



WEST BENGAL MEDICAL SERVICES CORPORATION LTD.
(Wholly owned by the Government of West Bengal)
Swasthya Sathi, GN-29, Sector-V, Salt Lake, Kolkata-700 091.

SHORT NOTICE INVITING TENDER DOCUMENTS FOR

Establishment of 24 bedded hybrid Critical Care Unit at 11(eleven) different Government SuperSpeciality Hospitals- Electrical Work.

1. Establishment of 24 bedded hybrid Critical Care Unit at Asansol Super Speciality Hospital- Electrical Work, Dist: Paschim Bardhaman.
2. Establishment of 24 bedded hybrid Critical Care Unit at Basirhat Super Speciality Hospital- Electrical Work, Dist: North 24 PGS.
3. Establishment of 24 bedded hybrid Critical Care Unit at Hatuara Super Speciality Hospital- Electrical Work, Dist: Purulia.
4. Establishment of 24 bedded hybrid Critical Care Unit at Egra Super Speciality Hospital- Electrical Work, Dist: Purba Medinipur.
5. Establishment of 24 bedded hybrid Critical Care Unit at Falakata Super Speciality Hospital- Electrical Work, Dist: Alipurduar.
6. Establishment of 24 bedded hybrid Critical Care Unit at Kalna Super Speciality Hospital- Electrical Work, Dist: Purba Bardhaman.
7. Establishment of 24 bedded hybrid Critical Care Unit at Nandigram Super Speciality Hospital- Electrical Work, Dist: Purba Medinipur.
8. Establishment of 24 bedded hybrid Critical Care Unit at Panskura Super Speciality Hospital- Electrical Work, Dist: Jhargram.
9. Establishment of 24 bedded hybrid Critical Care Unit at Raghunathpur Super Speciality Hospital- Electrical Work, Dist: Purulia.
10. Establishment of 24 bedded hybrid Critical Care Unit at Barjora Super Speciality Hospital- Electrical Work, Dist: Bankura.
11. Establishment of 24 bedded hybrid Critical Care Unit at Sagardighi Super Speciality Hospital- Electrical Work, Dist: Murshidabad.

(NIT Reference No. : WBMSCL/NIT-94/2022, Dated – 11/03/2022)

WEST BENGAL MEDICAL SERVICES CORPORATION LIMITED

(Wholly Owned by the Government of West Bengal)

Registered Office: Swasthya Sathi, GN-29, Sector-V, Salt Lake, Kolkata-700091

Phone: 033-4034-0300 ♦ Email: info@wbmsc.gov.in ♦ website: www.wbmsc.gov.in

I.T.B. No. : WBMSCL/NIT- 94/2022

Dated – 11/03/2022

Managing Director, WBMSCL invites sealed bids through electronic tendering (e-Tendering) for Establishment of 24 bedded hybrid Critical Care Unit at 11(Eleven) Government Super Speciality Hospitals, Located at Different District of West Bengal from the bonafied, resourceful and reliable experienced Contractor in West Bengal.

Sl. No.	Name of the Work	Estimated Amount (Rs.)	Earnest Money (Rs.)	Cost of Tender documents (Rs.) (Non-refundable)	Period of Completion	Name & address of the Office
01	Establishment of 24 bedded hybrid Critical Care Unit at Asansol Super Speciality Hospital-Electrical Work, Dist: Paschim Bardhaman.	3605945.00	72119.00	NIL	30 (Thirty days)	Managing Director, West Bengal Medical Services Corporation Limited, Swasthya Sathi Building, GN-29, Sector-V, Saltlake,
02	Establishment of 24 bedded hybrid Critical Care Unit at Basirhat Super Speciality Hospital-Electrical Work, Dist: North 24 PGS.	3449130.00	68983.00	NIL	30 (Thirty days)	
03	Establishment of 24 bedded hybrid Critical Care Unit at Hatuara Super Speciality Hospital-Electrical Work, Dist: Purulia.	3901766.00	78035.00	NIL	30 (Thirty days)	
04	Establishment of 24 bedded hybrid Critical Care Unit at Egra Super Speciality Hospital- Electrical Work, Dist: Purba Medinipur.	3699832.00	73997.00	NIL	30 (Thirty days)	
05	Establishment of 24 bedded hybrid Critical Care Unit at Falakata Super Speciality Hospital-Electrical Work, Dist: Alipurduar.	3594154.00	71883.00	NIL	30 (Thirty days)	
06	Establishment of 24 bedded hybrid Critical Care Unit at Kalna Super Speciality Hospital-Electrical Work, Dist: Purba Bardhaman.	3699832.00	73997.00	NIL	30 (Thirty days)	

Sl. No.	Name of the Work	Estimated Amount (Rs.)	Earnest Money (Rs.)	Cost of Tender documents (Rs.) (Non-refundable)	Period of Completion	Name & address of the Office
07	Establishment of 24 bedded hybrid Critical Care Unit at Nandigram Super Speciality Hospital-Electrical Work, Dist: Purba Mediniur.	3879921.00	77598.00	NIL	30 (Thirty days)	
08	Establishment of 24 bedded hybrid Critical Care Unit at Panskura Super Speciality Hospital-Electrical Work, Dist: Jhargram.	3593639.00	71873.00	NIL	30 (Thirty days)	
09	Establishment of 24 bedded hybrid Critical Care Unit at Raghunathpur Super Speciality Hospital-Electrical Work, Dist: Purulia.	3601130.00	72023.00	NIL	30 (Thirty days)	
10	Establishment of 24 bedded hybrid Critical Care Unit at Barjora Super Speciality Hospital-Electrical Work, Dist: Bankura.	2694230.00	53885.00	NIL	30 (Thirty days)	
11	Establishment of 24 bedded hybrid Critical Care Unit at Sagardighi Super Speciality Hospital-Electrical Work, Dist: Murshidabad.	3264230.00	65285.00	NIL	30 (Thirty days)	

GENERAL CLAUSE OF NIT :

TWO BID SYSTEM

1.0 This NIT is of Two Bid Tender, i) Technical & ii) Financial, both to be submitted concurrently in the portal. The bidders who will be Technically qualified in respect to Technical and Financial eligibility/capability criteria specified in the below mentioned subsequent clause can only be permitted to participate in the Financial Bidding.

TENDER DOCUMENT

2.0 In the event of e-filling intending bidder may download the tender document from the website directly by the help of his Digital Signature Certificate & upload the same with other documents along with necessary Earnest Money electronically as mentioned in Cl 14 of NIT. (Details of which has been narrated in "Instruction to Bidders", i.e. Section A). Where an individual person holds a digital signature certificate in his own name duly issued to him by the company or the firm of which he happens to be director or partner, such individual person either belonging to and appropriate cadre officer of the company or an authorized partner of a firm, shall invariably upload a copy of Registered power of attorney showing clear authorization in his favour, to upload such tender. The power of attorney shall have to be registered in accordance with the provisions of the Registration Act, 1908.

- a. Dully filled in copies of Section – B (Forms I to V & Affidavit) in prescribed proforma with proper dated signature in the relevant spaces to be uploaded electronically. **Documents in support of the**

information furnished in Forms I to V & Affidavit must be attached/uploaded for evaluation and the file number & page number has to be indicated in the respective column of the Form.

b. Digitally signed Technical Bid and Financial Bid both to be submitted concurrently in the website <https://wbttenders.gov.in>. Tender Document may be downloaded from the website. Submission of Technical Bid & Financial Bid as per the date and time Schedule stated in Sl. No. 16 of this NIT. The documents submitted by the bidders should be properly indexed.

Eligibility Criterion for participation in the tender :-

3.0 i) Credential :-

(a) The prospective bidders shall have satisfactorily completed **AS A SOLE FIRM (NOT as a sub-contractor)** during the last 5 (five) years prior to the date of issue of this NIT at least one work of similar nature under the authority of State/Central Govt., State/Central Gov. undertaking, Statutory/Autonomous Bodies under the statute of the Central/State Government and having a magnitude more than 40 (forty) percent in case of 1st call, 30% in case of 2nd call, 20% in case of 3rd call of the Estimated amount put to tender for intended job.

OR

(b) The prospective bidders shall have satisfactorily completed **AS A SOLE FIRM (NOT as a sub-contractor)** during the last 5(five) years prior to the date of issue of this NIT at least two works of similar nature under the authority of State/Central Gov., State/Central Gov. undertaking, Statutory/Autonomous Bodies under the statute of the Central/State Government having a magnitude each of minimum value of 30 (thirty) percent in case of 1st call, 25% in case of 2nd call, 15% in case of 3rd call of the Estimated amount put to tender for intended job.

OR

(c) The prospective bidders should produce credential **AS A SOLE FIRM (NOT as a sub-contractor)** at least one single running work of similar nature which has been completed to the extent of 80% or more (75% in case of 2nd call, 70% in case of 3rd call) and value of which is not less than the value of 40% (30% in case of 2nd call, 20% in case of 3rd call) of the estimated amount put to tender of intended job under the authority of State/Central Gov., State/Central Gov. undertaking, Statutory/Autonomous Bodies under the statute of the Central/State Government. **In the credential certificate it should be clearly stated that the work is in progress satisfactorily & also that no penal action has been initiated against the executing agency, i.e. the tenderer.**

N.B. - a) Estimated amount, Date of completion of project or percentage of physical progress of works for running works, value of works done, Salient feature & nature of work executed is to be mentioned in the Credential Certificate. Payment certificate will not be treated as credential. Credential Certificate issued by competent authority of State/Central Gov., State/Central Gov. undertaking, Statutory/Autonomous Bodies constituted under the statute of the Central / State Government will be taken as credential. However, Credential Certificate issued to sub-contractor by Central or State Govt. undertaking/Govt. Enterprise shall not be accepted.

b) Executed value (without contractual percentage) of completed/running work will be taken as credential.

c) Work order of relevant work(s) supported with completion certificate to be submitted.

ii) TECHNICAL PERSONEL

The prospective bidders shall have full time engaged/appointed in their Pay roll experienced technical personnel, the minimum being one Supervisory licence Holder(part no 1,2,11) (Authenticated documents in respect of qualification and engagement shall be furnished for Technical Evaluation).

iii) PAN Card, Valid Professional Tax Receipt Challan for the financial year 2021-22, Trade Licence, Valid GST Registration no. & certificate, Income Tax Acknowledgement Receipt for assessment year 2020-21, Electrical Contractor License, National S.C.C or S.C.C parts of 1,2,4, 11 (Authenticated documents in respect of qualification and engagement shall be furnished for Technical Evaluation) is to be submitted with Technical Bid document.

iv) Registered Unemployed Engineers' Co-operative Societies/ Registered Unemployed Labour Co-operative Societies are required to furnish valid bye law, Current Audit Report.

v) Joint Venture will not be allowed.

vi) Deleted.

- vii) Deleted
- viii) The partnership firm shall furnish (a) Registration Certificate from Register of firms along with certified copy of Form-VIII issued under Indian Partnership Act, 1932, & (b) partnership deed shall have to be either Notarised / registered from ADSR and the company shall furnish (a) Incorporation Certificate & CIN (b) the Article of Association and Memorandum. (Non Statutory Documents).
- ix) Deleted.
- x) A prospective bidder shall be allowed to participate in the particular job either in the capacity of individual or as a partner of a firm. If found to have applied severally in a single job, all of his/their bids will considered as nonresponsive for that job, without assigning any reason thereof.
And
If individual entity is found to be present in more than one bidding firm for a specific SI as a Proprietor or / and Partner / or POA (Power of Attorney), in that case all the bids of the respective firms containing that particular entity shall be considered as non-responsive.
- xi) **Earnest Money** : - The bidder shall be required to deposit earnest money amounting to

Sl. no	Name of the Work	Name of the site	Amount
01	Establishment of 24 bedded hybrid Critical Care Unit at Asansol Super Speciality Hospital- Electrical Work, Dist: Paschim Bardhaman.	Asansol SSH	72119.00
02	Establishment of 24 bedded hybrid Critical Care Unit at Basirhat Super Speciality Hospital- Electrical Work, Dist: North 24 PGS.	Basirhat SSH	68983.00
03	Establishment of 24 bedded hybrid Critical Care Unit at Hatuara Super Speciality Hospital- Electrical Work, Dist: Purulia	Hatuara SSH	78035.00
04	Establishment of 24 bedded hybrid Critical Care Unit at Egra Super Speciality Hospital- Electrical Work, Dist: Purba Medinipur.	Egra SSH	73997.00
05	Establishment of 24 bedded hybrid Critical Care Unit at Falakata Super Speciality Hospital- Electrical Work, Dist: Alipurduar.	Falakata SSH	71883.00
06	Establishment of 24 bedded hybrid Critical Care Unit at Kalna Super Speciality Hospital- Electrical Work, Dist: Purba Bardhaman.	Kalna SSH	73997.00
07	Establishment of 24 bedded hybrid Critical Care Unit at Nandigram Super Speciality Hospital- Electrical Work, Dist: Purba Mediniur.	Nandigram SSH	77598.00
08	Establishment of 24 bedded hybrid Critical Care Unit at Panskura Super Speciality Hospital- Electrical Work, Dist: Jhargram.	Panskura SSH	71873.00
09	Establishment of 24 bedded hybrid Critical Care Unit at Asansol Super Speciality Hospital- Electrical Work, Dist: Paschim Bardhaman.	Raghunathpur SSH	72023.00
10	Establishment of 24 bedded hybrid Critical Care Unit at Barjora Super Speciality Hospital- Electrical Work, Dist: Bankura.	Barjora SSH	53885.00
11	Establishment of 24 bedded hybrid Critical Care Unit at Sagardighi Super Speciality Hospital- Electrical Work, Dist: Murshidabad.	Sagardighi SSH	65285.00

The process of deposit of earnest money through offline instruments like Bank Draft, Pay Order etc. will be stopped for e-tender procurement of this office **wef. 01.09.2016.** **Necessary Earnest Money will be deposited by the bidder electronically: online – through his net banking enabled bank account, maintained at any bank or: offline – through any bank by generating NEFT/ RTGS challan from the e-tendering portal.** Intending Bidder will get the Beneficiary details from e- tender portal with the help of Digital Signature Certificate and may transfer the EMD from their respective Bank as per the Beneficiary Name & Account No., Amount, Beneficiary Bank name (ICICI Bank) & IFSC Code and e-Proc Ref No. Earnest Money @2.00% of the estimated amount put to tender have to be submitted. The earnest money of the successful bidder (being converted to security deposit) deposited, will remain under the custody of the department till satisfactory completion of the work in full including extended quantity if ordered for. Besides this, necessary percentages shall be deducted from the progressive bids so as to make it 3% (Three percent) of the value of work billed for.

4. Constructional Labour Welfare Cess @ 1 % (one percent) of the cost of construction will be deducted from every bill of the selected agency. GST, Royalty & all other Statutory Levy / Cess will have to be borne by the contractor. As the rates in the Schedule of rate are inclusive of GST & Cess as stated above.
5. The Bidder will have to submit the receipt of payment of **Royalty** to the Government for use of sand, stone materials, laterite, Moorum, gravel etc. to the Engineer-In-charge before preparation of bill for payment, when they collect the materials directly from the source. If they collect the materials from the authorized quarry holder or commercials establishment who directly or indirectly pay the royalty to the Government, necessary certificate or cash memo for sale in that respect from them shall have to be produced to the Engineer-In- Charge failing which necessary deduction from the dues of the contractor may be made as fixed by the Engineer-In-Charge.
6. **Bids will remain valid for a period not less than 120 days (One Hundred Twenty days) from the date of opening of the financial proposal.** However, extension of bid validity may be suitably considered by the Tender Inviting Authority, if required, subject to obtaining written confirmation of the contractor/bidder(s) to the effect. If the bidder withdraws the Bid during the period of Bid validity his Earnest Money Deposit will be forfeited.
7. All materials shall be of approved brand in accordance with relevant code of practice and manufacture accordingly and shall be procured and supplied by the agency at their own cost. Authenticated evidence are to be submitted along with challan and test certificate. If required by the Engineer in Charge, further testing from any Government approved Testing laboratory shall have to be conducted by the agency at their own cost.
8. Deleted.
9. Deleted.

PRICE ADJUSTMENT / PRICE PREFERENCE

10. i) No adjustment of Price or Price Escalation of any kind will be allowed. Adjustment of price (increase or decrease).
- ii) No price preference will be allowed for the work under this NIT.
11. No Mobilization Advance / Secured Advance will be allowed.
12. Prospective applicants note carefully the minimum qualification criteria as mentioned in instruction to bidders before tendering the bids.
13. No Conditional Bid / Tender will be accepted under any circumstances.
13. Requirement of Principal Machineries which must be possessed by [Non Statutory Document] by the Bidders.
14. Before uploading tender document through e-filing each page of the tender documents are to be signed by the Bidder/ owner/ partner / authorized signatories having legal authority to do so, failing which the Bid will be treated as informal.

15. The employer reserves the right to accept or reject any / all offer without assigning any reason whatsoever and is not liable for any cost that might have incurred by the Bidder at the stage of Bidding.

The Bidders Net Worth for the last year calculated on the basis of capital, Profit and free reserve available to the firm should be positive.

16. IMPORTANT INFORMATION

- A. Current Schedule of Rates for P.W.D. (Electrical) with effect from 01.11.2017 as well as market rates will be applicable in this Tender including 1% cess.

B. DATE & TIME SCHEDULE

Sl. No.	PARTICULAR	DATE & TIME
i)	Date of uploading of N.I.T and Tender Documents (online)	12.03.2022
ii)	Documents Sell / download start date (online)	12.03.2022 at 11.00AM
iii)	Bid Submission Upload Start date (online)	12.03.2022 at 4.00 P.M.
iv)	Bid Submission Upload End date (online)	21.03.2022 up to 3.00 P.M.
v)	Date & Place for Opening of Technical bid (online) for the Bidders	21.03.2022 at 4.00 P.M.
vi)	Date & place for opening of financial proposal	To be notified later

C: LOCATION OF CRITICAL EVENTS

Bid Opening: “West Bengal Medical Services Corporation Limited, Swasthya Sathi Building, GN-29, Sector –V, Saltlake, Kolkata-700091” Interested bidder may be presented at West Bengal Medical Services Corporation Limited, Swasthya Sathi Building, GN-29, Sector –V, Saltlake, Kolkata-700091 during opening of bid. Managing Director, West Bengal Medical Services Corporation Limited may call open bid /sealed bid after opening of the said bid to obtain the suitable rate further, if it is required. No objection in this respect will be entertained if raised by any bidder present or absent during opening of tender.

17. In case of any unscheduled holiday on the aforesaid dates [Sl. (v)], the next working day will be treated as schedule / prescribed date for the same purpose.
18. The successful Bidder shall have to execute Formal Agreement with Managing Director, West Bengal Medical Services Corporation Limited within 7(Seven) days from the issuance of Provisional Work order.
19. Bank guarantee shall be accepted for the purpose of the security.
20. Deleted.
21. The intending bidder(s) required to quote the rate **(percentage above/below/at par)** over the total estimated cost put to tender online considering that no escalation and / or price adjustment will be allowed by the department under any circumstances.
22. The Bidder has to visit and examine the site of works and its surroundings and obtained all information that may be necessary for preparing Bid and entering into an agreement for the work / works as mentioned in the NIT. The costs for visiting the working site shall be at the bidders own expense.
23. The Working Capital shall not be less than 15% (fifteen) percent of the amount put to tender out of which minimum 10% (ten) percent shall be of the applicant's own resource. [Non Statutory Documents (Financial Statement)]
24. Prospective Bidder shall have to execute the work in such manner so that appropriate service level of the Building under improvement is to be maintained during progress of the work and during **Defect Liability Period of 1(one) Year** for the works from the date of successful completion of the work up to the entire satisfaction of the Engineer in Charge. If any defect / damage is detected during this period as mentioned above the contractor shall make the same good at his own expense to the satisfaction of the Engineer in Charge or in default the Engineer in Charge may cause the same to be made good by other agency and deduct the cost (of which the certificate of the Engineer in Charge shall be final) from his security deposit or any sums that may be then, or at any time thereafter become due to the contractor. Security Deposit shall become payable only after expiry of the **Defect Liability Period** after making necessary deduction if applicable.

