

**INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM)
PASHAN, PUNE-411 008**

Tender No. IITM/CE/WORKS/RENO/2014-15/08

e-TENDER NOTICE

Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, Pashan, Pune-411 008, (India). Invites sealed separate tenders for following work (Part-I – Technical Bid, Part-II – Commercial Bid) in separate sealed covers from Contractors registered in the approved list of contractors of PWD/MES/ CPWD/ Railways/P&T/Industrial Experienced contractors and any other government departments inappropriate class for following work:

Name of work: Renovation of type II two blocks quarter no. 1-4 and 5-8 at IITM, Pashan, Pune.

Tender documents can be down loaded from the institute website <http://www.tropmet.res.in> or e – procurement web site <http://eprocure.gov.in> and can also be obtained from the civil wing of the institute.

The tender document fee: Rs 500-/, (Rs Five hundred only) [Non Refundable] by demand draft drawn in the favour of Director, IITM Pune.

Date of issue of tender documents : 22/01/2015

Pre - Bid Meeting : 29/01/2015 (11:00 hrs)

Venue of Pre-Bid meeting : Indian Institute of Tropical Meteorology,
Dr. Homi Bhabha Road, Pashan - Pune 411 008

Last date of receipt of Tender at IITM, Pune : 11/02/2015 (12:30hrs)

Opening of Tenders (Technical Bids only) : 11/02/2015 (15:00hrs)

The Institute reserves the right to reject any or all tenders without assigning any reason thereof.

Civil Engineer
For Director
IITM, PUNE

**TENDER FOR
RENOVATION OF TYPE II TWO BLOCKS QUARTER NO. 1-4 AND 5-8
AT IITM, PASHAN, PUNE.**

**VOLUME-I
(TECHNICAL BID)**

**INDIAN INSTITUTE OF TROPICAL METEOROLOGY,
DR.HOMI BHABA ROAD, PASHAN, PUNE-411008**

**TENDER FOR
RENOVATION OF TYPE II TWO BLOCKS QUARTER NO. 1 TO 4 AND 5 TO 8
AT IITM, PASHAN, PUNE.**

- Tender No. : **IITM/CE/WORKS/RENO/2014-15/08**
- Name of work : **Renovation Of Type II Two Blocks Quarter No. 1 To 4 And 5 To 8
at IITM, Pashan, Pune.**
- Tender document fee: Rs 500/-, (Rs Five hundred only) [Non Refundable] by
Demand draft drawn in the favor of Director, IITM
Pune-411008.
- Date of issue of tender documents from: 22/01/2015
- Pre - Bid Meeting : 29/01/2015 at 11 00 hrs.
- Venue of Pre-Bid meeting : Indian Institute of Tropical, Meteorology,
Dr. Homi Bhaba Road Pashan,
Pune-411008
- Last date of receipt of Tender at IITM, Pune: 11/02/2015 at 12: 30 hrs.
- Opening of Tenders (Technical Bids only) :11/02/2015 at 15: 00 hrs.
- Estimated Cost : **Rs. 46.50 lacks**
- COMPLETION PERIOD : **03 Months** from the date of handing over of site to
contractor by the Institute to commence the work

Ernest Money Deposit (EMD): **Rs.93,000/- (Rs. Ninety three thousand only)** by demand draft (DD) or Bank Guarantee (BG) from Nationalize/Schedule Bank in favour of The Director IITM, Pashan, Pune-411008.

**NOTICE INVITING TENDER FOR
RENOVATION OF TYPE II TWO BLOCKS QUARTER NO. 1 TO 4 AND 5 TO 8
AT IITM, PASHAN, PUNE.**

FOR

**INDIAN INSTITUTE OF TROPICAL METEOROLOGY,
DR.HOMI BHABA ROAD, PASHAN, PUNE-411008**

TWO COVER SYSTEM

Tender Notice No. IITM/CE/WORKS/RENO/2014-15/08

Director, Indian Institute of Tropical Meteorology, Pune, Invites bid for the said work under the **Two Cover System** from the contractors who meet the following criteria.

1. Contractor shall produce definite proof of valid contractor license /enlistment certificate with the CPWD/State PWD/MES Railways issued by the respective enlistment authority of the concerned department for the amount not less than estimated amount of the work. If the Electrical works is carried out by successful bidder through sub contractor then the subcontractor should have veiled electrical contract licenses of suitable class copy of the licenses should be provided before starting the work
2. For Civil work, Fabrication and Plumbing works of similar nature
 - i) Average annual financial turnover for similar works during the last 3 years ending 31st March 2014 of the previous should be at least 30% of the estimated cost.
 - ii) Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following:-

The BIDDER should have three similar completed works costing not less than the amount equal to 40% of the estimated cost.

Or

Two similar completed works costing not less than the amount equal to 50% of the estimated cost.

Or

One similar completed work costing not less than the amount equal to 80% of the estimated cost.

4. A sum of Rs. 500/- (Non – Refundable) for the cost of tender documents DD drawn in favour of Director, IITM.
5. This tender is not transferable.

6. The rates for BOQ items total cost of work should be mentioned clearly in the Commercial Offer (Part-II) as per commercial bid format only.
7. **Tenders received through Fax / E-mail / Telegraphic / Telex will not be considered.**
8. Tenders addressed to the Director, Indian Institute of Tropical Meteorology, Pune 411008 are to be submitted under two bids system. Super scribed with Tender Notice No., name of work, due date and time and it should submitted before due date at time.
9. The tenders must be clearly written or typed without any cancellations / corrections or overwriting.
 - a) Tenders, which are submitted without following the Two-Bid Offer System, will summarily be rejected.
 - b) Unsigned Tenders will also be rejected.
 - c) Part and incomplete tenders are liable to be rejected.
10. The tenders will be received in the Institute till 11/02/2015 up to **12: 30 hrs** and shall be opened on 11/02/2015 at **15:00 hrs** (Technical Bids only) in presence of the tenderers or their authorized person who wish to be present.
11. IITM will not be responsible:
 - a) For delayed / late quotations submitted / sent by Post / Courier etc.
 - b) For submission / delivery of quotations at wrong places other than the Office of Director, IITM, Pune,
12. The tender / quotation / offer submitted by the firm should be valid for a minimum period of One hundred twenty days (**120**) days from the date of opening the tender.
13. If required technical evaluation committee of IITM will visit to bidder's completed site and submit the report to IITM Pune. Based on IITM Committee report bidders will be qualified/disqualified.
14. The commercial bids of only technically qualified bidders will be opened by the Institute.
15. Delivery Period - As the time is the essence of the contract, period of completion of work should be strictly adhered to.
16. The Tenderer is required to furnish the Permanent Account Number (PAN) and Service Tax no. if any allotted by the Income Tax Department. If registered with the National Small Industries Corporation, the registration number, purpose of

registration and the validity period of registration' etc. should also be provided in Technical Bid.

