/Ruff & Tuff, JSW Texture, Birla Opus One Explore/Inspire, Nerolac Excel Texture finish, Jotun Jotashield Tex Ultra
	Waterproofing cement paint	Berger Durocem, Indigo Royal Indigocem or equivalent
	Premium acrylic-based floor guard paint	Asian Paints Apex Floor Guard, Berger Weathercoat Floor Protector, JSW Aurus Floor Coat, Birla Opus Calista Neo Floor Shade, Nippon Floor Guard, Indigo Platinum Floor Coat, MRF Zameen
	Premium acrylic-based tile guard paint	Asian Paints Apex Tile Guard, Berger Weathercoat Longlife PU Tile Coat, JSW Aurus Tile Coat, Birla Opus Calista Neo Tile Shade, Nerolac Excel Tile Guard, Jotun Jotashield Tile Glo, Nippon Roof coating, Indigo Platinum Tile Coat, MRF Tilegarde
d.	Wood Finishes	
	PU-based Polish	Asian Paints Woodtech Touchwood, Berger Woodkeeper Rainbow, JSW Beauteak Regal PU, Birla Opus Allwood SoftTouch, Nerolac Wonderwood PU, Nippon Cleartone/Wood Magic, Indigo Sleek PU, MRF Eezeewood
	Melamine Polish	Asian Paints Woodtech Melamyne, Berger Woodkeeper 24 Carat, JSW Beauteak Regal Melamine, Birla Opus Allwood Melamine, Nerolac Wonderwood Melamine, Nippon Melamic, Indigo Sleek Melamine, MRF Melamine
e.	Metal finishes	
	Epoxy paint	Asian Paints Apcolite Advanced 2-Pack Epoxy Finish, MRF Epidec, Indigo Platinum Epoxy
	Synthetic enamel paint	Asian Paints Apcolite Rustshield PU, Berger Luxol, JSW Halo Aquaglo, Birla Opus Calista Sparkle, Nerolac PU Enamel, Nerolac Bodelac, Indigo Platinum PU, MRF Specta PU
20	DI Pipes & fittings	Electrosteel, Jindal, TATA DUCTURA, Kapilansh, Kesoram
21	GI Pipe Fittings	Unik, AVR & Zoloto
22	HDPE Pipes	Reliance, Jain Pipes, ORIPLAST, Supreme
23	UPVC, CPVC pipes and fittings	Supreme, Astral, Star, Finolex, Prince, Skipper, Ashirvad, Prayag

24	HDPE 3/4-layer water storage cylindrical vertical/rectangular loft tank	Supreme Siltank, Astral Cleo/Vito, Star Macho, Prince Storefit, Ashirvad WeatherGuard/Pure
25	PVC Connection pipes	Watertec, Guru, Parryware
26	Chrome-plated (CP) brass fittings (bib, pillar, stop, angle, ball cocks)	Jaquar, Grohe, Roca, Kohler, Kerovit, Johnson, Prayag, ESSCO
27	Brass fittings (bib, pillar, stop, angle, ball cocks, ferrule)	Agi, Elite, Shakti, Sant, Leader, Prima, L&K
28	PVC/PTMT bib, pillar, stop, angle, ball cocks	Prayag, Watertec, Runs, Leader
29	Stainless steel sink	Neelkanth, Niralli, Jayna, Parryware, Cera, Prayag, Kohler, Hindware
30	Sanitaryware (China), fittings & accessories	Jaquar, RAK, Kerovit, Roca, Cera
31	EWC Seat Covers	Hindware, Parryware, Cera or any ISI-marked
32	Concealed flush tank/valve for W.C.	Jaquar, Roca, Grohe, Kohler, Geberit, Parryware
33	PVC Cisterns	Parryware, Cera, Watertec
34	Clear / Float / Frosted / Toughened Glass / Refractive Glass	Asahi India (AIS), Modiguard, Saint Gobain, Gold Plus
35	FRLS PVC insulated single-core stranded copper wire / three-core flexible cable / submersible cable	Gloster / RR Kabel / Polycab / KEI
36	PVC conduit / accessories, medium	Precision / Konseal / Balco
37	Modular switch / sockets / GI plate / Fan Regulator / DLP trunking & Accessories	Legrand Myrius / Legrand Arteor / Crabtree / ABB or any make as approved by EIC
38	MCCB / MCB / RCCB Blanking Plate / Vertical type Double-door MCCB DB / MCB DB / Enclosure	Legrand / LK / Schneider or any make as approved by EIC