25. If more than one Bidder quoted same rate and which are found lowest at the time of opening, such similar multiple rates will not be entertained / accepted. Lowest offer will be ascertained by sealed bid amongst the lowest bidder.
26. At any stage during scrutiny, if it is found that the credential or any other papers which the Bidder uploaded during Bidding process, found incorrect / manufactured / fabricated, that bid will be considered as non- responsive and outright rejected with forfeiture of Earnest Money and action will be taken as per stipulation of IT Rules in force.
27. List of “Technically Qualified Bidders” will be published in the web portal only. Financial Bid will be opened within a short period after such publication. Therefore, Bidders are requested to view the tender status on a regular basis. In case of there be any objection regarding Pre-qualification / list of “Technically Qualified Bidders”, that objection should be lodged to the Managing Director, WBMSCL within 48 hours from the date of publication of list of qualified Agency and beyond that time schedule no objection will be entertained by the Tender Evaluation Committee
28. Before issuance of Letter of Acceptance / Provisional Work order, the tender accepting authority may verify the credential & other documents of the lowest bidder so uploaded online if found necessary. If it is found such document incorrect/ manufactured / fabricated, Letter of Acceptance / Provisional Work order will not be issued in favour of the bidder under any circumstances and action will be taken accordingly.
29. In case of Ascertaining of Authority at any stage of application or execution of work, necessary registered Power of Attorney is to be produced.
30. The Earnest Money may be forfeited if;-
- a) If the Bidder withdraws the Bid during the period of Bid validity.
 - b) In case of successful Bidder, if the Bidder fails to execute formal agreement within the stipulated time period.
 - c) During scrutiny, if it is come to the notice of tender inviting authority that the credential or any other document which were uploaded & digitally signed by the Bidder are incorrect / manufactured / fabricated.
31. If any discrepancy arises between two similar clauses on different notifications, the clause as stated in later notification will supersede former one in following sequence;-
- a) Notice Inviting Tender
 - b) Special Terms and Conditions
 - c) Financial Bid
 - d) Schedule of Works

All works covered in the clause appearing hereinafter shall be deemed to form a part of the appropriate item or items of works appearing in the work schedule whether specifically mentioned in any clause or not and the rates quoted shall include all such works unless it is otherwise mentioned that extra payment will be made for particular works.

32. The bidders must have valid Electrical Contractors’ License with full time engagement of an Electrical Supervisor Competency on the parts 1, 2 & 11 or equivalent National Supervisors’ Certificate of competency (Self Attested scan copy of valid “Electrical Contractors’ License,” “Supervisors’ Certificate of Competency” and authentic Notarized document regarding engagement of Electrical Supervisors as submitted to the licensing board, “Govt. of West Bengal” require in Non-Statutory document).
33. Prospective bidders must have sufficient credentials to participate in the tender (electrical) as per notification of Clause No 3.
34. For any typographical mistake in case of Unit, Rate, Quantity, Amount, any type of nomenclature in items of works/item itself including description etc. whatsoever as stated in BOQ, that can’t be claimed during agreement or so. In that case sanctioned estimate will be binding criteria.
35. As per memorandum no. 4608-F(Y) dated.18.07.2018 of Finance Department Govt. of West Bengal, the successful bidder will have to submit Additional Performance Security @10% of the tendered amount, if the accepted bid value is 80% or less of the estimated amount put to tender. The Additional Performance Security shall be submitted in the form of Bank Guarantee from any Scheduled Bank before issuance of the Work Order. If

the bidder fails to submit the Additional Performance Security within seven working days from the date of issuance of Letter of Acceptance, his Earnest Money will be forfeited and other necessary actions as per NIT like blacklisting of the contractor, etc, may be taken. The Bank Guarantee shall have to be valid upto end of the Contract Period and shall be renewed accordingly, if required. The Bank Guarantee shall be returned immediately on successful completion of the Contract. If the bidder fails to complete the work successfully, the Additional Performance Security shall be forfeited at any time during the pendency of the contract period after serving proper notice to the contractor. Necessary provisions regarding deduction of security deposit from the progressive bills of the contractor as per relevant clauses of the contract shall in no way be altered/affected by provision of this Additional Performance Security.

The eligibility of the Bidder will be ascertained on the basis of document submitted / uploaded & digitally signed in support of the minimum criterion as mentioned above. If any document submitted / uploaded by the Bidder is either manufactured or false the eligibility of Bidder will be out rightly rejected at any stage without prejudice and action will be taken as per stipulation of IT Rules in force.

Sd/-

**Managing Director
West Bengal Medical Services Corporation Limited**

Payment Schedule

Payment will be made according to B.O.Q.

INSTRUCTION TO BIDDERS

SECTION – A

General guidance for e-Tendering

Instructions/ Guidelines for tenders for electronic submission of the tenders online have been annexed for assisting the contractors to participate in e-Tendering.

1. Registration of Contractor Any contractor willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement system, through logging on to **<https://etender.wb.nic.in>**. The contractor is to click on the link for e-Tendering site as given on the web portal.
2. Digital Signature certificate (DSC) Each contractor is required to obtain a class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders, from the approved service provider of the National Information's Centre (NIC) on payment of requisite amount details are available at the Web Site stated in Clause-2 of Guideline to Bidder DSC is given as a USB e-Token.
3. The contractor can search & download NIT & Tender Documents electronically from computer once he logs on to the website mentioned in Clause 2 using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.
4. Participation in more than one work a prospective bidder shall be allowed to participate in the job either in the capacity of individual or as a partner of a firm. If found to have applied severally in a single job, all his applications will be rejected for that job.
5. **Submission of Tenders/General process of submission:** Tenders are to be submitted through online to the website stated in Cl. 2 in two folders at a time for each work, one in Technical Proposal & the other in Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC) The documents are to be uploaded (virus scanned copy) duly Digitally Signed. The documents will get encrypted (transformed into non readable formats). A. Technical & Financial proposal: The proposal should contain scanned copies of the following in two covers (folders).

A-1. Statutory Cover file Containing.

Technical Bid:

- i) Earnest money (EMD) as prescribed in the NIT
- ii) NIT
- iii) Forms (As mentioned in the NIT, Section-B)

Financial Bid:

- iv) The rate will be quoted in the BOQ quoted rate will be encrypted in the B.O.Q. under Financial Bid.

A-2. Non statutory / Technical Documents

- i. Current Income Tax return (for the assessment year 2020-21), PAN, GST Registration Certificate & Professional Tax receipt challan for the financial year 2021-22
- ii. Valid enlistment renewal certificate
- iii. Registered Deed of partnership Firm
- iv. Trade License from the respective Municipality/Panchayet etc. (in case of S & P Contractors only)
- v. Certificate of Registration' from the respective Assistant Registrar of Co – operative Societies (for Regd. Unemployed Engineer's Co – Operative Society Ltd.)
- vi. Requisite Credential Certificate as mention in Clause [2(i)] of this N.I.T.
- vii. Valid Electrical Contractors' License with full time engagement of an Electrical Supervisor Competency on the parts 1, 2 & 11 or equivalent National Supervisors.

Note: Failure of submission of any of the above mentioned documents will render the tender liable to be rejected for both statutory & non statutory cover.

THE ABOVE STATED NON-STATUTORY/TECHNICAL DOCUMENTS SHOULD BE ARRANGED IN THE FOLLOWING MANNER

Click the check boxes beside the necessary documents in the My Document list and then click the tab “Submit Non Statutory Documents’ to send the selected documents to Non-Statutory folder. Next Click the tab “Click to Encrypt and upload” and then click the “Technical” Folder to upload the Technical Documents.

Sl. No.	Category Name	Sub Category Descriptio	Details
A.	CERTIFICATES	CERTIFICATES	Current Income Tax return (for the assessment 2020-21), PAN, GST Registration Certificate & Professional Tax receipt challan for the financial year 2021-22
B.	Company Details	Company Details – I	‘Certificate of Registration’ from the respective Assistant Registrar of Co – operative Societies (for Regd. Unemployed Engineer’s Co – Operative Society Limited), Valid Electrical Contractors’ License with full time engagement of an Electrical Supervisor Competency on the parts 1, 2 & 11 or equivalent National Supervisors.
C.	Credential (in applicable cases)	Credential	1. Documents of Credential (in the form of work completion certificates and payment certificates) as mentioned in Clause No. [2(i)]

B. Technical proposal

- i. Opening of Technical proposal: - Technical proposals will be opened by the Managing Director, West Bengal Medical Services Corporation Limited and his authorized representative electronically from the web site stated using their Digital Signature Certificate.
- ii. Intending bidders may remain present if they so desire.

C. Financial proposal

- i) The financial proposal should contain the following documents in one cover (folder) i.e. Bill of quantities (BOQ). The contractor is to quote the rate (**Offering Above/ Below/ At per**) online through Computer in the space marked for quoting rate in the BOQ and also digitally signed and upload the Schedule of works given in the format of Annexure)
- ii) Only downloaded copies of the above documents are to be uploaded virus scanned & Digitally Signed by the contractor.

PENALTY FOR SUPPRESSION / DISTORTION OF FACTS OR SUBMISSION OF INCORRECT INFORMATION:

If any tenderer fails to produce the original hard copies of the documents (specially Completion Certificates and audited balance sheets), or any other documents on demand of the Tender Opening Authority within a specified time frame or if any deviation is detected in the hard copies from the uploaded soft copies or if there is any suppression of facts, the Tenderer will be suspended from participating in the tenders on e-Tender platform for 3 (three) years. In addition, his user ID will be deactivated and Earnest Money Deposit will stand forfeited. Besides, WEST BENGAL MEDICAL SERVICES CORPORATION LIMITED may take appropriate legal action against such tenderer.

AWARD OF CONTRACT

The Tender Inviting Authority reserves the right to accept or reject any Tender and to cancel the Tendering process and reject all Tenders at any time and prior to the Award of Contract without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Bidder or Bidders of

the ground for Employer's action.

The Bidder whose Bid has been accepted will be notified by the Tender Inviting & Accepting Authority through acceptance letter/email..

The notification of award will initiate the execution of agreement.

The Agreement in prescribed composite Tender Form will incorporate all agreements between the Tender Accepting Authority and the successful Bidder. All the tender documents including NIT B.O.Q, STC & TF. will be the part of the Contract Documents.

SECTION – B

FORM –I

B.1. PRE-QUALIFICATION APPLICATION.

To
Managing Director,
West Bengal Medical Services Corporation Limited

Ref: - Tender for _____
_____work_____

N.I.T. No: WBMSCL/NIT- 94/2021, Dated – 11/03/2022 of West Bengal Medical Services Corporation Limited

Dear Sir,
Having examined the Statutory, Non statutory, Instruction to Bidders & NIT documents along with its Agenda & corrigendum, I /we hereby submit all the necessary information and relevant documents for evaluation

The application is made by me / us on behalf of _____

In the Capacity _____ duly authorized to submit the order.

The necessary evidence admissible by law in respect of authority assigned to us on behalf of the group of firms for Application and for completion of the contract documents is attached herewith. We are interested in bidding for the work(s) given in Enclosure to this letter.

We understand that:

- (a) Tender Inviting & Accepting Authority/Engineer-in-Charge can amend the scope & value of the contract bid under this project.
- (b) Tender Inviting & Accepting Authority/Engineer-in-Charge reserve the right to reject any application without assigning any reason.

(c) Enclo:- e-Filling:-

- (d) 1. Statutory Documents.
- (e) 2. Non Statutory Documents.

Date: -

Signature of applicant including title
and capacity in which application is made.

SECTION - B

FORM - II

B.2.

Work in progress.

Sl.	Name of the work.	Tender No.	Tendered Amount.	% of work Executed.

Work order issued but work not started.

Sl.	Name of the work.	Tender No.	Tendered Amount.	Status.

Signature

Date: -----

Name of the Firm with Seal.

SECTION – B

FORM- III

B.3. STRUCTURE AND ORGANISATION.

B.3.1. Name of applicant::_____

B.3.2. Office Address:: _____

Telephone No.::_____

Mobile No. :_____

E-mail ID : _____

B.3.3. Name & address of Bankers::_____

B.3.4. Attach an organization chart showing the structure of the company with names of Key personnel and technical staff with Bio-data.

Note: Application covers Proprietary Firm, Partnership, Limited Company or Corporation,

Date:

Signature of applicant.
including title and capacity in which application is made.

FORM – IV

B.4. EXPERIENCE PROFILE.

B.4.1. Name of the Firm: _____

**B.4.2. LIST OF PROJECTS COMPLETED THAT ARE SIMILAR IN NATURE TO THE WORKS
HAVING MORE THAN 40% OF THE PROJECT COST EXECUTED DURING THE LAST FIVE YEARS.**

Name, Location & nature of work	Deptt. Concern	Engineer- in- Charge	Contract price in Indian Rs.	% of Participation of company	Original Time Schedule		Actual Time Schedule		Reasons for delay in completion (if any)
					Start Date	Completion Date	Start Date	Completion Date	

Note: a) Certificate from the Employers to be attached

b) Non-disclosure of any information in the Schedule will result in disqualification of the firm.

Date:

Signature of applicant
including title and capacity in which application is made.

[Print out in Agency's Letter head & upload the filled proforma with digitally signed as stated below]

DECLARATION BY THE TENDERER

I/We have inspected the site of work and have made myself/ourselves fully acquainted with local conditions in and around the site of work. I /We have carefully gone through the Notice Inviting Tender and other tender documents mentioned therein along with the drawing attached. I/We have also carefully gone through the 'Priced schedule of Probable Items and Quantities'.

My/Our tender is offered taking due consideration of all factors regarding the local site conditions stated in this Detailed Notice Inviting Tender to complete the proposed work referred to above in all respects.

I/We promise to abide by all the stipulations of the contract documents and carry out and complete the work to the satisfaction of the department.

I/We declare that I/We in the capacity of individual/ as a partner of a firm not debarred in the last financial year.

I/We also agree to procure tools, plants and others as per requirement, at my/our cost required for the work.

Date :

Signature of Tenderer

Postal address of the Tenderer

Name of the Firm with Seal



PRINTED TENDER FORM

**WEST BENGAL MEDICAL
SERVICES CORPORATION
LIMITED**

PRINTED TENDER FORM

eNIT no. WBMSCL/NIT- 94/2021

Dated – 11/03/2022

TENDER AND CONTRACT FOR WORKS GENERAL RULES AND DIRECTIONS FOR GUIDANCE OF BIDDERS/CONTRACTORS

TENDER FOR WORKS

I/We on behalf of West Bengal Medical Services Corporation Limited hereby tender for the execution of the work specified in the underwritten “Memorandum” within the time specified in such “Memorandum” at the rates specified therein, and in accordance, in all respects within the Rules contained in clauses hereinafter, in all of the annexed General Conditions of Contract (GCC), Special Conditions of Contract (SCC) and with such other materials as are provided for, by and in all other respects in accordance and with such conditions so far as applicable.

MEMORANDUM

(a) If several sub-works are included, they should be detailed in a separate list

(a) General description of work

(b) Estimated cost put to Tender ... Rs

(c) Earnest Money Deposit ... Rs.

(d) Security Deposit (including earnest money) ... Rs

(e) Percentage, if any, to be deducted from bill ... Rs

.....
(Rupees.....)

Percentage.....)

(f) Time allowed for the work from date of written order to Commencecalendar months.

For offline tender during submission of bid and during execution of Agreement for online tender

Name of Work Tendered	Amount Put to Tender	Rate Quoted by the Bidder (% above or less or at par)	Tendered Amount (Contract Price both in words & figures)

Should this Tender be accepted, I/we hereby agree to abide by and fulfill all of the terms and provisions of the said conditions of contract annexed hereto so far as applicable, or in default thereof to forfeit and pay to the Governor or his/her successions in office, the sums of money mentioned in the said conditions.

**Give particulars and numbers*

Strike out (a) or (b) as applicable.

A sum of Rs * has been furnished through online net banking/RTGS/NEFT transfer as earnest money deposit [(a) the full value of which is to be absolutely forfeited to the Governor or his/her successors in office, without prejudice to any other rights or remedies of the said Governor or his successors in office. Should I/we not deposit the full amount of security specified in the above 'Memorandum' in accordance with clause I(A) of the said conditions of contract, the said sum of Rs shall be retained by the Government as on account of such security as aforesaid:(b) the full value of which shall be retained by Government on account of the security deposit specified in clause I (B) of the said conditions of contract].

T Signature of Contractor before submission of tender

Dated the _____ Day of _____ 20____

X T
(Witness)

X Signature of Witness to Contractor's signature

Address
Occupation

XX Signature of the Executive Engineer/AE on behalf of the Department.

The above tender is here by accepted by me for and on behalf of the Governor of the State of west Bengal

XX

Dated the _____ Day of _____ (Month) _____ (Year)

GENERAL CONDITIONS OF CONTRACT

Clause 1 1.1 Earnest Money - The person/persons who intend to participate in the Tender for an Estimated Amount up to Rs. 25 (Twenty Five) Crore shall have to deposit Earnest Money @ 2% (Two percent) of the Estimated Amount put to Tender or Rs 10 Lakh, whichever is lower.

In case of offline tender earnest money is to be submitted in the form of Bank Draft or Bankers Cheque.

In case of Online Tender (e-Tender) earnest money is to be deposited through e-tender portal (<https://wbttenders.gov.in>) by selecting from either of the following payment modes:

- i) Net banking (any of the banks listed in the ICICI Bank Payment gateway) in case of payment through ICICI Bank Payment Gateway.
- ii) RTGS/NEFT in case of offline payment through bank account in any Bank with his/her tender/quotation as per Memorandum No. 3975-F(Y) dated: - 28.07.2016 of Secretary to the Government of West Bengal, Finance Department. The L1 bidder shall make the Formal Agreement after getting the Letter of Acceptance (LOA) issued by the Tender Accepting Authority. Failure to make the Formal Agreement within the time period as prescribed in the Letter of Acceptance (LOA) for the purpose, may be construed as an attempt to disturb the tendering process and will be dealt with accordingly in a legal manner as deemed fit including blacklisting the bidder.

1.2 Security Deposit - While making any payment to the person(s) whose tender has been accepted (hereinafter shall be called the contractor) for work done under the contract, the authority making payment shall deduct such sum which together with the Earnest Money already deposited and converted into security deposit, shall amount to 10% of the value of works executed at the material point of time and paid during the progressive running accounts bills, so that total deduction together with

Earnest Money constitute 10% of the tendered value of work actually done.

In case of excess/and supplementary work over the tendered amount, additional security @ of 10% of such additional amount is to be deposited for all such excess/ and supplementary works beyond the tendered amount before payment of final bill.

Compensation of all other sums of money payable by the contractor to the Government under the terms of the contract may be deducted from the security deposit.

However, even though the earnest money deposited exceeds the prescribed percentage, due to reduction of tendered amount due to any reason whatsoever, such additional earnest money shall be deemed to have been converted into security and further deductions from progressive bills shall be made, taking into consideration the enhanced component of earnest money so converted into security.