A. EARTHING STATION.

Earthing with G.I. earth plate of size 600x600x6mm with 25x3 mm GI strip as an earth conductor in 3 mtr deep & 1mtr wide pit with 3/4" G.I. pipe for watering refilling the pit including construction of cement concrete chamber with C.C. cover & funnel for watering. The brick chamber (600 x 600) shall be made 75 mm above FGL and shall have heavy duty cast iron frame and hinged cover at top for inspection. The earthing shall be carried out as per IS 3043, IE rules and statutory requirements.

B. F.R. P. V. C. CONDUITS

All conduits should be non-metallic F.R. PVC conduits and shall conform to BS: 9537. The conduit shall be plain end type as specified in BS and shall be used with the corresponding accessories (Refer BS specification for fittings for rigid non FR PVC non metallic conduits). conduits shall be rigid unplasticised, heavy gauge having 1.8 mm wall thickness up to 19 mm dia meter conduit and 2.0 mm wall thickness for all sizes above 19 mm dia meter.

C. BOXES

All the boxes for switches, sockets, and other receptacles, junction boxes, pull boxes and outlet boxes shall be fabricated from 2.0 mm thick mild sheet duly painted with two coats of red oxide and then two coats of enamel paints the client. The boxes in contact with earth or exposed to the weather shall be of 2 mm thick mild steel and hot dip galvanized after fabrication. Separate screwed earth terminal shall be provided in the box for earthing purpose. All boxes shall have adequate no. of knock out holes of required diameter for conduit entry. Switch boxes to receive switches, socket outlets, telephone outlets fan regulators, etc. shall be fabricated to the approved shape and size to accommodate all the devices without overcrowding.

D. COVER PLATE

The cover of the boxes to receive outlet points shall be of best anodized sheet cut to shape and size as approved by the client. For factory building shall be covered with standard approved make plates, and junction boxes, pull boxes, boxes shall be provided with 3 mm thick anodized sheet cover.

E. WIRES & CABLES

No jointing of cable is allowed except in switch box or point out lets. The Wire & cables shall confirm to IS For all internal wiring PVC insulated FR cables of 650/2200 - volts grade, single core shall be used. The conductors shall be plain annealed copper conductors complying with IS. The conductors shall be circular stranded copper conductor. The minimum number and diameter of wires for circular stranded conductor shall meet the requirements set out in the relevant Indian Standards. The following colour code to be used strictly.

Single phase	-	Red.
Three phase	-	Red, Yellow, Blue,
Neutral	-	Black
Earth	-	Green

Materials:

The listed makes and approved materials only must be used.

Sr. No.	Brief Description of Equipment / Material	Makes
1	MCB DB / Panels with Miniature Circuit Breaker-MCB,ELCB,Isolators etc.	Legrand/Schneider/Siemens/Havel/L&T-Hagers
2	Modular Plug & Socket (5Amp, 5/15 Amp)	Legrand /Schneider/Crabtree/L&T/Siemens anchor Roma
3	Ceiling Fan	GE/Crompton/Bajaj/USHA
4	Fan Regulator	Anchor Roma, Havells, Legrand
5	1 X 36 watt Tube light fittings	Crompton, Bajaj, wipro or equivalent
6	Exhaust Fan	Almonard/GEC/ Crompton/bajaj
7	FRLS PVC Wires	Polycab/ R R Cable /Finolex/Universal
8	M.S. Conduits	BEC/VIMCO/Bharat/Univercell
9	FR PVC Conduits/Casing Caping angle holder/ batten holder/ceiling rose	Modi/Diamond/Precision ,Circle Arc/sandeep
10	Telephone Cables	Polycab,Finolex, APPS, Raychem
11	Telephone SocketRJ11	Digilik, Matrix, SIEMENS, roma , legrand
12	RJ45 Socket with Face Plate	Digilink, Systimax, Amp, D-link
13	Ding Dong Bell	anchor, kona ,or equivalent
14	Distribution bord	Roma Anchor, Havells , Legrand, etc
15	Modular GI Box	Legrand, Havells,or equivalent
16	modulator plate	Legrand /Schneider/Crabtree/L&T/Siemens anchor Roma
17	Busbar Switch	Ruchi, Legrand, Havells or equivalent

17 A copy of latest Income Tax Clearance Certificate from Income Tax Department (INDIA) for in Technical Bid.

18 The bidders are requested to submit their bank details required for RTGS Payment

19) **PAYMENT:**

a) No advance can be paid.

b) Running payment will total bill limit two. RA bills not less than 10.00 lakhs each.

20) **Performance security** interest free – Successful bidder will submit the performance security of 5% of order value in the form of DD/BG drawn on any Nationalized Bank/Scheduled bank in favour of Director IITM, Pune payable at Pune which will be released on completion of work