39	SFU (Switch Fuse Unit) / Direct ROM / Extendable ROM	Legrand / LK / Schneider or any make as approved by EIC
40	Cable Straight-through joint Kit / End termination kit	Raychem / 3M or any make as approved by EIC
41	Piano-type switch / sockets / GI plate / Fan	Anchor / Indica / GM or any make as approved by EIC
42	Astronomical time switch	Legrand / LK or any make as approved by EIC
43	5-in-1 switch socket combined unit	Anchor / Indica / GM or any make as approved by EIC
44	6/16A 3-pin top	GM or any make as approved by EIC
45	LED Luminaires	Philips / Crompton / Bajaj
46	Outdoor LED Luminaires	Philips, Crompton, Jaquar, Bajaj or any make as approved by EIC
47	1200 BLDC Ceiling fan	Atomberg Efficio / Crompton / Bajaj or any make as approved by EIC (Compatible to run with a step regulator)
48	Wall fan	Atomberg / Crompton / Bajaj / Usha or any make as approved by EIC
49	Exhaust fan	Crompton / Usha / Almonard or any make as approved by EIC
50	Condenser fans and motors	LK or any make as approved by EIC
51	Energy meter	LK or any make as approved by EIC
52	LED Indicator for panels	LK / Schneider or any make as approved by EIC
53	Contactors	LK / Schneider or any make as approved by EIC
54	Motor Starters, VFD	LK or any make as approved by EIC
55	1.1 kV Cu/Al XLPE cable	RR Kabel / Gloster / Polycab / KEI
56	Meterbox	Sintex / Hencel or any make as approved by EIC

Note: Any addition or rejection to this list can be made by NITC evaluating the then-existing conditions, and the contractor is liable to bind to any such changes.

The above is the list of preferred makes. EIC will be approving the make for use based on the samples submitted by the agency. From the above makes, EIC has the right to select any of the above or equivalent makes based on the quality and requirement.

National Institute of Technology Calicut

SCHEDULE

Name of the work : Electrical works for Heat Engine Lab Extension-MED

Ref: Engg/EMU/TA-1/0003/HE Lab Extension/QN-E012/26-27 dated 09-11-2026

Item No	Description	Quantity	Unit	Unit Rate(Rs) Inclusive of all taxes	Amount (Rs) Inclusive of all taxes
1	**WIRING**				
1.1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable etc. as required.				
1.1.1	Group C	6.00	Point		
1.2	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
1.2.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	20.00	Meter		
1.2.2	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	16.00	Meter		
1.3	Supplying and drawing following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
1.3.1	3 x 2.5 sq. mm	15.00	Meter		
1.4	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
1.4.1	20 mm	10.00	Meter		

1.5	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
1.5.1	5/6 A switch	1.00	Each		
1.5.2	15/16 A switch	7.00	Each		
1.5.3	3 pin 5/6 A socket outlet	2.00	Each		
1.6	Supplying and fixing of 15/16A modular socket, Three module including connection, etc., as required. on existing modular cover plate. Make:Legrand Myrius Equivalent	7.00	Each		
1.7	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	2.00	Each		
1.8	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	1.00	Each		
1.9	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc. as required.				
1.9.1	1 or 2 Module (75mmX75mm)	3.00	Each		
1.9.2	4 Module (125mmX75mm)	5.00	Each		
1.9.3	12 Module (200mmX150mm)	1.00	Each		
1.10	Supplying and fixing 3 pin, 5 A ceiling rose on the existing junction box/ wooden block including connections etc. as required.	1.00	Each		
1.11	Supplying and fixing extra down rod of 10 cm length G.I. pipe, 15 mm dia, heavy gauge including painting etc. as required. (Note: More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored)	24.00	Each		
1.12	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable etc. as required.				
1.12.1	Group C	3.00	Point		
2	**MCCB, MCB & DB'S**				

2.1	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) including proper permanent painting/marking of DB Labelling and MCB marking as required as per KEI Standard, and asfitted electrical drawing for the installation in hard copy with attestation of Grade B electrical contractor & CAD file in the format of KEI load addition.				
2.1.1	8 way , Double door	1.00	Each		
2.2	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
2.2.1	Single pole	3.00	Each		
2.2.2	Double pole	1.00	Each		
2.3	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	2.00	Each		
2.4	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
2.4.1	25 A	1.00	Each		
2.5	Removing of Industrial socket of any size including switch board, clamps, GI/plastic box etc. as required and handing over to the store/yard.	2.00	Each		
3	**LIGHTING**				