Security deduction will not normally be required for hiring of inspection vehicles and boats etc., supply of tools & plants, furniture and computer peripherals. Separate agreement may be required in those cases, particularly for consultancy and RFP for EPC, which shall be made in standard formats to be approved by the Government.

After completion of the work, the Contractor may opt for refund of the Security Deposit by replacing equal amount of Bank Guarantee of scheduled Bank valid up to 3 months beyond the defect liability period.

Additional Performance Security @ 10% of the tendered amount in the form of Bank Guarantee from a Scheduled Bank, valid up to the date of completion of work, shall be obtained from the successful bidder, if the accepted bid value is 80% or less than the estimated amount put to tender.

If the bidder fails to submit Additional Performance Security within 7 (seven) working days from the date of LoA or the time period as approved by the Tender inviting Authority, his Earnest Money will be forfeited.

If the bidder fails to complete the works successfully, the Additional Performance Security along with Security Deposit lying with the Government shall be forfeited at any time during the pendency of contract period as per relevant Clauses of the Contract.

Necessary provisions regarding deductions of Security Deposit from the progressive bills of the Contractor as per relevant clauses of the contract will in no way be affected/ altered by this Additional Performance Security.

Clause 2. The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be reckoned from the date on which the order to commence work is given to the contractor. The work shall throughout the stipulated period of the contract be proceeded with all due diligence. Time being deemed to be the essence of the contract on the part of the contractor, the contractor shall be bound in all cases, to achieve the 'Milestones' as defined under Clause 5 and specified in the NIT into various 'Identifiable and quantifiable construction related stages' pertaining to the work. In the event of the contractor failing to comply with any of the conditions related to achieving the 'Milestones' within the specified time period prescribed for such 'Milestone' plus one month, he/she shall be liable to pay compensation.

If the contractor fails to commence and/or maintain required progress viz. Milestones defined in the Notice Inviting Tender over the total time allotted for its full completion and in terms of clause 5 or fails to complete the work and clear the site on or before the end of contract period or extended date of completion, he/she shall, without prejudice to any other right or remedy available under the law on account of such breach, pay as agreed compensation to the implementing Department.

This will also apply to items or group of items for which a separate period of completion has been specified.

Compensation for delay of work: @ 2% (Two percent) of the tendered value of work arrived for each month of delay to be computed on per day basis subject to the ceiling limit of security deposit already withheld or due to be withheld during imposition of the said clause and minimum payable compensation equivalent to the Earnest Money deposited (EMD).

*Compensation
for delay*

Provided always, that the total amount of compensation for delay, to be paid under this clause shall not exceed 10% of the tendered value of work or the tendered value of the item or group of items of the work, for which a separate period of completion is originally given.

*Action when whole
of security deposit
is forfeited*

The amount of compensation may be adjusted or set-off against any sum payable to the contractor under this contract, if the contractor catches up with the progress of work subsequently, part or full of the desired progress as per the contract in accordance with the decision of the Tender Accepting Authority, under powers delegated by Government to be communicated by the Engineer-in-Charge, the withheld amount shall be released. However, no interest, whatsoever, shall be payable on such withheld amount.

Force majeure :-If the work(s) be delayed for the following reasons:-

Due to war, internal emergency and other conditions such as abnormally bad weather, flood, cyclone natural calamity or serious loss or damage by fire or civil commotion, the contractor shall immediately give notice thereof in writing to the Engineer-in-charge but shall nevertheless use constantly his/her best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-charge to proceed with the works.

*Contractor
remains liable
to pay
compensation, if
action is not
taken under
Clause 3*

Clause 3. Subject to other provisions contained in this clause, the Engineer-in-charge with the prior approval of Tender Accepting Authority, may, without prejudice to his/her any other rights, remedy against the Contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provision of the contract or otherwise, and whether the date of completion has or has not been elapsed, by notice in writing, absolutely determine the contract in any of the following cases:

- (i) If the Contractor has been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that work is being performed in an inefficient or otherwise improper or un-workman like manner, shall omit to comply with the requirements of such notice for a period of seven days thereafter;
- (ii) If the Contractor has without reasonable cause suspended the progress of work, or has failed to proceed with the work with due diligence so that, in the opinion of the Engineer-in-Charge he/she will be unable to secure completion of the work by the schedule date for completion, and continues to do so after a notice of seven days in writing from the Engineer-in-charge;
- (iii) If the Contractor fails to complete the work within the stipulated date or the Milestones/items of work within individual dates of completion, if any, stipulated on or before such date(s) of completion and does not complete them or reach the defined Milestones within the period specified in the notice given in writing to that effect by the Engineer-in-charge;
- (iv) If the Contractor persistently neglects to carry out his/her obligations under the contract and/or commits default by not complying with any of the terms & conditions of the contract and does not remedy it, or take effective steps to remedy it, within seven days after a notice in writing is given to him/her to that effect by the Engineer-in-Charge;
- (v) If the Contractor being an individual, or a firm, or any partner thereof, shall at any time be adjudged insolvent or have a 'Receiving Order' or Order for administration of his/her Estate made against him/her, or take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force, or make any conveyance or assignment of his/her effects or composition or arrangement for the benefit of his/her creditor or purport to do so, or if any application be made under Insolvency Act for the time being in force for the sequestration of his/her Estate, or if a trust deed is executed by him/her for benefit of his/her creditors;
- (vi) If the Contractor being a Company pass a resolution or the court delivers an order of judgement that the Company shall be wound up, or if a receiver or a manager on behalf of a creditor be appointed, or if a circumstance arise which entitle the Court or the creditor to appoint a receiver or a manager or which entitle the court to issue a winding up order;
- (vii) If the Contractor shall suffer an execution order being levied on his/her goods and allows it to be continued for a period of 21 days;
- (viii) If the Contractor assigns without prior written approval of the Tender Accepting

Authority, transfers, sublets (engagement of labour on piece work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire work or any portion thereof without prior written approval of the Engineer-in-charge;

- (ix) AND THEREFORE, the Contractor has made himself/herself liable for action under any of the cases aforesaid, the Engineer-in-charge on behalf of the Government with the prior approval of Tender Accepting Authority, shall have the powers to adopt any of the following actions, as he/she may deem best suited to the interest of the Government:-
- (a) To determine the contract as aforesaid, of which rescission notice in writing and costs to be recovered for works since executed subject to a minimum of the amount of Earnest Money deposited by the Contractor under the hand of Engineer-in-charge, shall be the conclusive evidence. Upon such determination, the Earnest Money Deposit, Security Deposit already recovered for executed works and performance guarantee, if any under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government.
 - (b) After giving notice to the Contractor to measure up the work executed and to take such whole or the balance or part thereof, as shall be un-executed out of his/her hands, and to give it to another Contractor to complete the balance work. The Contractor, whose contract is determined or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.
 - (c) To employ labour paid by the implementing Department, and to supply materials, to carry out the works or any part of the work, debarring the contractor and debiting the cost of labour and price of materials (of the amount of which cost and price determined by certificate of the Engineer-in-Charge shall be final and conclusive against the contractor) and crediting him/her with the value of the work done, in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his/her contract; the certificate of the Executive Engineer as to the value of the work done shall be final and conclusive against the contractor.

*Contractors
remains liable to
pay compensation
if action not taken
under Clause 3*

In the event of above course being adopted by the Engineer-in-charge, the Contractor shall have no claim of compensation for any loss sustained by him/her by reason of his/her having purchased or procured any material or entered into any engagement or made any advances on any account or with a view to execute the work or the performance of the contract. In case, action is taken under any of the provisions aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof actually performed under this contract, unless and until the Engineer-in-charge has certified in writing that the performance of such work and value payable in respect thereof, and he/she shall only be entitled to be paid the value so certified.

Clause 3A. In case, the work cannot be started due to reasons not within the control of the Contractor within 1/4th (one fourth) of the stipulated time for completion of the work or 45 days whichever is less, which is accepted as a valid & justified reason by the Tender Accepting Authority, either party viz. Contractor & the Engineer-in-Charge may close the contract with the approval of Tender Accepting Authority. In such an eventuality, the earnest money deposited and the security of the contractor shall be refunded, but no payment on account of interests, loss of profit or damages etc. shall be payable at all.

Clause 3B. In case a continuing work cannot be completed due to reasons beyond the control of the contractor, like Force Majeure enumerated later under Clause 5, the contract may be terminated as stated in clause 3A above by the Engineer-in-Charge with the consent of the contractor and approval of the Tender Accepting Authority.

Clause 4. In cases in which any of the powers conferred upon the Engineer-in-Charge under Clause 3 hereof shall have become exercisable and the same had not

*Power to take
possession of or
require removal
of or sell
Contractor's
plant*

been previously exercised, non-exercising thereof shall not constitute as a waiver of any of the conditions hereto, and such powers shall, notwithstanding be exercisable in the event of any future case of default by the contractor, for which by any clause or clauses hereof, he/she is declared liable to pay compensation amounting to whole of his/her security deposit, and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force either of the powers under ix (a) or (c) vested with him/her under the preceding clause, he/she may if he/she so desires, take possession of all or any tools & plant, materials and stores, in or upon the work, or the site thereof, or belonging to the contractor, or procured by him/her and intended to be used for execution of the work, or any part thereof, paying or allowing for the same in account at the contract rates or in case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge whose certificate thereof, shall be final and binding. Otherwise, the Engineer-in-Charge may deliver notice in writing to the contractor or his/her clerk, foreman or other authorized agent, requiring him/her to remove such tools & plant, materials or stores from the premises within a time to be specified in such notice; and in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sale them by public auction or private sale on account of the contractor and at his/her risk, in all respects, and the certificate of the Engineer-in-Charge as to the expense of any such removal, and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor.

Clause 5. The time allowed for execution of a work as specified in the 'Schedule of Work' or in the extended time in accordance with the terms and conditions shall be the essence of the contract. Execution of work shall commence from such time period as mentioned in the said schedule, or from the date of handing over of the site to the contractor whichever is later. If the contractor commits default in commencing execution of the work as aforesaid within thirty days, without justifiable reasons included under Force Majeure or other such reasons beyond the control of the contractor, in which case to be reported within seven days by the contractor, considered valid and cogent by the Engineer-in-Charge, the Engineer-in-Charge shall after passing of thirty days from the date of scheduled commencement of work as per work order, with the prior approval of the Tender Accepting Authority, without prejudice to any other right to remedy available in law, be at liberty to apply clause 2 and subsequently clause 3 of the tender document.

5.1 As soon as possible after the contract is executed, signed and agreed, the contractor shall submit a 'Time and Progress Chart' for each broad activity (Milestone) and get it approved by the Engineer-in-Charge. The chart shall be prepared in direct relation to the time slated in the Notice Inviting Tender (NIT) document, for completion of items or group of items of the work. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work. This may be amended, as necessary, by an agreement between the Engineer-in-Charge and the contractor within the limitations of time imposed in the NIT document. Further, to ensure good progress during execution of work, the contractor shall in all cases, in which the time allowed for any work exceeds one month (save and except for special jobs for which a separate programme has been agreed upon) to complete the work as per defined 'Milestones' given in such 'Schedule of Work' defined clearly in the NIT itself into various 'Identifiable and quantifiable construction related stages' related with the type and nature of work, and that the 'total time allowed for completion of work' is to be broken up against achievement of those stages during the construction / progress of work to ensure a periodic monitoring of progress and enable the contractor and the Engineer-in-Charge to take corrective measures from time to time.

5.2 If the work(s) be delayed by:

Force majeure, due to war, internal emergency and other conditions such as abnormally bad weather, flood, cyclone natural calamity or serious loss or damage by fire or civil commotion, strike or lockout affecting procurement of construction materials or any of the trades employed in the work, or any other cause which in the absolute discretion of the Engineer-in-Charge is beyond the contractor's control, then upon happening of any such event causing delay, the

contractor shall immediately give notice in writing to the Engineer-in-Charge but shall nevertheless use constantly his/her best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

- 5.3** Request for rescheduling of 'Milestones' of various activities and extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the event causing delay in the prescribed form. The contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- 5.4** If any such case the Engineer-in-Charge, with the approval of Tender Accepting Authority, may give a fair and reasonable extension of time and reschedule the activity wise 'Milestones' for completion of the work. Such extension shall be communicated to the contractor by the Engineer-in-Charge with the approval of Tender Accepting Authority in writing within maximum 1 (one) month of the date of receipt of such request.

Final Certificate

Clause 6. On completion of work, the contractor shall be furnished with a certificate by the Engineer-in-Charge of such completion, but no such certificate shall be given, nor shall the work be considered to be completed until and unless the contractor shall have removed from the work premises on which the work is executed, all scaffolding, surplus materials and rubbish, and cleaned off the dirt from wood works, doors, windows, floors, or other parts of any building, upon or about which the work is executed, or of which he may have had possession for the purpose of the execution thereof, nor until the work shall have been measured by the Engineer-in-charge whose measurements shall be binding and conclusive against the contractor. If the contractor shall fail to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish and cleaning off dirt on or before the date fixed for completion of the work, the Engineer-in-charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish, and dispose of the same as he/she thinks fit, and clean off such dirt as aforesaid; and the contractor shall forthwith be bound to pay the amount of all expense so incurred, and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid, except for any sum actually realized by the sale thereof.

Payment on inter- mediate certificates to be regarded as advances

Clause 7. No running account bill payment shall be normally made for works less than 30 (Thirty) percent of Tendered Value or up to Rs 25.00 lakh, whichever is less, till after the whole of the work shall have been completed and certificate of completion given. For works of tendered value above Rs 25.00 lakh, for running account bill payment, the contractor shall on submitting a bill of at least Rs 25.00 lakh there for, be entitled to receive a payment proportionate to the part thereof, approved and passed by the Engineer-in-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. But all such intermediate payments shall be regarded as payments by way of advance against the final measured bill payment only and not as payments for work actually done and completed, and shall not preclude the bad, unsound, and imperfect or unskillful work which is to be removed and taken away and reconstructed, or re-erected or to be considered as an admission of the due performance of the contract, or any part thereof, in any respect, or the accruing of any claim, nor shall it conclude, determine or affect in any way the powers of the Engineer-in-charge under these conditions or any of them as to the final settlement and adjustment of the accounts or otherwise or in any other way vary or affect the contract. The final bill shall be submitted by the contractor within one month of the date fixed for completion of the work, otherwise the Engineer-in-charge's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on all parties.

Bills to be submitted monthly

Clause 8. Works bill shall be submitted by the contractor each month, after fulfilling above clause, on or before the date fixed by the Engineer-in-charge, for all works executed during the previous month, and the Engineer-in-charge shall take or cause to take the requisite measurement for the purpose of having the same verified, and the claim as far as admissible adjusted, if possible, before the expiry of fourteen days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-charge may depute a Junior Engineer to measure up the said

work in presence of the contractor, whose countersignature in the measurement book will be sufficient warrant; and the Engineer-in-charge may prepare a bill from such list which shall be binding on the contractor in all respects.

Within 10 (Ten) days of completion of work, the contractor shall give notice of such completion to the Engineer-in-charge and within 14 (Fourteen) days of receipt of such notice, the Engineer-in-charge shall inspect the work, and if there is no defect in the work, he/she shall furnish to the contractor a final certificate of completion. Otherwise, a provisional certificate of physical completion indicating defects (a) to be rectified by the Contractor and/or (b) for which payment will be made at reduced rates, shall be issued. Such reduced rate is to be imposed with the approval of Superintending Engineer concerned.

Clause 8A. When annual repair and maintenance work is carried out, the splashes and droppings from white washing, colour washing, painting etc., on walls, floors, windows shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all the other items of work in the contract. In case, the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either Departmentally or through any other contractor. Before taking such action, the Engineer-in-Charge shall give ten days notice in writing to the contractor.

Clause 8B. The Contractor shall submit completion Plan/Drawing as required in the 'General Specification' for Civil as well as Electrical Works as applicable within 30 days of completion of the work.

Clause 9. The Contractor shall submit all bills in printed forms, as per format prescribed by Government of West Bengal, in the office of the Engineer-in-Charge, and the charges in the bills shall always be entered at the rates specified in tender or in case of any extra work ordered in pursuance of these conditions, and not mentioned or provided for in the tender at rates thereafter provided for such work.

Clause 9A (1) Payments due to the contractor may, if so desired by him/her be made to his bank through e-Pradan, details of which has to be directly furnished to the Engineer-in-charge.

While the online receipt given by such Banks shall constitute a full and sufficient discharge/acquittance for the payment, the contractor should wherever possible present his/her bills duly receipted and discharged through his/her Banker/s.

(2) In the case of bills, which the contractor presents for payment direct, and which are not endorsed in favour of the Bank, while efforts will be made to secure payment to the financing Bank, payments made to the contractor should be accepted as full acquittance so far as the Government is concerned. As a part of the arrangement, the financing Bank should give the Government a letter to this effect.

Note 1. The procedure will not affect the usual rights of the Government to deduct from contractor's bill, (whether endorsed in favour of a Bank or not) any sum due to Government of account of penalties, over-payments etc., on this or any other contract with the Governor of the State of West Bengal.

Note 2. Nothing contained herein shall operate to create in favour of the Bank any rights, claims or equities vis-à-vis the Governor.

Clause 10. If the specification or estimate of the work provides for use of any special description of material to be supplied by the Engineer-in-Charge, (such materials & stores and the prices to be charged there for as hereinafter mentioned being so far as practicable for the convenience of the contractor, but not so as in any way to control the meaning or effect of this contract specified in the schedule or 'Memorandum' hereto annexed), the contractor shall be supplied with such materials and stores as is required from time to time to be used by him/her for the purpose of the contract only, and the value of the full quantity of materials and stores so supplied at the rates specified in the said schedule or Memorandum may be set off or deducted from any sums then due, or thereafter to become due to the contractor under the contract, or otherwise or against or from the security deposit, or the proceeds of sale thereof; if the same is held in Government securities, the same or a sufficient portion thereof being in this case sold for

*Payments of
contractor's
bills to Banks*

*Stores supplied
by Government*

the purpose. All materials supplied to the contractor shall remain the absolute property of Government, and shall not on any account be removed from the site of the work, and shall at all times be open for inspection by the Engineer-in-charge. Any such material unused and in perfectly good condition at the time of the completion or determination of the contract shall be returned to the Engineer-in-charge's store, if by a notice in writing under his/her hand, he/she shall so require; but the contractor shall not be entitled to return any such material unless with such consent, and shall have no claim for compensation on account of any such material so supplied to him/her as aforesaid being unused by him, or for any wastage or damage to any such material.

Work to be executed in accordance with specifications, drawings, orders, etc.

Clause 11. The Contractor shall execute the whole and every part of work in the most substantial and workman like manner, and both, as regards to materials and otherwise, in every respect, in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design and drawings, and instructions in writing relating to the work signed by the Engineer-in-Charge and lodged in his/her office, to which the contractor shall be entitled to have access at such office, or on the site of the work for the purpose of inspection during office hours, and the contractor shall, if he/she so require, be entitled at his/her own expense to make or cause to be made copies of the specifications, and of all such design, drawings and instructions as aforesaid.