- 21) **Retention money:** 5% security deposit will be recovered & retained from each running bill which will be refunded after defect liability period of 12 months from the date of handing over the clear site
- 22) **Non tendered items:** The Rate for non-tendered items will be arrived as per following material cost at site + labour cost + taxes + 10% overhead & profit. Non tendered items will be executed only with prior approval of Institute's authority.
- 23) **DEVIATION:** Additional work/any deviation beyond work order quantities requires prior approval of the IITM authorities before execution of such work. The permissible overall deviation from the work order value is 10% and such deviation should not be executed at site without prior approval of Institute's authority.
- 24) **DEFECT LIABILITY PERIOD:** Defect liability period of the work will be 12 months from the date of actual completion of work and clear handing over of the site by the contractor to the Institute.
- 25) The successful bidder will be responsible for all activities on the site as per safety norms and building code
- 26) Government/labour Act- The successful bidder will follow all the government labour acts which are in force at present and introduce from time to time.
- 27) The prices quoted should be firm and irrevocable and not subject to any change whatsoever, even due to increase in cost of raw material components and fluctuation in the foreign exchange rates and excise duty.
- 28) IITM will not provide any accommodation / transportation for the Engineers/Representatives.
- 29) No sub-contracting will be allowed for installation or maintaining system/ equipment/ instrument during or after warranty period.
- 30) Discount if any offered should be mentioned clearly in the commercial bid only.
- 31) The Earnest Money Deposit of **Rs. 93,000/- (Rs. Ninety Three Thousand only)** must be paid / sent along with your technical bid in the form of a Demand Draft, or Bank Guarantee drawn on Nationalized Bank drawn in favour of **The Director, Indian Institute of Tropical Meteorology, Pune payable at Pune**, otherwise your technical & financial bids will not be considered at all.

- 32) The Earnest Money of the unsuccessful bidder whose technical bid has not been found suitable will be returned within 30 days after award of work to successful bidder.
- 33) Tenders not accompanied with Demand Draft / Bank Guarantee towards "Earnest Money Deposit" and tender fee will summarily be rejected.
- 34) **PENALTY:** If the Contractor fails to carry out the work as per specifications mentioned in the BOQ within the due date, the contractor is liable to pay liquidated damages of one percent, per every week delay subject to a maximum of 10% of work order value and such money will be deducted from any money due or which may become due to the supplier. Period of completion will be counted from the date of handing over the site to contractor for execution of work.
- 35) Decision of Director, IITM in regard of interpretation of the terms and conditions shall be final and binding on the vendor.
- 36) **Corrupt or Fraudulent Practices.**
- A) IITM requires that the bidders/contractors under this tender observe the highest standards of ethics during the procurement and execution of such contracts. In pursuance of this policy, IITM:
- i) Defines for the purposes of this provision, the terms set forth as follows:
- a) "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of the public official in the procurement process or in contract execution; and
- b) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or a execution of a contract to the detriment of IITM, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive IITM of the benefits of the free and open competition;
- ii) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- B) IITM will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt and fraudulent practices in competing for, or in executing, a contract.
- 37) Conditional Offers will not be considered.
- 38) All disputes are subject to exclusive jurisdiction of Competent Court and Forum in Pune, India only.
- 39) The Director, Indian Institute of Tropical Meteorology, Pune 411 008, India reserves the right to accept any tender in full or in part or to reject the lowest or any or all tenders without assigning any reason.

40) The Director, Indian Institute of Tropical Meteorology, Pune will be the final authority to decide the appropriate action and it will be binding on the Vendor.

*Only one set of document will be issued. Contractors have to take additional copies.

41) Water for the work will be supplied at one point for execution of work

42) The Electricity for the execution of the work will be provided on chargeable basis. Submeter and required cable to be arranged by successful bidder

43) While filing the commercial bids the contractors should consider all the taxes and Cost mentioned in commercial bids inclusive of all Taxes.

44) **BID SUBMISSION**

Technical Bid-I along with forwarding application on their company letter head, complete tender documents, blank BOQ, related documents duly signed and stamped on each page in sealed ENVELOPE superscribe with TECHNICAL BID and Part - II Commercial Bid duly filled and signed in separate sealed ENVELOPE superscribed with COMMERCIAL BID and Both the sealed bids should be sent in another sealed envelope superscripted with Tender notice no., due date and time addressed to the Director, Indian Institute of Tropical Meteorology, Dr. Homi Bhabha Road, IITM Post, Pashan, Pune - 411 008, INDIA so as to reach on or before 11/02/2015 (12 30hrs). **The technical bids will be opened on the same day at 15 00 hrs.**

[Note: Late received bids will not be considered for tender opening and further evaluation]

45) The Director, Indian Institute of Tropical Meteorology, reserves the right to accept/reject Anyone /all the tenders without assigning any reason thereof.

CIVIL ENGINEER
FOR DIRECTOR,
INDIAN INSTITUTE OF TROPICAL METEOROLOGY,
DR. HOMI BHABHA ROAD,NCL POST,
PASHAN PUNE – 411008.INDIA

-AGREEMENT-

This agreement, made the day of ,2014 between Indian Institute of Tropical Meteorology, Homi Bhabha road, Pashan, Pune (hereinafter called _ the Employer) II of the one part and M/s. ----- II of the part

Whereas the Employer is desirous that the Contractor execute -----at Indian Institute of Tropical Meteorology, Pashan, Pune (hereinafter called _ the Works II) and the Employer has accepted the Bid by the Contractor for the execution

And completion of such works and the remedying of any defects therein, at a Contract Rs. -----

THIS AGREEMENT WIRNESSETH as follows:

1. In this Agreement, words and expression shall have the same meaning as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the works and remedy any defects therein conformity in all aspects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the works and the remedying the defects wherein the contract Price or such other sum as may become payable under the provisions of the Contractor at the times and in the manner prescribed by the contract.
4. The contractor shall not be responsible for any delays due to changes in drawings, specifications, scope of work or any other reasons attributable to the client, his representatives and other contractors. The contractor shall also not be responsible for any delays occurring due to force majeure situations during the execution of the work.
5. **PENALTY CLAUSE:** If the Contractor fails to carry out the work as per specifications mentioned in the BOQ within the due date, the contractor is liable to pay liquidated damages of one percent, per every week delay subject to a maximum of 10% of work order value and such money will be deducted from any money due or which may become due to the supplier. Completion period will be calculated from the date of handing the site to contractor for execution of work.

6. Other terms and conditions will be applicable as per Tender document and issued LOI dated on-----
7. The Director, Indian Institute of Tropical Meteorology, Pune will be the final authority to decide the appropriate action and it will be binding on the Vendor. Decision of Director, IITM in regard of interpretation of the terms and conditions shall be final and binding on the vendor.

In witness whereof the parties thereto have caused this Agreement to be executed the day and Year first before written.