3.1	LED Down lighter (SMD Type) (System lumen efficacy ≥ 105 < 120 lm/Watt) Supplying, Installation, Testing & Commissioning of LED Recessed/ surface Down lighter (Round/ square/ Rectangular) SMD type of following body material with PMMA and prismatic diffuser and construction as per IS : 10322 with driver as per the requirement with Driver efficiency >85%, Operating voltage AC 140-270 Volt, frequency 50/60 hz, Operating temp range -5°C to 40°C, internal surge protection of 2.5 KV with Short & Open circuit protection ,THD < 10% , P. F.≥0.95, IP20, CRI >80, UGR (Unified Glare Rating) < 19, Flicker free (flicker should be below 5%), life time (LED, Driver & electrical circuitry), of minimum 50000 Burning Hours with 70% of initial Lumen maintained till life ends, CCT 3000°K /4000°K / 5700°K / 6500°K (As per ANSI Bin), SDCM (Standard Deviation Colour Matching) <3, Maximum power consumption should not more than the specified rating and Fixture shall be confirming to relevant BIS standards. Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing Complete in all respect i/c external connections with 1.5 sq.mm FRLS/HFFR, PVC insulated copper conductor single core cable and earthing etc. as required with Minimum 5 year OEM warranty. System lumen efficacy ≥105 and <120 lm/Watt output . LM79 & LM80 Test report and all testing required for LED fixtures as per BIS shall be submitted. Shape size and CCT shall be as approved by Engineer-in-Charge as per requirement. (Thermal management: heat sink of aluminium housing such that LED junction temperature shall not rise above 90°C).				
	Powder coated die cast /Extruded aluminium Body including trim				
3.1.1	18 watt	4.00	Each		

3.2	LED Panel light 2x2 ft. (System lumen efficacy ≥105 <120 lm/Watt)Supplying, installation, Testing & Commissioning of Panel light 2x2 ft., of following body material and construction as per IS : 10322 with driver as per the requirement with Driver efficiency >85%, Operating voltage AC 140-270 Volt, frequency 50/60 hz, Operating temp range -5 °C to 40 °C, internal surge protection of 2.5 KV with Short & Open circuit protection, THD < 10% , P. F.≥0.95, IP20, CRI >80, UGR (Unified Glare Rating) < 19, Flicker free, (flicker should be below 5 %), life time (LED, Driver & electrical circuitry), of minimum 50000 Burning Hours with, 70% of initial Lumen maintained till life ends as per LM80 extrapolation IES TM-21-11 report, CCT 3000°K / 4000°K / 5700°K /6500°K (As per ANSI Bin), SDCM(Standard Deviation Colour Matching) <3, Maximum power consumption should not more than the specified rating and Fixture shall be of relevant BIS standard. Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing. complete in all respect i/c external connections with 1.5 sq mm FRLS/HFFR, PVC insulated copper conductor single core cable and earthing etc. as required with Minimum 5 year OEM warranty. System lumen efficacy ≥105 <120 lm/Watt output . LM79 & LM80 Test report and all testing required for LED fixtures as per BIS shall be submitted. Shape size and CCT shall be as approved by Engineer-in-Charge as per requirement. (Thermal management: heat sink of aluminium housing such that LED junction temperature shall not rise above 90°C).				
	Powder Coated CRCA Sheet Body (Thickness > 0.50 mm)				
3.2.1	36 watt	1.00	Each		
3.3	Supply and fixing of 18/20 watt 4 feet T8 LED tube with efficacy 100lm/W. (T8 LED-Crompton LGT8-20-865-2 or compatible)	2.00	Each		
3.4	Supply and fixing of box type tube fittings (Batten), complete with side holders etc, as required.(Batten- Crompton ECO DIJB12LT8-20 1XT8 or compatible)	2.00	Each		
4	**FANS**				

4.1	Brush Less Direct Current (BLDC) Fan without Remote Supply, Installation, Testing and Commissioning of ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. metal(Aluminium alloy) blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, steel/Al body Power Factor not less than 0.9, Service Value (CM/M/W) minimum as below, 350 RPM (tolerance as per IS : 374-2019), THD (Total Harmonic Distortion) less than 10%, suitable for operation with regulator for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 °C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC supply, Ceiling Fan compliant to IS 374:2019 fan i/c external connections with 1.5 sq.mm FRLS/HFFR, PVC insulated copper conductor single core cable and earthing etc. as required.				
4.1.1	1200mm, service value ≥ 6.0 CM/Min/Watt, air delivery 235 CM/Min (Minimum)	2.00	Each		
4.2	Supply and fixing of 450 mm sweep wall mount fan with Aluminium blades, 1350RPM, minimum 100 CCM air delivery Wall mount Fan with necessory arrangement (Crompton Sstorm2 Wall mount or equvalent)	1.00	Each		
4.3	Supplying and fixing of heavy duty 300mm sweep exhaust fan speed>1400rpm including connection etc. as required. Make:havells/almonard or Equivalent	1.00	Each		
				Total (Including all taxes)	
Total in Words (Including all taxes) :					