Alteration in specification and designs do not invalidate contract

Clause 12. The Engineer-in-Charge shall have powers to make any alteration in, omission from, addition to, or substitution for, the original specifications, drawings, designs and instructions, that may appear to him/her to be necessary or recommended by Superintending Engineer or the Chief Engineer during the progress of work, and the contractor shall be at all times be bound to carry out these works, in accordance to any instructions which may be given to him/her in writing, signed by the Engineer-in-charge, and such alterations, omissions, additions or substitutions, shall not invalidate the contract but shall be deemed to have formed a part of the work included in the original tender and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as a part of the work shall be carried out by the contractor on the same conditions in all respects on which he/she agreed to do the main work, and at the same rates, if any, may be specified in the tender for the main work. Time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work bears to the original work contract, and the certificate of the Engineer-in-charge shall be conclusive as to such proportion. And, if the altered, additional or substituted work includes any class of work, for which no rate is specified in the contract, then such class of work shall be carried out at the rates entered in the schedule of rates of concerned Works Department applicable in the district, which was in force at the time of acceptance of the contract, minus/plus the percentage which the total tendered amount bears to the estimated cost of the entire work put to tender; and if the altered, additional or substituted work is not entered in the said schedule of rates, payment thereof shall be made by the Engineer-in-charge by determining the rates on analysis worked out from (a) the basic rates of materials and labour provided in the aforesaid schedule of rates, or (b) the current market rates of materials and labour when even basic rates for the work are not available in the schedule. In cases when such rates are determined on analysis by the Engineer-in-charge under (a) above, the stipulated percentage above or below schedule of rates as provided in the contract shall also apply, and in case of rates worked out on analysis under (b) above, payment shall be made at the rates so determined without application of the said stipulated percentage. In the event of any dispute regarding rates determined on analysis for any altered, additional or substituted work under this clause, the decision of the Superintending Engineer shall be final and binding.

Rates for works not in tender BOQ/SoR

No compensation for alternation in or restriction of work to be carried out.

Clause 13. If at any time after the commencement of the work the Governor shall for any reason whatsoever not require the whole thereof as specified in the tender to be carried out, the Engineer-in-charge shall give notice in writing of the fact to the contractor, who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from execution of the work in full, but which he/she did not derive in consequence of the full amount of the work not having been carried out; neither shall he/she have any claim for compensation by reason of any alterations having been made in the original specifications, drawings, designs and instructions which shall involve any curtailment of the work as originally contemplated.

*Action and
compensation
payable in case
of bad work*

Clause 14. If it shall appear to the Engineer-in-charge or his/her subordinate engineer in-charge of the work, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials of any inferior description, or that any materials or articles provided by the Contractor, for the execution of the work are unsound, or of a quality inferior to that contracted for, or otherwise not in accordance with the contract, the contractor shall on demand in writing from the Engineer-in-charge specifying the work, materials or articles complained of notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and re-construct the work so specified in whole or in part, as the case may require, or as the case may be remove the materials or articles so specified and provide other proper and suitable materials or articles at his/her own proper charge and cost; and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in his/her demand aforesaid, then the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate put to tender / on up to date executed work value for every day not exceeding ten days, while his/her failure to do so shall continue and in the case of any such failure, the Engineer-in-charge may rectify or remove, and re-execute the work or remove and replace with others, the materials or articles complained of as the case may be at the risk and expense in all respects of the contractor.

*Work to
be open to
inspection*

Clause 15. All work under or in course of execution or executed in pursuance of the contract shall at all times be open to inspection and supervision of the Engineer-in-Charge and all his/her subordinates and also higher Officers / Authority of the Government and the contractor shall at all times during the normal working hours, and at all other times at which reasonable notice of the intention of the Engineer-in-charge or his/her subordinates to visit the work site shall have been given to the contractor, either himself/herself be present to receive orders and instructions, or have a responsible agent duly accredited in writing present for that purpose. Orders given to the contractor's agent shall be considered to have the same force as if it had been given to the contractor himself/herself.

*Contractor
or his/her
responsible
agent to be
present*

*Notice to be
given before
work is
covered up*

Clause 16. The Contractor shall give, not less than five days notice in writing to the Engineer-in-charge or his/her subordinate in-charge of the work, before covering up or otherwise placing beyond the reach of measurement any work, in order that the same is so covered up or placed beyond the reach of measurement, and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Engineer-in-charge or his/her subordinate, in-charge of the work; and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given or consent obtained, the same shall be uncovered at the contractor's expense, or, in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

*Contractor
liable for
damage done
and for
imperfections for
180 days after
certificate*

Clause 17. If the Contractor or his/her workers or authorized representatives shall break, deface, injure or destroy any part of the structure in which they may be working or any building, road, road curbs, fence, canals, water pipes, cables, drains, electric or telephone posts or wires, trees, grass or grassland or cultivated ground contiguous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work from any cause whatever or any imperfections become apparent in it at any time, whether during its execution or within a period of six months after issuance of a certificate of its completion by the Engineer-in-Charge, the contractor shall make the same good at his/her own expense, or in default, the Engineer-in-Charge may cause the same to be made good by other workers, and deduct the expenses (of which the certificate of the Engineer-in-Charge shall be final and binding) from any sums, whether under the contract or otherwise, that may be then, or at any time thereafter become due to the contractor by the Government or from his/her security deposit, or the proceeds of sale thereof, or of a sufficient portion thereof, and if the cost in the opinion of the Engineer-in-Charge whose opinion shall be final and conclusive against the contractor, making such damage or imperfections good shall exceed the amount of such security deposit and/or such sums, it shall be lawful for the Government to recover the excess costs from the contractor in accordance with the procedure prescribed by any law for the time being in force.

Clause 17A. The Contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works, and counting, weighing, assisting in the joint measurement or examination at any time and from time to time of the work or materials. Failing his/her so doing the same may be

provided by the Engineer-in-Charge at the expense of the Contractor and the expenses may be deducted from any money due to the contractor under the contract or from his/her Security Deposit or the proceeds of sales thereof or of a sufficient portion thereof. The Contractor shall also provide all necessary fencing / barricading / providing caution boards etc. and light required to protect the public from accident, and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damage and costs which may be awarded in such suit, actions or proceedings to any such persons or which may with the consent of the Contractor be paid to compromise any claim by any such persons.

Clause 18A. In every case in which by virtue of the provisions under sub-section (1) of Section 12, of the Workmen's Compensation Act, 1923, the implementing Department is obliged to pay compensation to a workman employed by the contractor, in execution of the works. The implementing Department will recover from the Contractor the amount of compensation so paid; and without prejudice to the rights of the Department under sub-section (2) of section 12, of the said Act, implementing Department shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by implementing Department to the Contractor whether under this contract or otherwise. The implementing Department shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the contractor and upon his/her giving to the implementing Department full security for all costs for which the Department might become liable in consequence of contesting such claims.

Clause 18B. In every case in which by virtue of the provisions under 'The Contract Labour (Regulation & Abolition) Act 1970', and its amendments and rules, the implementing Department is obliged to pay amount of wages to a workman employed by the Contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by Contractors, executing Department will recover from the Contractor, the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the executing Department under sub-section(2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, executing Department shall be at liberty to recover such amount or any part thereof by deducting it form the security deposit or from any sum due by Executing Department to the Contractor whether under this contract or otherwise and the executing Department shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of section 21, of the said Act, except on the written request of the Contactor and upon his/her giving to the implementing Department full security for all costs for which the Department might become liable in contesting such claim.

Clause 19. The Contractor shall obtain a valid license under the Contract Labour (Regulation and Abolition) Act, 1970, before the commencement of the work, and continue to have valid licenses until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986, Fatal Accident Act, 1855, Personal Injuries (Compensation Insurance) Act, 1970.

The Contractor shall also comply with the provisions of the 'Building and Other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996' and 'The Building and Other Construction Workers Welfare Cess Act, 1996'. Failure to fulfill these requirements shall attract penal provisions of the contract, arising out of the resultant non-implementation of such provisions.

Labour

Clause 19A. No labour/s below the age of eighteen years shall be employed in the work and the contractor shall abide by the provisions of the Child Labour (Prohibition & Regulation) Act, 1986. Employment of female labour/s in works in the neighborhoods of sensitive barracks should be avoided as far as possible.

*Payment of
minimum
Wages to
Labour*

Clause 19B. The Contractor shall pay to labours employed by him/her either directly or through Sub-Contractors, wages not less than fair wages as defined by the Labour Commissioner of the State Government under 'Minimum Wages Act, 1948', Contractor's Labour Regulations or as per the provisions of the Contract Labour (Regulation and

Abolition) Act, 1970, wherever applicable.

The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him/her.

In respect of all labourers directly or indirectly employed in the works for performance of the Contractor's part of the contract, the contractor shall comply with or cause to be complied with the contractor's Labour Regulations made by the State Government/ Government of India, from time to time in regard to payment of wages, wage period, deductions from wages, recovery of wages not paid and deductions made without authority, maintenance of wage books or wage slips, publication of scale of wage and other terms of employment, inspection and submission of periodical returns and all other matters likewise in nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979, Minimum Wages Act, 1948, wherever applicable.

- a) The Engineer-in-Charge concerned shall have the right to deduct from the money due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his/her/their wages which are not justified by their terms of the contract or non-observance of the regulations.
- b) Under the provision of Weekly Holidays Act, 1986, the contractor is bound to allow to the labours, directly or indirectly employed in the work, one day rest for 6 days of continuous work, and pay wages at the same rate as for duty. In the event of default, the Engineer-in-charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labour and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-charge concerned.

The contractor shall also comply with the provisions of the 'Employees Liability Act, 2008', Workmen's Compensation Act and 'Maternity Benefits Act' or the amendments thereof or any other law relating thereto, and the rules made there under from time to time.

The Contractor shall indemnify and keep indemnified the implementing Department against payments to be made under and for the observance of the laws aforesaid and PW Contractor's Labour Regulations without prejudice to this right to claim indemnity from his/her sub-contractors.

The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

Whatever is the minimum wage for the time being, or if the wage payable is higher than minimum wage, such wage shall be paid by the contractor to the workers directly without the intervention of any Dafadar, and that Dafadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workers as and by way of commission or otherwise.

The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Dafadar from the wage of workers.

Clause 19C. In respect of all labours directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his/her own expenses, arrange for the safety provisions as framed from time to time by the competent authority, and shall at his/her own expense provide all facilities in connection therewith. In case the contractor fails to make arrangement, and fail to provide necessary facilities as aforesaid, he/she shall be liable to pay a penalty of Rs. 2000/- for each default, and in addition the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in their behalf, from the contractor.

Clause 19D. For the works above Rs. 2.0 crore, the Contractor shall submit by the 4th and 19th of every month to the Engineer-in-charge, a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively-

The number of labourers employed by him/her on the work, their working hours, and the

wages paid to them;

Accidents that had occurred during the said fortnight showing the circumstances under which it had happened, and the extent of damage and injury caused by them, and the number of female workers who have been allowed maternity benefits according to Clause 19F of the contract and the amount paid to them;

Failing which the contractor shall be liable to pay to the Department, a sum not exceeding Rs. 2000/- for each default or materially incorrect statement. The decision of the Engineer-in-charge shall be final in deducting from any bill due to the contractor; the amount levied as fine and would be binding on the contractor.

Clause 19E. In respect of all labours directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with all the rules framed by the Government from time to time for the protection of health and sanitary arrangements of workers employed by the contractor.

Clause 19F. In the event of the contractor(s) committing a default or breach of any of the provisions of the Contractor's Labour Regulations and Rules for the protection of health and sanitary arrangement for the workers as amended from time to time or furnishing any information or submitting or filing any statement under the provisions of the above Regulations and Rules which is materially incorrect, he/she shall, without prejudice to any other liability, pay to the Department a sum not exceeding Rs. 2000/- for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractors defaulting continuously in this respect, the penalty may be enhanced to Rs. 200/- per day for each day of default subject to a maximum of five per cent of the tendered value. The decision of the Engineer-in-charge shall be final and binding on the parties.

Should it appear to the Engineer-in-charge that the contractor(s) is/are not properly observing and complying to the provisions of the Contractor's Labour Regulations and Rules, The Minimum Wages Act, 1948 and Contract Labour (Regulation and Abolition) Act 1970, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as 'the said Rules') the Engineer-in-charge shall have the power to give notice in writing to the contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and/or observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-charge shall have the power to provide the amenities herein before mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/her own expense and to approved standards all necessary hutments and sanitary arrangements required for his/her/their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-charge shall have power to give notice in writing to the contractor(s) requiring that the said hutments and sanitary arrangements be remodeled and/or reconstruct such hutments and sanitary arrangements according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such hutments and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-charge shall have the power to remodel or reconstruct such hutments and sanitary arrangements according to approved standards at the cost of the contractor(s).

Clause 19G. The contractor shall comply with all the provisions of The Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970, Employees Liability Act, Industrial Dispute Act and Maternity Benefit Act, 1961, as amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought into force by the appropriate authority from time to time.

Clause 19H. The Engineer-in-charge may require the contractor to remove from the site of work, any person or persons engaged/assigned or employed by the contractors upon the work who may be determined as insane or incompetent or misconducts himself/herself, and the contractor shall forthwith comply with such requirements.

Clause 19I. It shall be the responsibility of the contractor to see that the

building/structure under construction is not occupied by anybody unauthorized during construction, and is handed over to the Engineer-in-charge with vacant possession free from encumbrances in entirety, If such buildings/structures through completed is occupied illegally, then the Engineer-in-Charge shall have the option to refuse to accept the said building/structure in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay a levy up to 5% of tendered value of work may be imposed by the Engineer-in-charge whose decision shall be final both with regard to the justification and quantum and shall be binding on the contractor.

However, the Engineer-in-charge, through a notice, may require the contractor to remove the illegal occupations, any time on or before construction and delivery.

Work on Sundays

Clause 20. No work shall be done on Sundays without the prior sanction of the Engineer-in-charge.

Work not to be sublet. Contract may be rescinded and security deposit forfeited for subletting, bribing, or if contractor becomes insolvent

Clause 21. The contract shall not be assigned or sublet without specific orders from Government in respect of a specified sub-contractor. And if the contractor shall assign or sublet his contract, or attempt so to do, or become insolvent or commence any insolvency proceedings or make any composition with his creditor, or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given, promised, or offered by the contractor, or any of his servants or agents to any public officer or person in the employ of Government in any way relating to his office of employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Divisional Officer may thereupon by notice in writing rescind the contract, and the security deposit of the contractor shall thereupon stand forfeited and be absolutely at the disposal of Government and the same consequences shall ensure as if the contract had been rescinded under the Clause 3 hereof, and in addition the contractor shall not be entitled to recover or be paid for any work there for actually performed under the contract.

Sum payable as compensation to be considered as reasonable without reference to actual loss

Clause 22. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

Changes in constitution of firm

Clause 23. Where the contractor is a partnership firm or a consortium, prior approval in writing of the Engineer-in-Charge shall be obtained for any change made in the constitution of the firm/consortium. Where the contractor is an individual or a Hindu Undivided Family (HUF) business concern, such approval as aforesaid shall likewise be obtained, before the contractor enters into any partnership agreement/Memorandum of Articles whereunder the partnership firm/ consortium would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract is liable to be rescinded.

Works to be under direction of Engineer-in-Charge

Clause 24. All works to be executed under the contract shall be executed under the direction of Engineer-in-Charge. Further instructions/advice, if felt necessary by Superintending Engineer/ Chief Engineer, shall also be binding to be communicated by the Engineer-in-Charge.

Settlement of disputes - Dispute Redressal Committee'

Clause 25. Settlement of Disputes and Arbitration:

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever, in any way arising out of or relating to the contracts, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works, or the executions or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment thereof shall be dealt with as mentioned hereinafter:

If the contractor considers any work demanded of him/her to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge or any matter in connection with or arising out of the contract or carrying out of the work to be unacceptable, he/she shall promptly within 15 days request the Chairman of the Departmental Dispute Redressal Committee, in writing, for

written instruction or decision. Thereupon, the Dispute Redressal Committee shall give its written instruction or decision within a period of three months from the date of receipt of the Contractor's letter.

The Dispute Redressal Committee in each of the Works Departments shall be constituted with the following officials as Members:

1	Secretary / Engineer-in-Chief of the Department concerned	Chairman
2	Joint Secretary / Deputy Secretary / any Officer of equivalent rank of the Department	Member
3	One Designated Chief Engineer / Engineer of the Department to be nominated by the Department concerned.	Member Secretary and Convenor
4	One representative of Finance Department of the Government not below the rank of Joint Secretary or Financial Advisor in case of the Works Department where FA system has been introduced.	Member

This provisions will be applicable irrespective of the value of the works to which the dispute may relate.

Clause 26. The contractor shall fully indemnify and keep indemnified the implementing Department against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against implementing Department in respect of any such matter as aforesaid, the contractor shall be immediately notified thereof by the implementing Department and the contractor shall be at liberty, at his/ her own expense, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify the implementing Department if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge this behalf.

Lump sum as in estimates

Clause 27. When the estimate on which the tender is made includes lump sums in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of works involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-charge, capable of measurement, certificate in writing of the Engineer-in-charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of this clause.

Action where no specification

Clause 28. In the case of any class of work for which there is no such specifications as referred to under Clause 11, such work shall be carried out in accordance with the latest Bureau of Indian Standards (BIS) specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per reputed manufacturer's specifications if accepted by the Engineer-in-Charge. If not available, then as per State Government / Union Government accepted and approved specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge which is approved by the Tender Accepting Authority.

Definition of works

Clause 29. The expression "works" or "work" where used in these conditions shall, unless there be something either in the subject or context repugnant to such construction, be constructed and taken to mean the works by or by virtue of the contract constructed to be executed, whether temporary or permanent and whether original, altered, substituted or additional.

Clause 30. The Contractor(s) shall at his/their own cost provide his/their labour with hutting on an approved site, and shall make arrangements for conservancy and sanitation in the labour camp to the satisfaction of the local Public Health and Medical Authorities. He/they shall also at his/their own cost make arrangements for the laying

of pipe lines for water supply to his/their labour camp from the existing mains wherever available, and shall pay all fees, charges and expenses in connection with there and incidental thereto.

Clause 31. The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions:-

- i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-charge;
- ii) The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are, in the opinion of the Engineer-in-Charge, unsatisfactory.

Clause 32. The contractor undertakes to make arrangement for the supervision of the work by the firm supplying the construction materials. The Contractor shall collect the total quantity of materials as per approved programme required for the work as per approved programme, before the work is started and shall hypothecate it to the Engineer-in-Charge. If any material remains unused on completion of the work on account of lesser use of materials in actual execution for reasons other than authorized changes of specifications and abandonment of portion of work, a corresponding deduction equivalent to the cost of unused materials as determined by the Engineer-in-Charge shall be made and the material returned to the contractor. Although the materials are hypothecated to Institute, the contractor undertakes the responsibility for their proper watch, safe custody and protection against all risks. The materials shall not be removed from site of work without the consent of the Engineer-in-Charge in writing.

The contractor shall be responsible for rectifying defects noticed within Defect Liability Period from the date of completion of the work and the portion of the security deposit relating to work shall be refunded after the expiry of Defect Liability Period.

Clause 33. The contractor shall provide all necessary superintendence during execution of the work and as long thereafter as may be necessary for proper fulfilling of the obligations under the contract.

*Contractors
Superintendence,
Supervision,
Technical Staff &
Employees*

The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge, the name(s), qualifications, experience, age, address(es) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work. The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his/her approval or otherwise of such representative(s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative shall be appointed by the contractor soon after receipt of the approval from the Engineer-in-Charge and shall be available at site before start of work.

If the contractor (or any partner in case of firm/company) himself/herself has such qualifications, it will not be necessary for the said contractor to appoint such a principal technical representative but the contractor shall designate and appoint a responsible agent to represent him and to be present at the work whenever the contractor is not in a position to be so present. All the provisions applicable to the principal technical representative under the clause will also be applicable in such a case to the contractor or his responsible agent. The principal technical representative and/or the contractor shall on receiving reasonable notice from the Engineer-in-Charge or his designated representative(s) in charge of the work in writing or in person or otherwise, present himself/herself to the Engineer-in-Charge and/or at the site of work, as required, to take instructions. Instructions given to the principal technical representative or the responsible agent shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and/or the contractor or his/her responsible authorized agent shall be actually available at site especially during important stages of execution of work, during recording of measurement of works and whenever so required by the Engineer-in-Charge by a notice as aforesaid and shall also note down instructions conveyed by the Engineer-in-Charge or his/her designated representative in the site order

book and shall affix his signature in token of noting down the instructions and in token of acceptance of measurements.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the contractor as specified in Schedule and the decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded checked / test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint a suitable technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is/are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) along with every running account bill / final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The contractor shall provide and employ skilled, semi-skilled and unskilled labour as is necessary for proper and timely execution of the work.