Signed and delivered for and on behalf of M/s. ----- Signed and delivered for and on behalf of Indian Institute of tropical Meteorology, Pashan

1) Signature
Name:

Address:

1) Signature
Name:

2) Signature
Name:

2) Signature
Name:

REFERENCE BOQ TO BE SUBMITTED BLANK DULY SIGNED AND STAMPED
ALONG WITH TECHNICAL BID:

Sr. no.	Description	Qty	Unit	Basic Rate Rs.	Tax Rs.	Total rate (basic+ tax) Rs.	Amount Rs.
CIVIL WORK							
(A) Dismantling Civil Work							
1	Removing/Taking down existing sand face External wall and ceiling Cement plaster, exposing brick masonry, raking out joints in the masonry including providing necessary scaffolding & disposing of the material beyond PMC limit all as directed by Engineer In charge etc complete.	800	Sq.m				
2	Removing/Taking down existing neeru/sanala finish Internal wall and ceiling Cement plaster, exposing brick masonry, racking joints in the masonry including providing necessary scaffolding & disposing of the material beyond PMC limit all as directed by Engineer In charge etc complete.	1550	Sq.m				
3	Dismantling all R.C.C. Chajja's and lintel beams etc. at G.F. & F.F. including providing necessary scaffolding & disposing of the debris material beyond PMC limit all as directed by Engineer In charge.	32	Nos				
4	Dismantling existing paving/plinth protection including disposing off the material beyond PMC limits all as directed by Engineer In charge etc complete.	15	Cu. m.				
5	Dismantling of old wash basins including fitting fixtures etc. & disposing off the debris material beyond PMC limit all as directed by Engineer In charge.	8	Nos				

6	Removing Indian type W.C. pan including disconnecting the sanitary & water supply connection, flushing system & removing & breaking flooring & bed concrete around pan removing the same carefully and disposing of debris material beyond PMC Limit all as directed by Engineer In charge.	8	Nos				
7	Removing/Taking down Doors & Windows including shutters and disposing of debris material beyond PMC Limit all as directed by Engineer In charge etc complete.						
	(a) Doors	48	Nos				
	(b) Windows	48	Nos				
8	Removing existing flooring of any thickness without removing bed concrete/Mother slab & disposing off the debris material beyond PMC limit all as directed by Engineer In charge.	300	Sq.m				
9	Removing of kitchen otta, R.C.C Shelves and partitions for two block total 08 Quarters and disposing of the debris material beyond PMC limit all as directed by Engineer In charge etc complete.	1	Job				
10	Dismantling R.C.C. Grills for stair case & disposing off the debris material beyond PMC limit all as directed by Engineer In charge etc complete.	0	Sq.m				
11	Dismantling Brick work & disposing off the debris material beyond PMC limit as directed by Engineer In charge etc complete.	6	Cu. m				
12	Removing old plumbing fittings and disposing off the dismantled material and debris out of the premises, all as directed by the Engineer In charge.						
	(a) Shower	8	Nos				
	(b) Bibcock/stopcock / Wheel valves etc.	56	Nos				

13	Removing old G.I. Pipes 15mm to 40mm diameter concealed or open and disposing off all dismantled material and debris out of the premises, all as directed by Engineer In charge.	220	RM				
14	Removing Cast Iron down take vent pipes and etc fittings and disposing off dismantled material and debris out of the premises, all as directed by Engineer In charge.	100	RM				
15	Removing existing waterproofing over terrace and toilet/bath at G.F and F.F quarters including scrapping & cleaning the area thoroughly & disposing off the debris material beyond PMC limit all as directed by Engineer In charge.	260	Sq.m				
16	Dismantling existing water tanks by providing required support of scaffolding to slab as directed by engineer in-charge & disposing of the damaged material beyond PMC limit as directed by Engineer In charge.	2	Nos				
17	Dismantling R.C.C horizontal & vertical slab shelves partitions of existing cupboard in rooms for each quarter by providing required support of scaffolding and disposing off of the debris material beyond PMC limit all as directed by Engineer In charge.	8	Job				
18	Dismantling of existing solar system carefully to keep the same in safe custody till the terrace is ready to installed re-setup the same to make it functional with necessary shuttering required.	1	JOB				
	TOTAL (A)						
	(B) New Civil Work						

19	Excavation in foundation in all types of soil including hard murum, sand, soft rock including shoring, pumping or bailing out water, back filling excavated material in the sides of trenches and / or spreading, leveling surplus earth as directed and disposing off of the debris material beyond PMC limit all as directed by Engineer In charge.	10	Cu. m				
20	Providing & Constructing 2 nd class Burnt Brick masonry 230 mm thick with conventional / I.S. type Brick, in Cement Mortar (1:6) including striking joints on unexposed faces & raking out joints on exposed face, providing scaffolding for construction, curing etc. complete.	6	Cu. m				
21	Providing & constructing 2 nd class Burnt Brick masonry 100mm thick with conventional / I.S. type brick in c.m. (1:4) including providing R.C.C. Bond at 0.9 m interval, striking out joints on unexposed faces & raking out joints on exposed faces, providing scaffolding for construction, curing etc. complete	10	Sq.m .				
22	Providing & laying machine mixed plain cement concrete in grade M10 but having volumetric proportion (1:3:6) (Cement:sand:coarse aggregates) of specified thickness mix & gradation & including formwork if required, laying, spreading ramming, curing, etc. for all types of foundations below footings, walls, rafts, etc.complete all as directed by Engineering-in-Charge. [Location: For Plinth protection]	12	Cu. m				

23	Providing & Casting in situ RCC M20 of trap/granite /quartzite/ gneiss metal for Lintel, chajja, making base slab structure for water tank etc. as per design including formwork, laying, spreading, ramming, compaction, curing & roughening the surface if special finish is to be provided etc. complete.(Excluding steel)	6	Cu. m				
24	Providing & applying internal cement plaster 15 mm thick in a single coat in Cement Mortar (1:4) sanala finish over chicken wire mesh to concrete & brick surface in all position including all types of finishing such as cornice, molding, pattas, scaffolding & curing etc. complete as directed.[Note: For plastering work natural sand to used]	1550	Sq.m				
25	Providing & applying external cement plaster 20 mm thick over chicken wire mesh in double coat. First coat in c.m. (1:4) & Finishing coat in c.m. (1:2) with sand face finish to concrete & brick surfaces in all positions including all types of finishing such as cornice, molding, pattas, scaffolding & curing etc. complete as directed.[Note: For plastering natural sand to used]	800	Sq.m				
26	Providing & laying Ceramic tiles of size 450 X450X9mm (Make: R.A.K/NITCO/ KAJARIYA/ SOMANY/BELL or equivalent) in required position laid on a bed of C:M (1:4) including neat cement float, filling joints with white / coloured cement slurry, cleaning curing etc. complete	280	Sq.m				
27	Providing & fixing 450X100 X9mm (Make: R.A.K/NITCO/ KAJARIYA/ SOMANY/BELL or equivalent) skirting in required position with cement mortar including joint filling with white/coloured cement slurry cleaning curing etc. complete	360	R.M.				

28	Providing & fixing 300X300 X7mm antiskid ceramic tiles for flooring in toilets/Bath (make Nitco / Kajaria / Bell) in required position on C.M. (1:4) including neat cement float, filling joints with white / coloured cement slurry, cleaning curing etc. complete.	25	Sq.m				
29	Providing & fixing ceramic tiles in dado of size 200mmX 300mmX7 mm in toilets of approved quality & brand (make Nitco/Kajaria/Bell) in required position with cement mortar including joint filling with white/coloured cement slurry cleaning curing etc. complete. (Toilet, Bath & Kitchen)	170	Sq.m				
30	Providing & laying 60mm thick precast concrete paving blocks including ramming the ground laying ¼” crush metal in required slope ramming the same & laying blocks over it in proper slope & level and cleaning etc. complete. [Location: Plinth protection]	100	Sq.m				
31	Providing & constructing Kitchen counter/platform of 25 mm to 30mm thick high polished Jet Black granite stone top & fascia and including Kaddappa stone as sub base slab fixed in C:M. (1:3) granite fascia Patti including providing and fixing S.S. Sink with size 18” x 16” (make Tata / Nirali) Kitchen platform size (2.35Mtrs X 0.65Mtrs) with grating including waste coupling, PVC Waste pipe, up to Nahani trap cutting the plaster wherever required for anchorage of stone slab making good the same in required position with cement mortar including joint filling with white / coloured cement slurry cleaning curing etc. complete.	18	RM				

32	Providing & laying 20-25mm thick readymade edge cutting and polished Kota stone flooring slabs with cement mortar 1:4 bedding and jointed with gray cement slurry mixed with pigment to match the shade of the slabs, including rubbing, cleaning curing etc. complete.[Location: Staircase]	24	Sq.m				
33	Providing & laying 20-25mm thick readymade cut and polished Kota stone riser and threads including chamfering etc in cement mortar 1:4 and jointed with gray cement slurry mixed with pigment to match the shade of the slabs, including rubbing, cleaning curing etc. complete.[Location: Staircase]	20	Sq.m				
34	Providing & fixing MS Grill of approved design including 1 coat of primer and 2 coats of enamel paints etc. complete.	110	Sq.m				
35	Providing & fixing M.S. framed door using M.S tube 25mm and 1mm thick M.S Sheet on both sides and MS angle 40 x 40 x 5, 1 sq.cm. rigid bar with 1mm thick MS sheet on single side as per approved desing including necessary fittings such as hinges, tower bolt, handle, locking arrangement and one primer & two coats of enamel paint as directed by engineer in-charge with all leads, lifts etc. complete.[Location: Stair Case entrance door & terrace door]	10	Sq.m				
36	Providing & laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc. consisting of following operations.	270	Sq.m				

	<p>a)Applying and grouting a slurry coat of neat cement using 3.15 Kg/sq.m. of cement admixed with proprietary water proofing compound conforming to IS:2645 over the RCC slab including cleaning the surface before treatment.</p>									
	<p>b)Laying cement concrete using broken bricks / brick bats 25 mm to 100 mm size with 500% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with proprietary water proofing compound conforming to IS:2645 over 20 mm thick layer of cement mortar of mix 1:5 admixed with proprietary water proofing compound confirming to IS:2645 to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.</p>									
	<p>c)After two days of proper curing applying a second coat of cement slurry admixed with proprietar</p>									
	<p>d)Finishing the surface with 20 mm thick joint less cement mortar of mix 1:4 (1 cement:4 coarse sand)admixed with proprietary waterproofing compound conforming to IS:2645 and finally finishing the surface with trowel led with neat cement slurry and making of 300 x 300 mm square</p>									
	<p>e)The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer In charge. With average thickness of 120 mm and minimum thickness at khurra as 65 mm.</p>									

37	Providing & fixing colour glazed earthenware wash hand basin of size 18" x 12" with water pillar cock, brackets rubber plugs & stop cock & necessary pipe connections including PVC waste pipe upto the outside face of the wall etc complete. [Make:Parryware/Cera/Simplo]	8	Nos.				
38	Providing & applying acrylic base antifungal weather proof exterior Paint APEX with two and more coats over external sand faced plastered finish walls including preparation of surfaces etc complete. [Make: Asian/Burger/Nerolac]	800	Sq.m				
39	Providing & applying of 1 st quality washable Oil Bond distemper (O.B.D) (readymade) applying standard quality cement primer and putty of approved manufacturer preparing surface by rubbing zero no. sand paper & applying standard quality paint of required shade and colour complete as directed manufacturers specification etc. complete.[Make: Asian/Burger/Nerolec]	1550	Sq.m				
40	Providing & applying Synthetic Enamel Paint (Oil Paint) to ceilings, walls including applying standard quality primer and putty of approved manufacturer preparing surface by rubbing zero no. sand paper & applying standard quality paint of required shade and colour complete as directed manufacturers specification etc. complete.[Make: Asian/Burger/Nerolec]	320	Sq.m				

41	Providing & fixing 40 mm thick readymade edge cut and both side polished kaddappa stone slabs with applying synthetic enamel paint for shelves and cupboards fixed in cement including making grooves in the wall cleaning curing etc complete.	16	Sq.m				
42	Providing window sills, jams & lintel bottom in 20mm thick granite patti in stepping manner with chamfered edge polishing on both side faces on a bed of C.M.(1:2) & applying adhesive for anchorage including cement float filling joints with slurry, curing polishing & cleaning curing etc complete.	33	Sq.m				
43	Providing and Fixing TMT steel reinforcement including cutting , bending, hooking, binding with steel wire, placing in position steel reinforcement for RCC lintel, chajja work at all level with chair, supports, cover etc. complete.	600	KG				
44	Providing & fixing chicken wire mesh over external / internal walls to receive cement plaster in all position including nailing, scaffolding as directed by engineer in-charge with all leads, lifts etc. complete.	2400	Sq.m				
45	Providing & fixing in position Indian type vitrious China orrisa W.C. Pan, with P trap brick masonry around the pan including 10 litre flushing cistern of standard make flush pipe from tank to inlet connector etc. complete.[Parryware/Cera/Simplo]	8	Nos.				