The Engineer-in-Charge shall be at liberty to object to and require the contractor to remove from the works any person who, in his opinion, misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-in-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

Clause 34. "Levy / Taxes Payable by Contractor"

- (i) GST, Building and other Construction Workers' Welfare Cess or any other tax or Cess in respect of this contract shall be payable by the Contractor and Engineer-in-Charge shall not entertain any claim whatsoever in this respect.
- (ii) The contractor shall deposit Government Royalty and obtain necessary permit for supply of the sand, stone chips, red bajri, sand stone, river bed materials etc. from local authorities, if those are directly procured from quarry sites.

In case materials are procured from secondary sources, certificates of quarry owners to the effect of payment of royalties and Cess would have to be furnished. In absence of such certificates towards payment of Royalties and Cess such components shall be deducted from the contractor's bills at prescribed rates and deposited through 'GRIPS' portal or otherwise, in the designated Government Treasuries/PAO.

If pursuant to or under any law, notification or order, any Royalty, Cess or the like becomes payable by the implementing Department and does not at any time become payable by the contractor to the State Government/Local appropriate authorities in respect of any material used by the contractor in the works then in such a case, it shall be lawful to the Department and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the contractor.

Clause 35.

- (i) All tendered rates shall be inclusive of statutory taxes and levies payable under respective statutes. However, if any further tax or cess is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the amount so paid. Provided such payments, if any, is not, in the opinion of the Engineer-in-charge (whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.
- (ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Department and/or the Engineer-in-Charge

and further shall furnish such other information/document as the Engineer-in-Charge may require from time to time.

- (iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or cess, give a written notice thereof to the Engineer-in-Charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

Clause 36. Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Engineer-in-charge shall have the option of terminating the contract without compensation to the contractor, but would be liable to clear full dues and claims on work done to his/her legal successor/s.

Clause 37. The contractor shall not be permitted to tender for works in which his near relative is posted as in any capacity between the grades of the Executive Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him/her in any capacity or are subsequently employed by him/her and who are near relatives to any Official in the Institute. Any breach of this condition by the contractor would render him/her liable to be removed from the approved list of contractors of the Department. If however the contractor is registered in any other Department, he/she shall be debarred from tendering in the Department for any breach of this condition.

NOTE: By the term "near relatives" is meant wife, husband, own parents and grandparents, own children and grandchildren, own brothers and sisters, own uncles, aunts and first cousins and their corresponding in-laws.

Clause 38. No engineer of Gazetted Rank or other Gazetted Officer employed in engineering or administrative duties in the Government shall work as a contractor or employee of a contractor for a period of one year after his/her retirement from Government service without the previous permission of Government in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of Government as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.

Clause 39. The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him/her to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in addition to compensation up to the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the Engineer-in-Charge concerned. The contractor shall be paid for the damages/destruction suffered and for the restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract.

Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the Air Force Officers or the Engineer-in-Charge (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work.

In the event of the contractor having to carry out reconstruction as aforesaid, he/she shall be allowed such extension of time for its completion as is considered reasonable by the Engineer-in-charge.

Clause 40. The contractor shall comply with the provisions of the Apprentices Act, 1961 and the Apprenticeship Rules, 1992 and orders issued thereunder from time to time. If

he/she fails to do so, his/her failure will be a breach of the contract and the Engineer-in-Charge may, in his/her discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him/her of the provisions of the said Act.

Clause 41. Procedure For Suspension and Debarment of Supplier, Contractors and Consultants

The procedure as laid down below shall govern the suspension/debarment of Suppliers/Contractors/Consultants (Contractors for brevity) involved in Government procurement for offences or violations committed during competitive bidding and contract implementation, for the works under different Departments of Government of West Bengal.

Grounds for Suspension and Debarment:-

- (1) Submission of eligibility requirements containing false information or falsified documents.
- (2) Submission of Bids that contain false information or falsified documents, or the concealment of such information in the Bids in order to influence the outcome of eligibility screening or any other stage of the bidding process.
- (3) Unauthorized use of one's name/digital signature certificate for the purpose of bidding process.
- (4) Any documented unsolicited attempt by a bidder **(A Person/Contractor/Agency /Joint Venture/Consortium/Corporation participating in the procurement process and/or a person / Contractor / Agency / Joint Venture / Consortium / Corporation having an agreement/contract for any procurement with the department shall be referred as Bidder)** unduly influencing the outcome of the bidding in his favour.
- (5) Refusal or failure to post a self-declaration to the effect of any previous debarment imposed by any other department of State Government and/or Central Government.
- (6) All other acts that tend to defeat the purpose of the competitive bidding such as lodging false complain about any Bidder, lodging false complain about any Officer duly authorized by the Department, restraining any interested bidder to participate in the bidding process, etc.
- (7) Assignment and subcontracting of the contract or any part thereof without prior written approval of the procuring entity.
- (8) Whenever adverse reports related to adverse performance, misbehaviour, direct or indirect involvement in threatening, making false complaints etc. damaging the reputation of the department or any other type complaint considered fit by the competent authority of the department, are received from more than one Officer or on more than one occasion from individual Officer.
- (9) Refusal or failure to post the required performance security / earnest money within the prescribed time without justifiable cause.
- (10) Failure in deployment of Technical Personnel, Engineers and/or Work Supervisor having requisite license / supervisor certificate of competency as specified in the contract.
- (11) Refusal to accept an award after issuance of "Letter of Acceptance" or enter into contract with the Government without justifiable cause.
- (12) Failure of the Contractor, due solely to his fault or negligence, to mobilize and start work or performance within the specified period as mentioned in the "Letter of Acceptance", "Letter of Acceptance cum Work Order", "Work Order", "Notice to Proceed", "Award of Contract", etc.
- (13) Failure by the Contractor to fully and faithfully comply with its contractual obligations without valid cause, or failure by the Contractor to comply with any written lawful instruction of the Procuring Entity/Authority (the Officer authorized by the Administrative Department, Government of West Bengal for procurement) or its representative(s) pursuant to the implementation of the Contract.
- (14) For the procurement of Consultancy Service/Contracts, poor performance by the Consultant of his services arising from his fault or negligence. Any of the following acts by the Consultant shall be construed as poor performance.
 - (i) Non deployment of competent technical personnel, competent Engineers and/or work supervisors;
 - (ii) Non-deployment of committed equipment, facilities, support staff and manpower;
 - (iii) Defective design resulting in substantial corrective works in design and/or construction;

- (iv) Failure to deliver critical outputs due to consultant's fault or negligence;
 - (v) Specifying materials which are inappropriate and substandard or way above acceptable standards leading to high procurement cost;
 - (vi) Allowing defective workmanship or works by the Contractor being supervised by the Consultant.
- (15) For the procurement of goods, unsatisfactory progress in the delivery of the goods by the manufacturer, supplier, or distributor arising from his fault or negligence and/or unsatisfactory or inferior quality of goods, vis-à-vis as laid down in the contract.
- (16) Willful or deliberate abandonment or non-performance of the project or Contract by the Contractor resulting in substantial breach thereof without lawful and/or just cause.

CATEGORY OF OFFENCE :-

- (A) First degree of offence: 1 to 16 of the above Clause-41 to be considered as First degree of offence.
- (B) Second degree of offence: Any one of the offences as mentioned under 'A' above, committed by a particular Bidder/Contractor/Supplier on more than one occasion, be considered as Second degree of offence.

In addition to the penalty of suspension/debarment, the bid security / earnest money posted by the concerned Bidder or prospective Bidder shall also be forfeited.

PENALTY FOR OFFENCE :-

- (I) For committing First degree of offence: Disqualifying a Bidder from participating in any procurement process under the Administrative Department of Government of West Bengal up to 2 (two) years.
- (II) For committing Second degree of offence: Disqualifying a Bidder from participating in any procurement process under the Administrative Department of Government of West Bengal up to 3 (three) years.

PROCEDURE OF SUSPENSION AND DEBARMENT DURING THE PROCUREMENT PROCESS

- (1) Initiation of Action, Notification and Hearings:
Any Bidder or procurement authority on his own or based on any other information made available to him may invite the process of suspension/debarment proceedings by filing a written application with the **Bid Evaluation Committee** and such filing of written application has to be done within forty eight hours from the date and time of publication of the result of technical evaluation of any bid.
 - (a) Upon verification of the existence of grounds for suspension/debarment, the Chairperson of **Bid Evaluation Committee** shall immediately notify the bidder concerned either electronically through his registered e-mail or in writing to his postal address, advising him that:
 - i) A complaint has been filed against him and prima facie material has been found, which may lead to suspension/debarment.
 - ii) He has been recommended to be placed under suspension/debarment by the suspension committee (as constituted by the respective Administrative Department) stating the ground for such.
 - iii) The said bidder, within three days from the date of issue of such notification by the Bid Evaluation Committee, may approach the Chairperson of Suspension Committee by submitting all required documents in his favour for hearing. Any application made thereafter would not be entertained.
 Such notice should contain the e-mail id and the postal address of the Chairperson of the Suspension Committee.
 - (b) After receiving the recommendation for suspension from Bid Evaluation Committee, Suspension Committee shall issue a notice to the alleged bidder electronically through his registered e-mail id, to submit all relevant documents in support of his defense within three working days after issuance of the notice of the Suspension Committee. The Suspension Committee will conduct the hearing within seven working days from the date of receipt of the documents from the alleged bidder. If no appeal has been received from the alleged bidder or if after hearing sufficient ground for suspension is found, the Suspension Committee, will suspend the alleged bidder from participating in the procurement process under the Administrative Department for a period of six months from the date of issuance of suspension order. The Chairperson of the

Suspension Committee shall issue the suspension order within seven days from the last date of hearing and shall notify the bidder concerned either electronically through his registered e-mail id or in writing to his postal address. The Chairperson of Suspension Committee shall also inform the decision to all concerned.

If sufficient reason for suspension is not found, the Suspension Committee would reject the recommendation of Bid Evaluation Committee and would allow the bidder to take part in the tendering process.

If the bidder is suspended, the Suspension Committee would recommend debarment of the bidder and forward the case with all documents to the Debarment Committee for further action.

- (c) The Debarment Committee upon receipt of the recommendation of the Suspension Committee shall scrutinize the documents. The Debarment Committee will hold a hearing of the alleged bidder and issue necessary order within ten working days from the last date of hearing. The Debarment Committee, if satisfied after hearing, shall forward the case to the Department for orders of Debarment. The Department in due course will issue Debarment Order disqualifying/prohibiting the erring bidder from participating in the bidding/procurement of all projects under the Administrative Department for a specified period. The alleged bidder shall be intimated accordingly either electronically through his registered e-mail id or in writing to his postal address. Otherwise the Debarment Committee may reject the recommendation of the Suspension Committee. The Chairperson of Debarment Committee shall also inform the decision to all concerned.

PROCEDURE FOR DEBARMENT DURING THE CONTRACT IMPLEMENTATION STAGE:-

- (A) Upon termination of contract due to default of the Bidder, the Engineer-in-Charge shall recommend for debarment to the Bid Evaluation Committee. The Bid Evaluation Committee shall submit his recommendation of debarment of the alleged Bidder along with a detailed report stating clearly the reasons for debarment to the Debarment Committee within 30 (thirty) days from the date of termination of contract. The alleged Bidder shall be intimated accordingly either electronically to his registered e-mail id or in writing to his postal address. The Chairperson of Bid Evaluation Committee shall also inform the decision to all concerned.
- (B) The Debarment Committee upon receipt of the recommendation of Bid Evaluation Committee shall scrutinize the documents. The Debarment Committee will hold a hearing about the matter from the Bidder and issue necessary order within 10 (ten) working days from the last date of hearing. The Debarment Committee, if satisfied after hearing, shall forward the case to the Department for the order of debarment. The Department in due course will issue debarment order disqualifying/prohibiting the erring Bidder from participating in the bidding/procurement of all projects under the Administrative Department, Government of West Bengal for a specified period. The alleged Bidder shall be intimated accordingly either electronically to his registered e-mail id or in writing to his postal address. Otherwise the Debarment Committee may reject the recommendation of the Bid Evaluation Committee. The Chairperson of Debarment Committee shall also inform the decision to all concerned.

STATUS OF SUSPENDED / DEBARRED BIDDER :-

- (a) Bidder placed under Suspension/Debarment by the competent authority will not be allowed to participate in any procurement process under the Administrative Department within the period of suspension/debarment. The earnest money of the suspended Bidder shall stand forfeited to the Government.
- (b) If the Suspension/Debarment Order is issued prior to the date of issue of "Letter of Acceptance", "Letter of Acceptance cum Work Order", "Work Order", "Notice to Proceed", "Award of Contract" etc. for any Bid, the Suspended/Debarred Bidder shall not be qualified for Award for the said Bid and such Procurement Process will be dealt with as per existing norms by simply excluding the erring Bidder.
- (c) If the Suspension/Debarment Order is issued after award of a Government Project/Contract to the Debarred Bidder, the awarded Project/Contract shall not be prejudiced by the said Order provided that the said offence(s) committed by the Debarred Bidder is not connected with the awarded project/contract.

Clause 42. Executive Engineer of the concerned Division will be the Engineer-in-Charge in respect of the Tender contract and all correspondences concerning rates, claims, change

in specifications and/or design and similar important matters will be valid only if accepted/recommended by the Engineer-in-Charge. If any correspondence of above tender is made with Officers other than the Engineer-in-charge for speedy execution of works, the same will not be valid unless copies are sent to the Engineer-in-Charge and also approved by him. Instructions given by the Assistant Engineer and the Junior Engineer on behalf of the Engineer-in-Charge (who have been authorized to carry out the work on behalf of the Engineer-in-Charge) regarding specification, supervision, approval of materials and workmanship shall also be valid. In case of dispute relating to specification and work, the decision of Engineer-in-Charge shall be final and binding. The Engineer-in-Charge will however invariably take decisions relating to tender contract or as mentioned in the relevant rules and clauses of the contract document with the approval of the Tender Accepting Authority.

Clause 43. Acceptance of the Tender will rest with the Tender Accepting Authority without assigning reason thereof to the bidder. The accepting authority reserves the right to reject any or all of the tenders without assigning any reason thereof to the bidder/contractor.

Clause 44. In the event of acceptance of Lowest Rate, no multiple Lowest Rates will be considered for acceptance by the Department. In such cases, the Tender will be cancelled.

Clause 45. In the event of conflicting different clauses, the clauses in the e-NIT will prevail.

Clause 46. Engineer-in-Charge shall not entertain any claim whatsoever from the Contractor for payment of compensation on account of idle labour on such grounds including non-possession of encumbrance free land.

Clause 47. Engineer-in-Charge shall not be held liable for any compensation due to machines becoming idle or any circumstances including untimely rains, other natural calamities, like strikes etc.

Clause 48. Imposition of any Duty/Tax/Octroi/Royalty etc. whatsoever of its nature (after work order / commencement and before final completion of the work) is to be borne by the contractor/bidder. Original challan of those materials, which are procured by the bidder, may be asked to be submitted for verification.

Clause 49. Cess @ 1% or as amended time to time of the cost of construction works shall be deducted from the Gross value of all Works Bill in terms of Finance Department order. Also it is instructed to register his/her establishment under the Act, with the competent registering Authority, i.e. Assistant Labour Commissioner / Deputy Labour Commissioner of the region.

Clause 50. No Mobilization/Secured Advance will be allowed unless specified otherwise in the contract.

Clause 51. Valid PAN issued by the Income Tax Department, Government of India, valid 15 digit Goods and Services Tax Payer Identification Number (GSTIN) under GST Act 2017, Cess, Royalty of Sand, Stone Chips, Stone Metal Gravel, Boulders, Forest product etc., Toll Tax, Income Tax, Ferry Charges and other Local Taxes, if any, are to be paid by the Contractor/Bidder. No extra payment will be made as a reimbursement or as compensation for these. The rates of supply and finished work items are inclusive of these taxes and charges.

Clause 52. All working Tools & Plants, Scaffolding, Construction of Vats & Platforms and arrangement of Labour Camps will have to be arranged by the Contractor at his/her own cost.

Clause 53. The Contractor shall supply Mazdoors, Bamboos, Ropes, Pegs, Flags etc. for laying out the work and for taking and checking measurements for which no extra payment will be made.

Clause 54. The Contractor/Bidder should see the site of works and Tender Documents, Drawings etc. before submitting e-Tender and satisfy himself/herself regarding the condition and nature of works and ascertain difficulties that might be encountered in executing the work, carrying materials to the site of work, availability of drinking water and

other human requirements & security etc. Work on river banks may be interrupted due to a number of unforeseen reasons e.g. sudden rises in water levels, inundation during flood, inaccessibility of working site for carriage of materials. Engineer-in Charge may order the contractor to suspend work that may be subjected to damage by climate conditions. No claim will be entertained on this account. There may be variation in alignment, height of embankment or depth of cutting, location of revetment, structures etc. due to change of topography, river condition and local requirements etc. between the preparation and execution of the scheme for which the tendered rate and contract will not stand invalid. The Contractor will not be entitled to any claim or extra rate on any of these accounts.

Clause 55. A machine page numbered Site Order Book (with triplicate copy) will have to be maintained at site by the Contractor and the same has got to be issued from the Engineer-in-Charge before commencement of work. Instructions given by inspecting officers not below the rank of Assistant Engineer will be recorded in this book and the contractor must note down the action to be taken by him in this connection as quickly as possible.

Clause 56. The work will have to be completed within the time mentioned in the e-NIT. A suitable Work Programme based on time allowed for completion of work as per e-NIT is to be submitted by the contractor within 7 (seven) days from the date of receipt of work order which should satisfy the time limit of completion. The contractor should inform in writing, within 7 (seven) days from the date of receipt of work order, the names of his authorized representatives who are to remain present at site daily during work execution who will receive instructions of the work, sign measurement book, bills and other Government papers etc.

Clause 57. No compensation for idle labour, establishment charge or on other reasons such as variation of price indices etc. will be entertained.

Clause 58. All possible precautions should be taken for the safety of the people and work force deployed at worksite as per safety rule in force. Contractor will remain responsible for his labour in respect of his liabilities under the Workmen's Compensation Act etc. He must deal with such cases as promptly as possible. Proper road signs as per PWD practice or any other sign board for safety purpose as per requirement by the concerned Administrative Department will have to be erected by the Contractor at his own cost while operating in public thoroughfares.

Clause 59. The Contractor will have to maintain qualified technical employees and/or Apprentices at site as per prevailing Apprentice Act or as stipulated in the contract.

Clause 60. The Contractor will have to accept the Work Programme as per modifications and priority of work fixed by the Engineer-in-Charge so that most vulnerable reach and/or vulnerable items are completed before impending monsoon or rise in river flood water level or for other suitable reasons.

Clause 61. Quantities of different items of work mentioned in the tender schedule or in work order are only tentative. In actual work, these may vary considerably. Payment will be made on the basis of works actually done in different items and no claim will be entertained for reduction of quantities in some items or for omission of some items. For execution of quantitative excess in any item or supplementary new items of work as decided by the Department, approval of the Superintending Engineer / Chief Engineer / Government would be required, depending on whosoever be the Tender Accepting Authority, before making such payment.