46	Raising of existing Chamber of approximate size 900 mmX600mm with brick masonry internal and external neat finish cement mortar plaster & IPS in the bottom with half round channel, hunches etc. & externally finished with rough cement plaster in c.m. (1:4) in single coat with R.C.C. Manhole cover with frame, refilling etc. complete.	8	Nos.				
47	Providing & fixing 150X100 mm S.W. gully trap in brick masonry chamber with 1:3:6 P.C.C. 100 mm thick, chamber finished externally with cement plaster (1:4) 230X300 with cover & frame etc. complete	4	Nos.				
48	Providing, fixing & jointing C.I. Soil pipes of heavy quality Indo Swedish or equivalent make with fitting such as plug or plain bends of sets, tees, cowls with cement joints & heavy clamps & making holes in walls & floors, testing to joints rectifying of leakage etc. complete.						
	a) 100mm dia C.I. waste pipe	32	RM				
	b) 75mm dia C.I. waste pipe	64	RM				
49	Providing, fixing & jointing 65mm dia PVC pipes with fitting such as plug or plain bends of sets, tees joints & heavy clamps & making holes in walls & floors, testing to joints rectifying of leakage etc. complete. [Supreme/Prince/Astron]	0	RM				
50	Providing & fixing 75 mm dia Nahani traps with C.P. grating on top etc. complete.	16	Nos				

51	Providing, laying, jointing, fixing & testing G.I. 'C' class (make Swastik TT / Zenith/ Sidharath / equivalent) with G.I. tested fittings or laid underground with necessary excavation, refilling & leveling & fitting heavy clamps & making holes in walls & floors, testing to joints rectifying of leakage etc. complete.						
	a) 40 mm dia	0	RM				
	b) 25 mm dia	50	RM				
	c) 15 mm dia	170	RM				
52	Providing & fixing various types of valve & cocks & other fittings flat etc complete.						
	a) 15 mm dia C.P. Stop cock	24	Nos				
	b) 15 mm dia C.P. Pillar cock	8	Nos				
	c) 15 mm dia C.P. Shower	8	Nos				
	d) 15 mm dia C.P. Bib cock	8	Nos				
	e) 15 mm dia C.P. Long body bib cock	16	Nos				
	f) 15 mm dia C.P. Mixer cock	8	Nos				
	g) 15mm patti gate valve	8	Nos				
	h) 25mm patti gate valve	8	Nos				
	i) 40mm patti gate valve	4	Nos				
53	Providing & fixing in position anodized (as per I.S. 1868/1982 aluminum sliding black powder coated window of three track with all necessary sections fixtures & fastenings in nylon casing & self locking latch fitted in vertical section, shutters including 4 mm thick plain glass and mosquito net with all required screws, nuts, fittings & fixture etc. complete all as directed by Engineer-In-charge.	45	Sq.m				

54	Providing & fixing in position anodized (as per I.S. 1868/1982 aluminum louvered black powder coated window with all necessary sections fixtures & fastenings in nylon casing & self locking latch fitted in vertical section, shutters including mosquito net with aluminum frame and all required screws, nuts, fittings & fixture etc. complete all as directed by Engineer-In-charge.	12	Sq.m				
55	Providing & fixing in position anodized aluminum black powder coated fixed window including all necessary section fixtures & fastening including 4 mm thick plain glass with provision for Exhaust fan complete all as directed by Engineering-in-charge.[Location: Kitchen]	4	Sq.m				
56	Providing and fixing 300 mm radius marble piece at corner in bath and kitchen including making groove in walls & fixing in cement mortar (1:2) and finishing with white cement .	16	Nos				
57	Providing & Fixing flush Doors with T.W. frames (Frames size 125mm x 75mm) fixed with 6 no. of hold fast in walls, including primer coat with side hung solid core panel bonded block board flush door of 30 mm thick with teak lipping including three coats of enamel paint with three 100 mm hinges & all necessary C.P. fittings such as aldrop -1, tadipatti-1, tower bolt-1, Hinges-3, door stopper-1 & handles-2 to each door etc complete.	70	Sq.m				
58	Providing & fixing latch of standard make of europa to main door with separate eye view, safety chain etc complete.	8	Nos				

59	Providing & fixing Granite stone frame made in granite slab of 18mm thk. granite patti in stepping manner with chamfered edge polishing on both side faces & on a bed of C.M. (1:2) & applying adhesive for anchorage including cement float filling joints with slurry, curing polishing & cleaning curing etc complete with PVC door (make Sintex) at toilet & bath as directed by engineer in-charge with all leads, lifts etc. complete. [MAKE: SINTEX/RAJSHRI or equivalent]	16	Nos.				
60	Providing & fixing in position openable 30mm thick wooden mosquito net shutters in main door opening & with all necessary sections, fixtures & fastenings & self closing hinges fitted in vertical section of shutter including accessories such as aldrop -1, tadipatti-1, tower bolt-1, Hinges-3, door stopper-1 & handles-2 to each door etc complete.	20	Sq.m				
61	Providing & fixing Doors for cupboard with T.W. frame of size 75 mm x 50 mm with good quality 18mm ply wood shutter with TW lipping, externally finished with lamination & internally painted with white enamel including necessary C.P. fittings such as hinges-6, door closer magnet-2, C.P. cloth hanger rod-1, Handles-2 & lock-1 etc. complete	47	Sq.m				
62	Providing & fitting PVC double layered water tanks with a capacity of 2000 ltr including necessary inlet/outlet, wash outlet, ball cock & over flows pipes, G.I. connections fitting etc completed as directed etc complete.	4	Nos				

63	Providing & fitting Stainless steel Curtain rods with end caps to doors & windows opening in position with all required screws, nuts, fittings & fixture etc. complete all as directed by Engineer-In-charge.	48	RM				
64	Providing & fitting Mirror above Wash basin in position having size 0.46 x 0.60 with all required screws, nuts, fittings & fixture etc. complete all as directed by Engineer-In-charge.	8	Nos.				
65	Providing & fitting C.P. finish make Jaguar/ Essco/Metro/Parryware, Bathroom/toilet accessories & fittings in position with all required screws, nuts, fittings & fixture etc. complete all as directed by Engineer-In-charge.						
	a) Towel Rod	8	Nos.				
	b) Ring to hold towel	8	Nos.				
TOTAL (B)							
(C) ELECTRIC WORK Concealed Electric Wiring Work							
1	Dismantling Internal and External existing cables & mains of all types & sizes along with the existing lights, fans, plug points with wire in casing capping, PVC conduit or TW batten complete with fitting such as batten holder, ceiling rose, switches, and disposing off the unwanted materials and debris out of the premises & refilling holes with cement if required for two blocks (08 Quarters) including meter room, staircase ,etc , all as directed by the Engineer In charge.[Note: Electrical fitting such as MSEB meter, Fan, Fan regulator, tube light and any reusable fittings should be handed over to Electrical department of Institute.]	2	Job				

2	<p>Point wiring: Wiring & Drawing for light point/ fan point/ exhaust fan point/ call bell point/5/15Amp Light Power points (Points directly controlled from Switch board or ,MCB D.B.) with 2X1.5 sq.mm FR PVC insulated copper conductor single core multistrand wires in surface / recessed medium class 2 mm thick 25 mm dia PVC conduit, with modular switch, modular light power point socket , modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required including fish wire, chasling & making good to the damage with wire mesh to original finish.</p> <p>Note:1.:Each Light points/fan points etc shall be considered as one Light points.Note:2.: Power points of 5A,5/15 Amp which is indepeddant shall be considered as one Light points under above categories.</p>	160	points							
3	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core multistrand wires in surface/ recessed medium class 2 mm thick 25 mm dia PVC conduit as required including fish wire, chasling & making good to the damage with wire mesh to original finish									
3.1	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire (For 5 Amp Socket)	400	Rmt							
3.2	2 X 4 sq. mm + 1 X 2.5 sq. mm earth wire (For 5/15 Amp Socket)	240	Rmt							
3.3	2 X 6 sq. mm + 1 X 2.5 sq. mm earth wire (From meter room till DB)	450	Rmt							

4	Supply & fixing following modular switch/ Socket on the existing modular plate & switch box including connection but excluding modular plate etc. as required						
4.1	5/6 amps switch (For Controlling 5/6Amp Power socket)	32	Nos.				
4.2	5/15 amps switch (For Controlling 5/15Amp Power socket)	56	Nos.				
4.3	5 pin 5/6 amp socket outlet (For Power socket) with shutter	32	Nos.				
4.4	6 pin 15/16 amp socket outlet (For Power socket) with shutter	56	Nos.				
4.5	Telephone socket outlet with shutter	8	Nos.				
4.6	TV antenna socket outlet with shutter	8	Nos.				
4.7	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	16	Nos.				
4.8	Supplying & fixing Ding dong bell on teak work/ sunmica top board including connections as required. as directed by engineer in-charge with all leads, lifts as per model flat etc. complete.	8	Nos.				
5	Supply and fixing modular blanking plate on the existing modular plate & switch box with matching colour including connection but excluding modular plate etc as required.	80	Nos.				
6	Supply & fixing following size/modules, galvanised GI box along with modular base frame and cover plate for modular switches in recess etc as required.(Item may be executed only if required and at places where point wiring is excluded)						
6.1	1 or 2 Module (For Power socket/ELV Purpose)	8	Nos.				

6.2	3 Module (For Power socket/ELV Purpose)	32	Nos.				
6.3	6 Module (For Power socket/ELV Purpose)	8	Nos.				
6.4	8 Module (For Power socket/ELV Purpose)	16	Nos.				
6.5	12 Module (For Power socket/ELV Purpose)	24	Nos.				
7	Supplying and fixing of 25 mm sizes of 2mm thickness PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. (Empty Conduit for Low Voltage)	300	R.M.				
8	supplying & Drawing of concealed 0.5mm dia. FRLS PVC insulated annealed copper conductor, unarmoured telephone cable in in the existing surface/ PVC conduit with termination as per model flat.	200	R.M.				
9	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required including fish wire, chasling & making good to the damage with wire mesh to original finish	160	R.M.				
10	Supply, Installation, Testing and Commissioning of prefabricated recessed type MCB DB with CRCA sheet fabrication with powder coated body concealed in wall or on support structure suitable for minimum 10 MCB's as per requirement. Incomer MCB- DP 40 A and outgoing MCB -3 nos. of SP 6A , 6Nos. of SP 16 A MCB as per requirement fitted with bus bar, as directed by engineer in-charge with all leads, lifts as per model flat etc. complete.	8	Nos.				

11	Supplying of capacitor type 1200 mm sweep ceiling fan complete with down rod, blades, shackle etc. with high breeze, high speed for operation on 230V, 50 Hz. Single phase A.C. supply confirming to IS 374-1979 and with double ball bearing system The fan shall be green as per BEE norms.	16	Nos.				
12	1x36 Watt fluorescent tube light fittings with Electronic Ballast having power factor >0.98 and lamp holders duly wired ready to use for 230 Volts, 50 Hz, single phase A.C. supply to IS :10322 as per quality requirements & including 1 no tube light to each fitting as per model flat.	26	Nos.				
13	Supply, of Exhaust fan 150mm light duty 230 V AC 50 Hz 450 mm 1400 RPM with condenser complete erected in position with n/c materials Fan motor with moisture treatment and class E insulation & With bird protective screen	8	Nos.				
14	Providing & Fixing 16mm thick and of suitable size to fit all meter room accessories and made of Fiber board as Meter board in meter room as directed by engineer in-charge as per model flat etc. complete.	2	Nos.				
15	Providing, fitting & installing 32/63-400 Kikat switch in meter room as directed by engineer in-charge as per model flat etc. complete.	6	Nos.				
16	Providing, fitting & installing 2 pole 40A MCB switch in meter room as directed by engineer in-charge as per model flat etc. complete.	8	Nos.				
17	Providing, fitting & installing 100 A Bus bar in meter room as directed by engineer in-charge as per model flat etc. complete.	2	Nos.				