Clause 62. In order to cope up with the present system of e-billing, supply of departmental materials is generally not allowed. However, if in special circumstances, Departmental materials may be issued to the Contractor/Bidder to the extent of requirements as assessed, those may be recovered from the Running Account Bill and/or Final Bill, as applicable.

Clause 63. Any material brought to site by the contractor is subject to approval of the Engineer-in-Charge. The rejected materials must be removed by the contractor from the site at his own cost within 24 hours of issue of the order to that effect. The rates in the schedule are inclusive of cost and carriage of all materials to worksite. The materials will have to be supplied in phase with due intimation to the Assistant Engineer concerned in

conformity with the progress of the work. For special type of materials, i.e. Geo Synthetic Bags, HDPE Bags, Geo Textile Filter, Geo Jute Filter etc., if any, relevant Data Sheet containing the name of the Manufacturers, Test Report etc. will also be submitted on each occasion. Engineer-in-Charge may conduct independent test on the samples drawn randomly before according approval for using the materials at site. In this regard decision of Engineer-in-Charge shall be final and binding.

Clause 64. For all items of contract jobs requiring skilled labour, the contractor shall have to employ 70% (Seventy Percent) of skilled labour locally. In case the Contractor fails to recruit skilled local labour, the Contractor shall employ skilled labour locally secured by Government in the manner indicated above. For bridge works, highly technical works of labour, the contractor may, with the prior permission in writing of the Engineer-in-charge to whom full facts must be placed for such permission, import and employ skilled labour up to 30% (Thirty Percent) of the total requirement. In this case the expression "Imported labour" shall mean "labour imported primarily from other States and secondarily, from the distant districts of the State of West Bengal." In case where the contractor fails to secure unskilled local labour or to engage imported labour, the contractor shall employ labour locally recruited by Government or labour imported by Government at the rate to be decided by the Superintending Engineer of the works concerned, whose decision as to the circumstances in which employment of such labour is of mutual advantage to Government and the contractor, will be final and binding on the parties.

Clause 65. All queries and disputes arising out of the works tender contract is to be brought to the notice of the Chairman of the 'Department Dispute Redressal Committee' in writing for decision within 15 days.

Clause 66. The contractor shall have to make his own arrangements for water, both for the work and use by his workers, etc., for road rollers and for all tools and plant, etc., required on the work.

Clause 67. Contractor will be responsible for the payments of all water charges payable to the Corporation Municipality / Panchayat or any other water works authority including a Government Department concerned.

Clause 68. If the contractors shall desire an extension of the time for completion of the work under clause 5 of the contract, no application for such extension will be entertained if it is not received in sufficient time to allow the Executive Engineer to consider it and the Contractor will be responsible for the consequences arising out of his negligence in this respect.

Clause 69. The Contractor will have to leave ducts in walls and floors to run conduit or cables, where necessary, and he will not be entitled to any extra payment on this account.

Clause 70. Contractors in the course of their work should understand that all materials obtained in the work of Dismantling, Excavation, etc., will be considered Government property and will be disposed of to the best advantage of Government.

Clause 71. In case of very special case of circumstances, if any Departmental materials are issued, there may be delay in obtaining the materials by the Department and the Contractor is, therefore, required to keep himself/herself in touch with the day to day position regarding the supply of materials from the Engineer-in-charge and to so adjust the progress of the work that his labour may not remain idle nor may there be any other claim due to or arising from delay in obtaining the materials. It should be clearly understood that no claim whatsoever shall be entertained by the Department on account of delay in supplying materials.

Clause 72. No compensation for any damage done by rain or traffic during the execution of the work will be made.

Clause 73. Whenever a work is carried out in municipal area, electric lights or electric danger signals whenever available shall be provided by the contractors on the barriers as well as paraffin lights. Facilities for the electric connection will be made by this Department but the Contractor will bear all the expenses.

Clause 74. The Contractor should quote through rate inclusive of cost of materials and carriage to place of working.

Clause 75. The Contractors should give complete specifications showing the method of execution and the quantity and quality of materials they intend to use per hundred square metre area.

Clause 76. In cases where water is used by the Contractor he will be required to deposit in advance with the Executive Engineer the charges for water which are to be calculated in accordance with the schedule of miscellaneous rates in the Canal Act.

Clause 77. It must be clearly understood by the Contractor that no claim on account of enhanced rates on those already accepted, due to fluctuations arising out of any situation will be entertained during the currency of this contract for the work as per schedule attached to the agreement and the additional work, if any, under Clause 12 of the contract.

Clause 78. In the event of emergency the Contractor will be required to pay his labour everyday and if this is not done, Government shall make the requisite payments as would have been paid by the contractor and recover the cost from the contractors.

INCONVENIENCE OF THE PUBLIC

Clause 79. The Contractor(s) shall not deposit material on any site which will seriously inconvenience the public. The Engineer-in-charge may require the Contractor(s) to remove any materials, which are considered by him to be a danger or inconvenience to the public or cause them to be removed at the contractor's cost.

Clause 80. The Contractor undertakes to have the site clean, free from rubbish to the satisfaction of the Engineer-in-charge. All surplus materials, rubbish etc. will be removed to the places fixed by the Engineer-in-charge and nothing extra will be paid.

Clause 81. The Contractor shall not allow any rubbish or debris to remain on the premises during or after repairs, but shall remove the same and keep the place neat and tidy during the progress of the work. The Engineer-in-charge may get the site premises cleared of debris etc. And recover the cost from the bill of the contractor, if the latter shows slackness in observing this clause.

Clause-82. Construction materials brought at site shall not be stacked at random. The contractor shall stack all these materials as directed by the Engineer-in-charge.

INTERPRETATION OF CLAUSES

Governor means the Governor of the State of West Bengal and his/her successors.

The Government means Government in the concerned Works Department.

The Department means the Secretary of the concerned Department or his/her authorized representative.

The Divisional Officer means the Executive Engineer of the concerned Works Department for the time being of the Division concerned, also identified as the Engineer-in-Charge.

The Sub-divisional Officer means the Assistant Engineer of the concerned Works Department for the time being of the Sub-division concerned. Junior Engineer equivalent to Section Officer of the Section concerned.

Superintending Engineer in the concerned works Department is the final Authority regarding Schedule of Rates and also the acceptance of Non-scheduled item rates arrived on the basis of market rate analysis for supplementary items, and the authority for approval of Reduced Rates and Part Rates. He is also the Tender Accepting Authority for works of value above Rs. 45.00 lakh and up to Rs. 2.00 crore under existing delegated power.

Chief Engineer in the concerned Works Department is the technical head of the Directorate and is also the Tender Accepting Authority for all works of value above Rs.

2.00 crore. Excess work over individual items comprising the original tender may be exceeded beyond 10% with the approval of concerned tender accepting authority and verified by the Superintending Engineer / Chief Engineer subject to the total value of work upon completion is within the technically sanctioned cost and that there is no major deviation from original scope of work in the tender. **Any supplementary tender/item/work in connection with the main tender is to be taken up with the approval of the Tender Accepting Authority not below the rank of Executive Engineer.** Such supplementary tenders above 10% of BOQ are to be executed only with the approval of appropriate Government irrespective of the value of tender.

Words importing the singular number only include the plural number and vice versa.

Irrespective of the accepting authority, Divisional officer shall be the authority signing agreement for all tenders of value more than Rs. 3.00 lakh up to any amount on behalf of the State.

Schedule showing (approximately) materials to be supplied by the Engineer-in-Charge under clause 10:

Particulars	Rates at which the materials will be charged to the contractor			Place of delivery
	Unit	Rs.	P.	

Note 1- The person or firm submitting the tender should see that the rates in the above schedule are filled up by the Engineer-in-charge on the issue of the form prior to the submission of the tender.

(Name in full)
 *Signature of Contractor/Agency
 with official seal containing
 Principal office address

(Name in full)
 *Signature of Managing Director
 on behalf of West Bengal Medical
 Services Corporation Limited with
 official seal containing designation &
 address

* To be authenticated on each and every page of the contract document by all parties.

ANNEXURE SECTION

Annexure-1

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Asansol Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box, 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CL-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wiring, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	nos	146,594.29	146,594.29
2	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				
a	4 way	8.00	nos	2,735.74	21,885.91
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				-
a	8 way	1.00	Nos	11,658.35	11,658.35
b	6 way	2.00	Nos	10,602.74	21,205.48
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				-
	12 way	1.00	Nos	22,001.26	22,001.26
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required – (As per Drawing no. 470 of PWD Specification Book – May 1991) 4 bars, 415 V, 315 A , Dimension of Al. bars [85mm long]- 4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	nos	3,914.86	7,829.71
6	Supplying and fixing 415 V 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				
a	320 A, 4P	1.00	nos	28,753.20	28,753.20
b	200 A, 4P	1.00	nos	11,672.33	11,672.33
c	200 A, 3P	2.00	nos	11,672.33	23,344.66
d	160 A, 4P	1.00	nos	8,496.17	8,496.17
e	100 A, 4P	9.00	nos	8,322.57	74,903.10
f	100 A, 3P	6.00	nos	8,322.57	49,935.40
g	63 A, 4 P	4.00	nos	4,971.64	19,886.54
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	nos	186.42	14,913.74
b	6-32 A, DP	2.00	nos	556.94	1,113.87
c	63 A, 3P	32.00	nos	1,385.35	44,331.09

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				
	40A, 30mA, four pole	8.00	nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	800.00	RM	1,100.40	880,317.83
b	4core x 35 sq.mm	200.00	RM	396.03	79,205.48
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/ surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	200.00	RM	82.72	16,544.93
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	800.00	RM	100.20	80,161.36
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	357.70	4,292.36
b	4.0 core x 35 sq.mm	50.00	Each	188.75	9,437.60
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
a	4.0 core x 120 sq.mm	12.00	Set	443.92	5,327.00
b	4.0 core x 35 sq.mm	50.00	Set	184.09	9,204.57
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	50.00	RM	875.02	43,750.86
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	1,440.00	RM	173.61	249,991.58
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,130.18	90,414.55
b	On Board	10.00	Point	251.67	2,516.69
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	889.00	42,671.94
b	6 Module	48.00	Point	484.57	23,259.28
c	4 Module	4.00	Point	369.35	1,477.39
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	138.65	39,931.54

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	188.75	54,549.34
20	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 lectrode	2.00	set	12,194.31	24,388.63
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	309.93	3,099.26
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	50	RM	822.00	41,100.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	50	Each	334.39	16,719.70
24	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. 200x50x1.25mm (18SWG)	10	Each	523.15	5,231.46
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	709.57	3,547.84
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells,Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	383.33	2,299.98

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	128.16	768.99
29	Supply and fixing of 24W (including all losses) 2ft X 2ft recess LED Luminaire with CRCA housing and minimum system lumen output of 3000 lumens with efficacy of 125 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours and CCT of 6500 K. The luminaire shall have CRI of > 80 with Standard deviation color matching (SDCM) < 5. It has IP20 protection and Operating Temperature range shall be 0 to 45 deg C. System power factor shall be > 0.9 and THD < 10%. Operating voltage should be 140 - 270V and in-built surge protection of 4KV. Luminaire should have Serviceability class B. Both Luminaire and Driver should be BIS Approved. LM 79 report and Type Test Certificate to be submitted for luminaire and LM 80 report for LED source issued by LED manufacturer. Similar to Philips Make Full Glow G5 "RC380B LED30S -6500 G5 L60 W60 PSU OD".	40	Nos	3,880.80	155,232.00
30	Supply and fixing of recess mounted Accent lighting luminaries with diecast aluminium heat sink and sand grain finishing reflector, 20W.	24	Nos	5,733.00	137,592.00
31	Painting upto 10 letters of the engraved number with approved black /red paint as required	500	nos	12.82	6,408.25
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	12,569.49	12,569.49
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and betteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd. Battery make-Exide or Quanta	2	Set	486,160.00	972,320.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	357.70	715.39
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/LeGrand	1	nos	8000.00	8,000.00
36	Supplying and fixing MCCB SS enclosure with IP20/30 protection, pwder coated provision for housing Four pole (4P) MCCB, concealed in wall after cutting the wall & mending good the damages to original finish / on flat iron frame incl. painting, connection & provision for earthing attachment	9	Each	1,423.80	12,814.17
Total					3605945.39

Annexure-2

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Basirhat Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box, 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CL-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wiring, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	nos	146,594.29	146,594.29
2	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				
a	4 way	8.00	nos	2,709.18	21,673.43
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				-
a	8 way	1.00	Nos	11,545.16	11,545.16
b	6 way	2.00	Nos	10,499.80	20,999.60
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				-
	12 way	1.00	Nos	21,787.66	21,787.66
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required – (As per Drawing no. 470 of PWD Specification Book – May 1991) 4 bars, 415 V, 315 A , Dimension of Al. bars [85mm long]-4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	nos	3,876.85	7,753.70
6	Supplying and fixing 415 V 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				
a	320 A, 4P	1.00	nos	28,753.20	28,753.20
b	200 A, 4P	1.00	nos	11,559.01	11,559.01
c	200 A, 3P	2.00	nos	11,559.01	23,118.02
d	160 A, 4P	1.00	nos	8,413.68	8,413.68
e	100 A, 4P	9.00	nos	8,241.76	74,175.88
f	100 A, 3P	6.00	nos	8,241.76	49,450.59
g	63 A, 4 P	4.00	nos	4,923.37	19,693.47
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	nos	184.61	14,768.95
b	6-32 A, DP	2.00	nos	551.53	1,103.06

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
c	63 A, 3P	32.00	nos	1,371.90	43,900.70
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				
	40A, 30mA, four pole	8.00	nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	600.00	RM	1,100.40	660,238.37
b	4core x 35 sq.mm	400.00	RM	396.03	158,410.96
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/ surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	400.00	RM	81.92	32,768.60
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	600.00	RM	99.23	59,537.32
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	354.22	4,250.69
b	4.0 core x 35 sq.mm	45.00	Each	186.92	8,411.38
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
a	4.0 core x 120 sq.mm	12.00	Set	439.61	5,275.28
b	4.0 core x 35 sq.mm	45.00	Set	182.30	8,203.69
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	50.00	RM	866.52	43,326.09
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	1,440.00	RM	171.92	247,564.48
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,119.21	89,536.74
b	On Board	10.00	Point	249.23	2,492.26
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	880.37	42,257.65
b	6 Module	48.00	Point	479.86	23,033.47
c	4 Module	4.00	Point	365.76	1,463.05

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	137.31	39,543.86
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	186.92	54,019.73
20	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 lectrode	2.00	set	12,075.92	24,151.84
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	306.92	3,069.17
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	50	RM	822.00	41,100.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	50	Each	331.15	16,557.37
24	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. 200x50x1.25mm (18SWG)	10	Each	518.07	5,180.67
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	702.68	3,513.39

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells,Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	379.61	2,277.65
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	126.92	761.52
29	Supply and fixing of 24W (including all losses) 2ft X 2ft recess LED Luminaire with CRCA housing and minimum system lumen output of 3000 lumens with efficacy of 125 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours and CCT of 6500 K. The luminaire shall have CRI of > 80 with Standard deviation color matching (SDCM) < 5. It has IP20 protection and Operating Temperature range shall be 0 to 45 deg C. System power factor shall be > 0.9 and THD < 10%. Operating voltage should be 140 - 270V and in-built surge protection of 4KV. Luminaire should have Serviceability class B. Both Luminaire and Driver should be BIS Approved. LM 79 report and Type Test Certificate to be submitted for luminaire and LM 80 report for LED source issued by LED manufacturer. Similar to Philips Make Full Glow G5 "RC380B LED30S -6500 G5 L60 W60 PSU OD".	40	Nos	3,880.80	155,232.00
30	Supply and fixing of recess mounted Accent lighting luminaries with diecast aluminium heat sink and sand grain finishing reflector, 20W.	24	Nos	5,733.00	137,592.00
31	Painting upto 10 letters of the engraved number with approved black /red paint as required	500	nos	12.69	6,346.03
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	12,447.45	12,447.45
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and betteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd. Battery make-Exide or Quanta	2	Set	486,160.00	972,320.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	354.22	708.45
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/LeGrand	1	Nos	8000.00	8,000.00

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
36	Supplying and fixing MCCB SS enclosure with IP20/30 protection, powder coated provision for housing Four pole (4P) MCCB, concealed in wall after cutting the wall & mending good the damages to original finish / on flat iron frame incl. painting, connection & provision for earthing attachment	9	Each	1,409.97	12,689.76
Total					3449130.11

Annexure-3

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Hatuara Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box, 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CL-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wiring, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	nos	146,594.29	146,594.29
2	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				
a	4 way	8.00	nos	2,788.86	22,310.88
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				-
a	8 way	1.00	Nos	11,884.73	11,884.73
b	6 way	2.00	Nos	10,808.62	21,617.23
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				-
	12 way	1.00	Nos	22,428.47	22,428.47
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required – (As per Drawing no. 470 of PWD Specification Book – May 1991) 4 bars, 415 V, 315 A , Dimension of Al. bars [85mm long]-4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	nos	3,990.87	7,981.75
6	Supplying and fixing 415 V 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				
a	320 A, 4P	1.00	nos	28,753.20	28,753.20
b	200 A, 4P	1.00	nos	11,898.98	11,898.98
c	200 A, 3P	2.00	nos	11,898.98	23,797.96
d	160 A, 4P	1.00	nos	8,661.15	8,661.15
e	100 A, 4P	9.00	nos	8,484.17	76,357.53
f	100 A, 3P	6.00	nos	8,484.17	50,905.02
g	63 A, 4 P	4.00	nos	5,068.17	20,272.69
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	nos	190.04	15,203.33
b	6-32 A, DP	2.00	nos	567.75	1,135.50
c	63 A, 3P	32.00	nos	1,412.25	45,191.89

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				
	40A, 30mA, four pole	8.00	nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	950.00	RM	1,100.40	1,045,377.42
b	4core x 35 sq.mm	400.00	RM	396.03	158,410.96
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/ surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	400.00	RM	84.33	33,732.38
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	950.00	RM	102.15	97,039.99
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	364.64	4,375.71
b	4.0 core x 35 sq.mm	45.00	Each	192.42	8,658.77
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
a	4.0 core x 120 sq.mm	12.00	Set	452.54	5,430.44
b	4.0 core x 35 sq.mm	45.00	Set	187.67	8,444.97
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	50.00	RM	892.01	44,600.39
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	1,440.00	RM	176.98	254,845.79
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,152.13	92,170.18
b	On Board	10.00	Point	256.56	2,565.56
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	906.26	43,500.52
b	6 Module	48.00	Point	493.98	23,710.92
c	4 Module	4.00	Point	376.52	1,506.08
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	141.34	40,706.91

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	192.42	55,608.55
20	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 lectrode	2.00	set	12,431.10	24,862.19
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	315.94	3,159.44
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	50	RM	822.00	41,100.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	50	Each	340.89	17,044.36
24	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. 200x50x1.25mm (18SWG)	10	Each	533.30	5,333.04
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	723.35	3,616.73
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells,Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	390.77	2,344.64

Sl. No.	Description of Item	Qnty.	Unit	Rate (Rupees)	Amount (Rupees)
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	130.65	783.92
29	Supply and fixing of 24W (including all losses) 2ft X 2ft recess LED Luminaire with CRCA housing and minimum system lumen output of 3000 lumens with efficacy of 125 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours and CCT of 6500 K. The luminaire shall have CRI of > 80 with Standard deviation color matching (SDCM) < 5. It has IP20 protection and Operating Temperature range shall be 0 to 45 deg C. System power factor shall be > 0.9 and THD < 10%. Operating voltage should be 140 - 270V and in-built surge protection of 4KV. Luminaire should have Serviceability class B. Both Luminaire and Driver should be BIS Approved. LM 79 report and Type Test Certificate to be submitted for luminaire and LM 80 report for LED source issued by LED manufacturer. Similar to Philips Make Full Glow G5 "RC380B LED30S -6500 G5 L60 W60 PSU OD".	40	Nos	3,880.80	155,232.00
30	Supply and fixing of recess mounted Accent lighting luminaries with diecast aluminium heat sink and sand grain finishing reflector, 20W.	24	Nos	5,733.00	137,592.00
31	Painting upto 10 letters of the engraved number with approved black /red paint as required	500	nos	13.07	6,532.68
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	12,813.55	12,813.55
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and betteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd. Battery make-Exide or Quanta	2	Set	486,160.00	972,320.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	364.64	729.28
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/LeGrand	1	nos	8000.00	8,000.00
36	Supplying and fixing MCCB SS enclosure with IP20/30 protection, pwder coated provision for housing Four pole (4P) MCCB, concealed in wall after cutting the wall & mending good the damages to original finish / on flat iron frame incl. painting, connection & provision for earthing attachment	9	Each	1,451.44	13,062.98
Total					3901765.75

Annexure-4
BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Egra Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box, 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CL-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wireing, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	nos	146,594.29	146,594.29
2	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				
a	4 way	8.00	nos	2,735.74	21,885.91
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				-
a	8 way	1.00	Nos	11,658.35	11,658.35
b	6 way	2.00	Nos	10,602.74	21,205.48
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				-
	12 way	1.00	Nos	22,001.26	22,001.26
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required – (As per Drawing no. 470 of PWD Specification Book – May 1991) 4 bars, 415 V, 315 A, Dimension of Al. bars [85mm long]-4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	nos	3,914.86	7,829.71
6	Supplying and fixing 415 V 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				
a	320 A, 4P	1.00	nos	28,753.20	28,753.20
b	200 A, 4P	1.00	nos	11,672.33	11,672.33
c	200 A, 3P	2.00	nos	11,672.33	23,344.66
d	160 A, 4P	1.00	nos	8,496.17	8,496.17
e	100 A, 4P	9.00	nos	8,322.57	74,903.10
f	100 A, 3P	6.00	nos	8,322.57	49,935.40
g	63 A, 4 P	4.00	nos	4,971.64	19,886.54
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	nos	186.42	14,913.74
b	6-32 A, DP	2.00	nos	556.94	1,113.87
c	63 A, 3P	32.00	nos	1,385.35	44,331.09
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
	40A, 30mA, four pole	8.00	nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	800.00	RM	1,100.40	880,317.83
b	4core x 35 sq.mm	400.00	RM	396.03	158,410.96
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	400.00	RM	82.72	33,089.86
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	800.00	RM	100.20	80,161.36
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	357.70	4,292.36
b	4.0 core x 35 sq.mm	45.00	Each	188.75	8,493.84
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials:				
a	4.0 core x 120 sq.mm	12.00	Set	443.92	5,327.00
b	4.0 core x 35 sq.mm	45.00	Set	184.09	8,284.12
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	50.00	RM	875.02	43,750.86
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	1,440.00	RM	173.61	249,991.58
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,130.18	90,414.55
b	On Board	10.00	Point	251.67	2,516.69
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	889.00	42,671.94
b	6 Module	48.00	Point	484.57	23,259.28
c	4 Module	4.00	Point	369.35	1,477.39
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	138.65	39,931.54

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	188.75	54,549.34
20	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 lectrode	2.00	set	12,194.31	24,388.63
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	309.93	3,099.26
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	50	RM	822.00	41,100.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	50	Each	334.39	16,719.70
24	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. 200x50x1.25mm (18SWG)	10	Each	523.15	5,231.46
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	709.57	3,547.84
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells,Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	383.33	2,299.98
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	128.16	768.99

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
29	Supply and fixing of 24W (including all losses) 2ft X 2ft recess LED Luminaire with CRCA housing and minimum system lumen output of 3000 lumens with efficacy of 125 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours and CCT of 6500 K. The luminaire shall have CRI of > 80 with Standard deviation color matching (SDCM) < 5. It has IP20 protection and Operating Temperature range shall be 0 to 45 deg C. System power factor shall be > 0.9 and THD < 10%. Operating voltage should be 140 - 270V and in-built surge protection of 4KV. Luminaire should have Serviceability class B. Both Luminaire and Driver should be BIS Approved. LM 79 report and Type Test Certificate to be submitted for luminaire and LM 80 report for LED source issued by LED manufacturer. Similar to Philips Make Full Glow G5 "RC380B LED30S -6500 G5 L60 W60 PSU OD".	40	Nos	3,880.80	155,232.00
30	Supply and fixing of recess mounted Accent lighting luminaries with diecast aluminium heat sink and sand grain finishing reflector, 20W.	24	Nos	5,733.00	137,592.00
31	Painting upto 10 letters of the engraved number with approved black /red paint as required	500	nos	12.82	6,408.25
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	12,569.49	12,569.49
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and betteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd. Battery make-Exide or Quanta	2	Set	486,160.00	972,320.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	357.70	715.39
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/Legrand	1	nos	8000.00	8,000.00
36	Supplying and fixing MCCB SS enclosure with IP20/30 protection, pwder coated provision for housing Four pole (4P) MCCB, concealed in wall after cutting the wall & mending good the damages to original finish / on flat iron frame incl. painting, connection & provision for earthing attachment	9	Each	1,423.80	12,814.17
Total					3699831.58

Annexure-5

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Falakata Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box, 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CL-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wiring, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	nos	146,594.29	146,594.29
2	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				
a	4 way	8.00	nos	2,921.66	23,373.31
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				-
a	8 way	1.00	Nos	12,450.67	12,450.67
b	6 way	2.00	Nos	11,323.31	22,646.62
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				-
	12 way	1.00	Nos	23,496.49	23,496.49
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required – (As per Drawing no. 470 of PWD Specification Book – May 1991) 4 bars, 415 V, 315 A , Dimension of Al. bars [85mm long]- 4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	nos	4,180.92	8,361.83
6	Supplying and fixing 415 V 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				
a	320 A, 4P	1.00	nos	28,753.20	28,753.20
b	200 A, 4P	1.00	nos	12,465.60	12,465.60
c	200 A, 3P	2.00	nos	12,465.60	24,931.20
d	160 A, 4P	1.00	nos	9,073.58	9,073.58
e	100 A, 4P	9.00	nos	8,888.18	79,993.60
f	100 A, 3P	6.00	nos	8,888.18	53,329.07
g	63 A, 4 P	4.00	nos	5,309.51	21,238.05
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	nos	199.09	15,927.30
b	6-32 A, DP	2.00	nos	594.78	1,189.57
c	63 A, 3P	32.00	nos	1,479.50	47,343.89

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				
	40A, 30mA, four pole	8.00	nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	650.00	RM	1,100.40	715,258.23
b	4core x 35 sq.mm	400.00	RM	396.03	158,410.96
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/ surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	400.00	RM	88.35	35,338.69
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	650.00	RM	107.01	69,557.49
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	382.01	4,584.07
b	4.0 core x 35 sq.mm	45.00	Each	201.58	9,071.09
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
a	4.0 core x 120 sq.mm	12.00	Set	474.09	5,689.03
b	4.0 core x 35 sq.mm	45.00	Set	196.60	8,847.12
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	50.00	RM	934.48	46,724.22
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	1,440.00	RM	185.40	266,981.30
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,206.99	96,559.23
b	On Board	10.00	Point	268.77	2,687.73
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	949.42	45,571.98
b	6 Module	48.00	Point	517.50	24,840.01
c	4 Module	4.00	Point	394.45	1,577.80
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	148.07	42,645.34

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	201.58	58,256.57
20	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 lectrode	2.00	set	13,023.05	26,046.11
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	330.99	3,309.89
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	50	RM	822.00	41,100.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	50	Each	357.12	17,855.99
24	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. 200x50x1.25mm (18SWG)	10	Each	558.70	5,587.00
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	757.79	3,788.95
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells,Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	409.38	2,456.29

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	136.88	821.25
29	Supply and fixing of 24W (including all losses) 2ft X 2ft recess LED Luminaire with CRCA housing and minimum system lumen output of 3000 lumens with efficacy of 125 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours and CCT of 6500 K. The luminaire shall have CRI of > 80 with Standard deviation color matching (SDCM) < 5. It has IP20 protection and Operating Temperature range shall be 0 to 45 deg C. System power factor shall be > 0.9 and THD < 10%. Operating voltage should be 140 - 270V and in-built surge protection of 4KV. Luminaire should have Serviceability class B. Both Luminaire and Driver should be BIS Approved. LM 79 report and Type Test Certificate to be submitted for luminaire and LM 80 report for LED source issued by LED manufacturer. Similar to Philips Make Full Glow G5 "RC380B LED30S -6500 G5 L60 W60 PSU OD".	40	Nos	3,880.80	155,232.00
30	Supply and fixing of recess mounted Accent lighting luminaries with diecast aluminium heat sink and sand grain finishing reflector, 20W.	24	Nos	5,733.00	137,592.00
31	Painting upto 10 letters of the engraved number with approved black /red paint as required	500	nos	13.69	6,843.76
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	13,423.72	13,423.72
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and betteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd. Battery make-Exide or Quanta	2	Set	486,160.00	972,320.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	382.01	764.01
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/Legrand	1	nos	8000.00	8,000.00
36	Supplying and fixing MCCB SS enclosure with IP20/30 protection, pwder coated provision for housing Four pole (4P) MCCB, concealed in wall after cutting the wall & mending good the damages to original finish / on flat iron frame incl. painting, connection & provision for earthing attachment	9	Each	1,520.56	13,685.03
Total					3594153.92

Annexure-6

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Kalna Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box, 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CL-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wiring, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	nos	146,594.29	146,594.29
2	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				
a	4 way	8.00	nos	2,735.74	21,885.91
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				-
a	8 way	1.00	Nos	11,658.35	11,658.35
b	6 way	2.00	Nos	10,602.74	21,205.48
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				-
	12 way	1.00	Nos	22,001.26	22,001.26
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required – (As per Drawing no. 470 of PWD Specification Book – May 1991) 4 bars, 415 V, 315 A , Dimension of Al. bars [85mm long]- 4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	nos	3,914.86	7,829.71
6	Supplying and fixing 415 V 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				
a	320 A, 4P	1.00	nos	28,753.20	28,753.20
b	200 A, 4P	1.00	nos	11,672.33	11,672.33
c	200 A, 3P	2.00	nos	11,672.33	23,344.66
d	160 A, 4P	1.00	nos	8,496.17	8,496.17
e	100 A, 4P	9.00	nos	8,322.57	74,903.10
f	100 A, 3P	6.00	nos	8,322.57	49,935.40
g	63 A, 4 P	4.00	nos	4,971.64	19,886.54
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	nos	186.42	14,913.74
b	6-32 A, DP	2.00	nos	556.94	1,113.87
c	63 A, 3P	32.00	nos	1,385.35	44,331.09

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				
	40A, 30mA, four pole	8.00	nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	800.00	RM	1,100.40	880,317.83
b	4core x 35 sq.mm	400.00	RM	396.03	158,410.96
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/ surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	400.00	RM	82.72	33,089.86
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	800.00	RM	100.20	80,161.36
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	357.70	4,292.36
b	4.0 core x 35 sq.mm	45.00	Each	188.75	8,493.84
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
a	4.0 core x 120 sq.mm	12.00	Set	443.92	5,327.00
b	4.0 core x 35 sq.mm	45.00	Set	184.09	8,284.12
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	50.00	RM	875.02	43,750.86
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	1,440.00	RM	173.61	249,991.58
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,130.18	90,414.55
b	On Board	10.00	Point	251.67	2,516.69
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	889.00	42,671.94
b	6 Module	48.00	Point	484.57	23,259.28
c	4 Module	4.00	Point	369.35	1,477.39
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	138.65	39,931.54

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	188.75	54,549.34
20	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 lectrode	2.00	set	12,194.31	24,388.63
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	309.93	3,099.26
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	50	RM	822.00	41,100.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	50	Each	334.39	16,719.70
24	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. 200x50x1.25mm (18SWG)	10	Each	523.15	5,231.46
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	709.57	3,547.84
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells,Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	383.33	2,299.98

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	128.16	768.99
29	Supply and fixing of 24W (including all losses) 2ft X 2ft recess LED Luminaire with CRCA housing and minimum system lumen output of 3000 lumens with efficacy of 125 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours and CCT of 6500 K. The luminaire shall have CRI of > 80 with Standard deviation color matching (SDCM) < 5. It has IP20 protection and Operating Temperature range shall be 0 to 45 deg C. System power factor shall be > 0.9 and THD < 10%. Operating voltage should be 140 - 270V and in-built surge protection of 4KV. Luminaire should have Serviceability class B. Both Luminaire and Driver should be BIS Approved. LM 79 report and Type Test Certificate to be submitted for luminaire and LM 80 report for LED source issued by LED manufacturer. Similar to Philips Make Full Glow G5 "RC380B LED30S -6500 G5 L60 W60 PSU OD".	40	Nos	3,880.80	155,232.00
30	Supply and fixing of recess mounted Accent lighting luminaries with diecast aluminium heat sink and sand grain finishing reflector, 20W.	24	Nos	5,733.00	137,592.00
31	Painting upto 10 letters of the engraved number with approved black /red paint as required	500	nos	12.82	6,408.25
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	12,569.49	12,569.49
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and betteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd. Battery make-Exide or Quanta	2	Set	486,160.00	972,320.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	357.70	715.39
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/LeGrand	1	nos	8000.00	8,000.00
36	Supplying and fixing MCCB SS enclosure with IP20/30 protection, pwder coated provision for housing Four pole (4P) MCCB, concealed in wall after cutting the wall & mending good the damages to original finish / on flat iron frame incl. painting, connection & provision for earthing attachment	9	Each	1,423.80	12,814.17
Total					3699831.58

Annexure-7

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Nandigram Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box, 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CL-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wiring, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	nos	146,594.29	146,594.29
2	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				
a	4 way	8.00	nos	2,735.74	21,885.91
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				-
a	8 way	1.00	Nos	11,658.35	11,658.35
b	6 way	2.00	Nos	10,602.74	21,205.48
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				-
	12 way	1.00	Nos	22,001.26	22,001.26
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required – (As per Drawing no. 470 of PWD Specification Book – May 1991) 4 bars, 415 V, 315 A , Dimension of Al. bars [85mm long]- 4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	nos	3,914.86	7,829.71
6	Supplying and fixing 415 V 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				
a	320 A, 4P	1.00	nos	28,753.20	28,753.20
b	200 A, 4P	1.00	nos	11,672.33	11,672.33
c	200 A, 3P	2.00	nos	11,672.33	23,344.66
d	160 A, 4P	1.00	nos	8,496.17	8,496.17
e	100 A, 4P	9.00	nos	8,322.57	74,903.10
f	100 A, 3P	6.00	nos	8,322.57	49,935.40
g	63 A, 4 P	4.00	nos	4,971.64	19,886.54
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	nos	186.42	14,913.74
b	6-32 A, DP	2.00	nos	556.94	1,113.87
c	63 A, 3P	32.00	nos	1,385.35	44,331.09

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				
	40A, 30mA, four pole	8.00	nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	950.00	RM	1,100.40	1,045,377.42
b	4core x 35 sq.mm	400.00	RM	396.03	158,410.96
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/ surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	400.00	RM	82.72	33,089.86
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	950.00	RM	100.20	95,191.61
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	357.70	4,292.36
b	4.0 core x 35 sq.mm	45.00	Each	188.75	8,493.84
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
a	4.0 core x 120 sq.mm	12.00	Set	443.92	5,327.00
b	4.0 core x 35 sq.mm	45.00	Set	184.09	8,284.12
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	50.00	RM	875.02	43,750.86
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	1,440.00	RM	173.61	249,991.58
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,130.18	90,414.55
b	On Board	10.00	Point	251.67	2,516.69
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	889.00	42,671.94
b	6 Module	48.00	Point	484.57	23,259.28
c	4 Module	4.00	Point	369.35	1,477.39
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	138.65	39,931.54

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	188.75	54,549.34
20	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 lectrode	2.00	set	12,194.31	24,388.63
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	309.93	3,099.26
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	50	RM	822.00	41,100.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	50	Each	334.39	16,719.70
24	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. 200x50x1.25mm (18SWG)	10	Each	523.15	5,231.46
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	709.57	3,547.84
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells,Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	383.33	2,299.98

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	128.16	768.99
29	Supply and fixing of 24W (including all losses) 2ft X 2ft recess LED Luminaire with CRCA housing and minimum system lumen output of 3000 lumens with efficacy of 125 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours and CCT of 6500 K. The luminaire shall have CRI of > 80 with Standard deviation color matching (SDCM) < 5. It has IP20 protection and Operating Temperature range shall be 0 to 45 deg C. System power factor shall be > 0.9 and THD < 10%. Operating voltage should be 140 - 270V and in-built surge protection of 4KV. Luminaire should have Serviceability class B. Both Luminaire and Driver should be BIS Approved. LM 79 report and Type Test Certificate to be submitted for luminaire and LM 80 report for LED source issued by LED manufacturer. Similar to Philips Make Full Glow G5 "RC380B LED30S -6500 G5 L60 W60 PSU OD".	40	Nos	3,880.80	155,232.00
30	Supply and fixing of recess mounted Accent lighting luminaries with diecast aluminium heat sink and sand grain finishing reflector, 20W.	24	Nos	5,733.00	137,592.00
31	Painting upto 10 letters of the engraved number with approved black /red paint as required	500	nos	12.82	6,408.25
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	12,569.49	12,569.49
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and betteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd. Battery make-Exide or Quanta	2	Set	486,160.00	972,320.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	357.70	715.39
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/LeGrand	1	nos	8000.00	8,000.00
36	Supplying and fixing MCCB SS enclosure with IP20/30 protection, pwder coated provision for housing Four pole (4P) MCCB, concealed in wall after cutting the wall & mending good the damages to original finish / on flat iron frame incl. painting, connection & provision for earthing attachment	9	Each	1,423.80	12,814.17
Total					3879921.42

Annexure-8
BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Panskura Super
Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box, 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CL-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wiring, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	nos	146,594.29	146,594.29
2	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				
a	4 way	8.00	nos	2,735.74	21,885.91
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				-
a	8 way	1.00	Nos	11,658.35	11,658.35
b	6 way	2.00	Nos	10,602.74	21,205.48
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				-
	12 way	1.00	Nos	22,001.26	22,001.26
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required – (As per Drawing no. 470 of PWD Specification Book – May 1991) 4 bars, 415 V, 315 A , Dimension of Al. bars [85mm long]- 4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	nos	3,914.86	7,829.71
6	Supplying and fixing 415 V 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				
a	320 A, 4P	1.00	nos	28,753.20	28,753.20
b	200 A, 4P	1.00	nos	11,672.33	11,672.33
c	200 A, 3P	2.00	nos	11,672.33	23,344.66
d	160 A, 4P	1.00	nos	8,496.17	8,496.17
e	100 A, 4P	9.00	nos	8,322.57	74,903.10
f	100 A, 3P	6.00	nos	8,322.57	49,935.40
g	63 A, 4 P	4.00	nos	4,971.64	19,886.54
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	nos	186.42	14,913.74
b	6-32 A, DP	2.00	nos	556.94	1,113.87
c	63 A, 3P	32.00	nos	1,385.35	44,331.09

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				
	40A, 30mA, four pole	8.00	nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	560.00	RM	1,100.40	616,222.48
b	4core x 35 sq.mm	570.00	RM	396.03	225,735.61
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/ surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	570.00	RM	82.72	47,153.05
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	560.00	RM	100.20	56,112.95
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	357.70	4,292.36
b	4.0 core x 35 sq.mm	45.00	Each	188.75	8,493.84
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
a	4.0 core x 120 sq.mm	12.00	Set	443.92	5,327.00
b	4.0 core x 35 sq.mm	45.00	Set	184.09	8,284.12
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	50.00	RM	875.02	43,750.86
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	2,000.00	RM	173.61	347,210.53
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,130.18	90,414.55
b	On Board	10.00	Point	251.67	2,516.69
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	889.00	42,671.94
b	6 Module	48.00	Point	484.57	23,259.28
c	4 Module	4.00	Point	369.35	1,477.39
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	138.65	39,931.54

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	188.75	54,549.34
20	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 lectrode	2.00	set	12,194.31	24,388.63
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	309.93	3,099.26
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	50	RM	822.00	41,100.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	60	Each	334.39	20,063.64
24	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. 200x50x1.25mm (18SWG)	10	Each	523.15	5,231.46
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	709.57	3,547.84
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells,Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	383.33	2,299.98

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	128.16	768.99
29	Supply and fixing of 24W (including all losses) 2ft X 2ft recess LED Luminaire with CRCA housing and minimum system lumen output of 3000 lumens with efficacy of 125 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours and CCT of 6500 K. The luminaire shall have CRI of > 80 with Standard deviation color matching (SDCM) < 5. It has IP20 protection and Operating Temperature range shall be 0 to 45 deg C. System power factor shall be > 0.9 and THD < 10%. Operating voltage should be 140 - 270V and in-built surge protection of 4KV. Luminaire should have Serviceability class B. Both Luminaire and Driver should be BIS Approved. LM 79 report and Type Test Certificate to be submitted for luminaire and LM 80 report for LED source issued by LED manufacturer. Similar to Philips Make Full Glow G5 "RC380B LED30S -6500 G5 L60 W60 PSU OD".	40	Nos	3,880.80	155,232.00
30	Supply and fixing of recess mounted Accent lighting luminaries with diecast aluminium heat sink and sand grain finishing reflector, 20W.	24	Nos	5,733.00	137,592.00
31	Painting upto 10 letters of the engraved number with approved black /red paint as required	500	nos	12.82	6,408.25
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	12,569.49	12,569.49
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and betteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd. Battery make-Exide or Quanta	2	Set	486,160.00	972,320.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	357.70	715.39
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/LeGrand	1	nos	8000.00	8,000.00
36	Supplying and fixing MCCB SS enclosure with IP20/30 protection, pwder coated provision for housing Four pole (4P) MCCB, concealed in wall after cutting the wall & mending good the damages to original finish / on flat iron frame incl. painting, connection & provision for earthing attachment	9	Each	1,423.80	12,814.17
Total					3593638.56

Annexure-9

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Raghunathpur Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box, 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CL-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wiring, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	nos	146,594.29	146,594.29
2	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				
a	4 way	8.00	nos	2,788.86	22,310.88
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				-
a	8 way	1.00	Nos	11,884.73	11,884.73
b	6 way	2.00	Nos	10,808.62	21,617.23
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				-
	12 way	1.00	Nos	22,428.47	22,428.47
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required – (As per Drawing no. 470 of PWD Specification Book – May 1991) 4 bars, 415 V, 315 A , Dimension of Al. bars [85mm long]- 4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	nos	3,990.87	7,981.75
6	Supplying and fixing 415 V 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				
a	320 A, 4P	1.00	nos	28,753.20	28,753.20
b	200 A, 4P	1.00	nos	11,898.98	11,898.98
c	200 A, 3P	2.00	nos	11,898.98	23,797.96
d	160 A, 4P	1.00	nos	8,661.15	8,661.15
e	100 A, 4P	9.00	nos	8,484.17	76,357.53
f	100 A, 3P	6.00	nos	8,484.17	50,905.02
g	63 A, 4 P	4.00	nos	5,068.17	20,272.69
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	nos	190.04	15,203.33
b	6-32 A, DP	2.00	nos	567.75	1,135.50
c	63 A, 3P	32.00	nos	1,412.25	45,191.89

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				
	40A, 30mA, four pole	8.00	nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	700.00	RM	1,100.40	770,278.10
b	4core x 35 sq.mm	400.00	RM	396.03	158,410.96
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/ surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	400.00	RM	84.33	33,732.38
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	700.00	RM	102.15	71,503.15
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	364.64	4,375.71
b	4.0 core x 35 sq.mm	45.00	Each	192.42	8,658.77
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
a	4.0 core x 120 sq.mm	12.00	Set	452.54	5,430.44
b	4.0 core x 35 sq.mm	45.00	Set	187.67	8,444.97
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	50.00	RM	892.01	44,600.39
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	1,440.00	RM	176.98	254,845.79
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,152.13	92,170.18
b	On Board	10.00	Point	256.56	2,565.56
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	906.26	43,500.52
b	6 Module	48.00	Point	493.98	23,710.92
c	4 Module	4.00	Point	376.52	1,506.08
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	141.34	40,706.91

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	192.42	55,608.55
20	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 lectrode	2.00	set	12,431.10	24,862.19
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	315.94	3,159.44
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	50	RM	822.00	41,100.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	50	Each	340.89	17,044.36
24	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. 200x50x1.25mm (18SWG)	10	Each	533.30	5,333.04
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	723.35	3,616.73
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells, Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	390.77	2,344.64

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	130.65	783.92
29	Supply and fixing of 24W (including all losses) 2ft X 2ft recess LED Luminaire with CRCA housing and minimum system lumen output of 3000 lumens with efficacy of 125 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours and CCT of 6500 K. The luminaire shall have CRI of > 80 with Standard deviation color matching (SDCM) < 5. It has IP20 protection and Operating Temperature range shall be 0 to 45 deg C. System power factor shall be > 0.9 and THD < 10%. Operating voltage should be 140 - 270V and in-built surge protection of 4KV. Luminaire should have Serviceability class B. Both Luminaire and Driver should be BIS Approved. LM 79 report and Type Test Certificate to be submitted for luminaire and LM 80 report for LED source issued by LED manufacturer. Similar to Philips Make Full Glow G5 "RC380B LED30S -6500 G5 L60 W60 PSU OD".	40	Nos	3,880.80	155,232.00
30	Supply and fixing of recess mounted Accent lighting luminaries with diecast aluminium heat sink and sand grain finishing reflector, 20W.	24	Nos	5,733.00	137,592.00
31	Painting upto 10 letters of the engraved number with approved black /red paint as required	500	nos	13.07	6,532.68
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	12,813.55	12,813.55
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and betteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd. Battery make-Exide or Quanta	2	Set	486,160.00	972,320.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	364.64	729.28
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/LeGrand	1	nos	8000.00	8,000.00
36	Supplying and fixing MCCB SS enclosure with IP20/30 protection, pwder coated provision for housing Four pole (4P) MCCB, concealed in wall after cutting the wall & mending good the damages to original finish / on flat iron frame incl. painting, connection & provision for earthing attachment	9	Each	1,451.44	13,062.98
Total					3601129.59

Annexure-10

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Barjora Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box, 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CI-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wiring, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	Nos	146,594.29	146,594.29
2	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				
a	4 way	2.00	Nos	2,788.86	5,577.72
b	6 way	2.00	Nos	3,565.66	7,131.31
c	8 way	8.00	Nos	4,279.50	34,235.99
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				
	8 way	3.00	Nos	11,884.73	35,654.18
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				
	12 way	1.00	Nos	22,428.47	22,428.47
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required - (As per Drawing no. 470 of PWD Specification Book - May 1991) 4 bars, 415 V, 315 A , Dimension of Al. bars [85mm long]- 4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	Nos	3,990.87	7,981.75
6	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				
a	320 A	1.00	Nos	28,753.20	28,753.20
b	250 A	3.00	Nos	11,898.98	35,696.94
c	200 A	3.00	Nos	11,898.98	35,696.94
d	160 A	1.00	Nos	8,661.15	8,661.15
e	63 A	4.00	Nos	5,068.17	20,272.69
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	Nos	190.04	15,203.33
b	6-32 A, DP	2.00	Nos	567.75	1,135.50
c	63 A, 3P	24.00	Nos	1,412.25	33,893.92
d	40 A, 3P	8.00	Nos	1,412.25	11,297.97
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				
	40A, 30mA, four pole	8.00	Nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	390.00	RM	1,100.40	429,154.94
b	4core x 35 sq.mm	500.00	RM	396.03	198,013.70

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Barjora Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/ surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	500.00	RM	84.33	42,165.48
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	390.00	RM	102.15	39,837.47
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	364.64	4,375.71
b	4.0 core x 35 sq.mm	45.00	Each	192.42	8,658.77
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
a	4.0 core x 120 sq.mm	12.00	Set	452.54	5,430.44
b	4.0 core x 35 sq.mm	45.00	Set	187.67	8,444.97
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	50.00	RM	892.01	44,600.39
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	1,336.00	RM	176.98	236,440.26
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,152.13	92,170.18
b	On Board	10.00	Point	256.56	2,565.56
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	906.26	43,500.52
b	6 Module	48.00	Point	493.98	23,710.92
c	4 Module	4.00	Point	376.52	1,506.08
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	141.34	40,706.91
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	192.42	55,608.55

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Barjora Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
20	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 86.36 x 86.36 x 46 cm 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 lectrode	2.00	Set	12,431.10	24,862.19
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	315.94	3,159.44
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	50	RM	822.00	41,100.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	50	Each	340.89	17,044.36
24	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. 200x50x1.25mm (18SWG)	10	Each	533.30	5,333.04
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	723.35	3,616.73
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells,Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	390.77	2,344.64
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	130.65	783.92

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Barjora Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qnty.	Unit	Rate (Rupees)	Amount (Rupees)
29	Supply and fixing of 24W (including all losses) 2ft X 2ft recess LED Luminaire with CRCA housing and minimum system lumen output of 3000 lumens with efficacy of 125 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours and CCT of 6500 K. The luminaire shall have CRI of > 80 with Standard deviation color matching (SDCM) < 5. It has IP20 protection and Operating Temperature range shall be 0 to 45 deg C. System power factor shall be > 0.9 and THD < 10%. Operating voltage should be 140 - 270V and in-built surge protection of 4KV. Luminaire should have Serviceability class B. Both Luminaire and Driver should be BIS Approved. LM 79 report and Type Test Certificate to be submitted for luminaire and LM 80 report for LED source issued by LED manufacturer. Similar to Philips Make Full Glow G5 "RC380B LED30S -6500 G5 L60 W60 PSU OD".	40	Nos	3,880.80	155,232.00
30	Supply and fixing of recess mounted Accent lighting luminaries with diecast aluminium heat sink and sand grain finishing reflector, 20W.	24	Nos	5,733.00	137,592.00
31	Painting upto 10 letters of the engraved number with approved black /red paint as required	520	Nos	13.07	6,793.99
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	12,813.55	12,813.55
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and batteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd., Fuji Electric Consul Neowatt Battery make-Exide or Quanta	1	Set	486,160.00	486,160.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	364.64	729.28
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/Legrand	1	Nos	8000.00	8,000.00
Total					2,694,230.14

Annexure-11

BOQ for Establishment of 24 bedded hybrid Critical Care Unit at Sagardighi Super Speciality Hospital- Electrical Work.

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
1	Supply & fixing of Sub Main Distribution Board (SMDB) with 1 no. metering extension box, 1 no. bottom cabling box, 4nos corner box; 2 nos side Cabling box(left and right side), 1 no. Multi function Meter (MFM 4400 LCD meter CI 1), 3 nos 400/5 CL-1 Cast Resin type Current Transformer, 3 nos indication lamp,including all internal wiring, conforms to IEC 61439-2 & DEKRA and ASTA certified, without incoming & outgoing MCCB, 8 ways Make: L&T (Cat No. DA6AD1084CZZ0)	1.00	nos	146,594.29	146,594.29
2	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				
a	4 way	2.00	nos	2,788.86	5,577.72
b	6 way	2.00	nos	3,565.66	7,131.31
c	8 way	8.00	Nos	4,279.50	34,235.99
3	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 160A				
	8 way	3.00	Nos	11,884.73	35,654.18
4	Supplying and fixing double door Vertical TPN MCB 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 attachmen, Up to 250A				
	12 way	1.00	Nos	22,428.47	22,428.47
5	Supplying & fixing sheet metal (16 SWG) Iron Clad Busbar chambers on angle iron frame on wall, incl. earthing attachment and painting as required - (As per Drawing no. 470 of PWD Specification Book - May 1991) 4 bars, 415 V, 315 A , Dimension of Al. bars [85mm long]- 4x50x10mm, Dimension of Sheet Metal box-500x150mm,	2.00	nos	3,990.87	7,981.75
6	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				
a	320 A	1.00	nos	28,753.20	28,753.20
b	250 A	2.00	nos	11,898.98	23,797.96
c	200 A	3.00	nos	11,898.98	35,696.94
d	160 A	1.00	nos	8,661.15	8,661.15
e	63 A	4.00	nos	5,068.17	20,272.69
7	Supplying and fixing 240/415 V MCB of Breaking capacity 10kA & C characteristics on din rail of existing DBs and necessary connection				
a	6-32 A, SP	80.00	nos	190.04	15,203.33
b	6-32 A, DP	2.00	nos	567.75	1,135.50
c	63 A, 3P	24.00	nos	1,412.25	33,893.92
d	40 A, 3P	8.00	nos	1,412.25	11,297.97

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
8	Supplying and fixing 415 V RCBO of Breaking capacity 10 kA with in existing DBs / enclosure and necessary connection				
	40A, 30mA, four pole	8.00	nos	4,784.85	38,278.80
9	Supply of following 1.1 KV Grade XLPE insulated, extruded PVC type ST2 outer sheathed, armoured Al. conductor cable as per IS 7098 (Part - I) 1988 with up to date amendments. Make: Havells, Gloster, Polycab/KEI/RR kabel				
a	4core x 120 sq.mm	910.00	RM	1,100.40	1,001,361.53
b	4core x 35 sq.mm	400.00	RM	396.03	158,410.96
10	Laying of cable from 3/3½ core 35 sqmm to 50 sqmm on wall/ surface incl. S & F MS saddles with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making holes etc. as necy., mending good damages and painting.	400.00	RM	84.33	33,732.38
11	Laying of cable above 3½ core 90 sqmm and upto 3½ core 150 sqmm on wall/surface including S & F MS clams with earthing attachment in 2 x 10 SWG GI (Hot Dip) Wire, making hole etc. as necy., mending good damages and painting	910.00	RM	102.15	92,954.10
12	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below.				
a	4.0 core x 120 sq.mm	12.00	Each	364.64	4,375.71
b	4.0 core x 35 sq.mm	45.00	Each	192.42	8,658.77
13	Finishing the end of following XLPE/PVC armoured cables by crimping method incl. supplying and fixing solderless socket (Dowels make), tapes, anticorrosive paste & jointing materials :				
a	4.0 core x 120 sq.mm	12.00	Set	452.54	5,430.44
b	4.0 core x 35 sq.mm	45.00	Set	187.67	8,444.97
14	Supplying & fixing medium gauge GI Pipe (ISI-Medium) Protection with necessary fittings and jointing metarials as required 100 mm dia	40.00	RM	892.01	35,680.31
15	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 2 x 56/0.3 (4 sqmm) + 1 x 36/0.3 (2.5 sqmm) ECC	1,400.00	RM	176.98	247,766.74
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 Modular type switch (Brand approved by EIC) fixed on Modular GI switch board with top cover plate and 2 no. suitable size "Ph & N" copper bar & earthing attachment fixed on wall incl. mending good damages to original finish.				
a	Average run 8 mtr	80.00	Point	1,152.13	92,170.18
b	On Board	10.00	Point	256.56	2,565.56
17	Supplying & Fixing GI Modular Switch Board of the following sizes complete with PVC Back Box, three no. suitable size Copper bar with holes (for Ph, N & E) incl. making earthing attachment, painting and mending good damages to building works				
a	2 Row 12 Module	48.00	Point	906.26	43,500.52
b	6 Module	48.00	Point	493.98	23,710.92
c	4 Module	4.00	Point	376.52	1,506.08
18	Supply & Fixing 240 V 16 A Modular type switch(Brand approved by EIC) on GI Modular type switchboard having top cover plate and making necessary connections as required	288.00	Each	141.34	40,706.91

Sl. No.	Description of Item	Qty.	Unit	Rate (Rupees)	Amount (Rupees)
19	Supply & Fixing 240 V, 16 A, 3 pin Modular type plug socket (Brand approved by EIC), without plug top and switch, on existing GI Modular type switch board with top cover plate and making necy. connections with PVC Cu wire and earth continuity wire etc.	289.00	Each	192.42	55,608.55
20	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	2.00	set	12,431.10	24,862.19
21	Excavation of soil for installation of Earth Electrode and filling & ramming. For Morrum Soil	10.00	Cu mtr.	315.94	3,159.44
22	Supply and fixing of 25 mm width X 3 mm thickness flat copper strip connecting between the Copper Earthing Pit and the compressor or the power distribution panel or to the Copper bus bar on wall/floor with GI saddles & insulating the same by one layer of PVC strip over one layer of ampere tape	53	RM	822.00	43,566.00
23	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. With 25x25x3mm angle iron support 200x50x1.25mm (18SWG)	50	Each	340.89	17,044.36
24	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. 200x50x1.25mm (18SWG)	10	Each	533.30	5,333.04
25	Supply & Fixing of perforated GI cable tray tee 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. 200x50x1.25mm (18SWG)	5	Each	723.35	3,616.73
26	Supply of Heavy duty 300mm. Impeller dia Single Phase, Exhaust Fan Make: Havells, Usha, Crompton	6	Nos	3,880.00	23,280.00
27	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:	6	Nos	390.77	2,344.64
28	Supply & Fixing louver shutter on wall with necy. bolts & nuts (6 mm dia x 62 mm long) For Al. 30 cm Exhaust fan (12")	6	Nos	130.65	783.92

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31	Painting upto 10 letters of the engraved number with approved black /red paint as required	500	nos	13.07	6,532.68
32	Supplying and fixing 415V, TPN on load front operated Changeover switch with Sheet Steel enclosure on angle iron frame on wall with nuts bolts 2 nos cable end box etc 415V FP, 125 A, make : HPL, Havells, L&T	1	Nos	12,813.55	12,813.55
33	20KVA (Input : 3P /Output : 3P) true on-line double conversion IGBT based UPS system with inbuilt isolation transformer ,along with 75 AH *20 numbers battery for 30 minutes back up, battery rack and interlink cable with 24 months overall warrenty on UPS and betteries. UPS Make: Schnider Electric IT Business, Vertiv Energy Private Limited , Numeric(Novateure Electrical) & Digital System Pvt. Ltd., Riello Power India Pvt. Ltd. Battery make-Exide or Quanta	1	Set	486,160.00	486,160.00
34	Supply & Fixing 240 V, 25A Modular starter (Brand 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 etc.	2	Each	364.64	729.28
35	Double Door Timer DB with I/C-25 A DP MCB-1no, Digital Astronomical Time switch, O/G-32A TP Power contactor-2no, 6-32 A SP MCB-3nos,with 3 phase indicating light-3nos with ON/OFF -2 nos indication lamp and manual bypass arrangement to be fixed in wall including connection, minor civil work as required. Make: Cabtree/L&T/Legrand	1	nos	8000.00	8,000.00
Total					3,264,229.63