18	Providing & Earthing with G.I. earth plate of size 600x600x6mm with 25x3 mm GI strip as an earth conductor in 3 mtr deep & 1mtr wide pit with 3/4" G.I. pipe for watering refilling the pit including construction of cement concrete chamber with C.C. cover & funnel for watering as directed by engineer in-charge as per model flat etc. complete.(Scope including excavation by manual/Machines /Boaring, Charcoal, salt, or Bentonite slurry etc)	2	Nos.				
19	Supplying & fixing on wall or underground GI earth strip of size 25 x 3 mm earth conductor as directed by engineer in-charge as per model flat etc. complete.	20	R.M.				
TOTAL (C)							
D) REBATE OFFERED :							
Credit for dismantled material							
a) Reinforced MS steel bar		200	kg				
b) Wash basin including fittings		8	No.				
c) Orissa pan		8	No.				
d) Doors		48	No.				
e) Windows		48	No.				
f) Showers		8	No.				
g) Bibcock / Stpcock / Wheel valves		56	No.				
h) G.I. pipes various diameters 15-40mm		220	RM				
i) C.I. pipes various diameters 75-110mm		100	RM				
TOTAL (D)							

Grand total (A+B+C-D) =

VOLUME II
COMMERCIAL BID

Sr. no.	Description	Qty	Unit	Basic Rate Rs.	Tax Rs.	Total rate (basic+ tax) Rs.	Amount Rs.
CIVIL WORK							
(A) Dismantling Civil Work							
1	Removing/Taking down existing sand face External wall and ceiling Cement plaster, exposing brick masonry, raking out joints in the masonry including providing necessary scaffolding & disposing of the material beyond PMC limit all as directed by Engineer In charge etc complete.	800	Sq.m				
2	Removing/Taking down existing neeru/sanala finish Internal wall and ceiling Cement plaster, exposing brick masonry, racking joints in the masonry including providing necessary scaffolding & disposing of the material beyond PMC limit all as directed by Engineer In charge etc complete.	1550	Sq.m				
3	Dismantling all R.C.C. Chajja's and lintel beams etc. at G.F. & F.F. including providing necessary scaffolding & disposing of the debris material beyond PMC limit all as directed by Engineer In charge.	32	Nos.				
4	Dismantling existing paving/plinth protection including disposing off the material beyond PMC limits all as directed by Engineer In charge etc complete.	15	Cu. m.				
5	Dismantling of old wash basins including fitting fixtures etc. & disposing off the debris material beyond PMC limit all as directed by Engineer In charge.	8	Nos.				

6	Removing Indian type W.C. pan including disconnecting the sanitary & water supply connection, flushing system & removing & breaking flooring & bed concrete around pan removing the same carefully and disposing of debris material beyond PMC Limit all as directed by Engineer In charge.	8	Nos.				
7	Removing/Taking down Doors & Windows including shutters and disposing of debris material beyond PMC Limit all as directed by Engineer In charge etc complete.						
	(a) Doors	48	Nos.				
	(b) Windows	48	Nos.				
8	Removing existing flooring of any thickness without removing bed concrete/Mother slab & disposing off the debris material beyond PMC limit all as directed by Engineer In charge.	300	Sq.m				
9	Removing of kitchen otta, R.C.C Shelves and partitions for two block total 08 Quarters and disposing of the debris material beyond PMC limit all as directed by Engineer In charge etc complete.	1	Job				
10	Dismantling R.C.C. Grills for stair case & disposing off the debris material beyond PMC limit all as directed by Engineer In charge etc complete.	0	Sq.m				
11	Dismantling Brick work & disposing off the debris material beyond PMC limit as directed by Engineer In charge etc complete.	6	Cu. m				
12	Removing old plumbing fittings and disposing off the dismantled material and debris out of the premises, all as directed by the Engineer In charge.						

	(a) Shower	8	Nos.				
	(b) Bibcock/stopcock / Wheel valves etc.	56	Nos.				
13	Removing old G.I. Pipes 15mm to 40mm diameter concealed or open and disposing off all dismantled material and debris out of the premises, all as directed by Engineer In charge.	220	RM				
14	Removing Cast Iron down take vent pipes and etc fittings and disposing off dismantled material and debris out of the premises, all as directed by Engineer In charge.	100	RM				
15	Removing existing waterproofing over terrace and toilet/bath at G.F and F.F quarters including scrapping & cleaning the area thoroughly & disposing off the debris material beyond PMC limit all as directed by Engineer In charge.	260	Sq.m				
16	Dismantling existing water tanks by providing required support of scaffolding to slab as directed by engineer in-charge & disposing of the damaged material beyond PMC limit as directed by Engineer In charge.	2	Nos.				
17	Dismantling R.C.C horizontal & vertical slab shelves partitions of existing cupboard in rooms for each quarter by providing required support of scaffolding and disposing off of the debris material beyond PMC limit all as directed by Engineer In charge.	8	Job.				
18	Dismantling of existing solar system carefully to keep the same in safe custody till the terrace is ready to installed re-setup the same to make it functional with necessary shuttering required.	1	JOB				
	TOTAL (A)						

	(B) New Civil Work						
19	Excavation in foundation in all types of soil including hard murum, sand, soft rock including shoring, pumping or bailing out water, back filling excavated material in the sides of trenches and / or spreading, leveling surplus earth as directed and disposing off of the debris material beyond PMC limit all as directed by Engineer In charge.	10	Cu. m				
20	Providing & Constructing 2 nd class Burnt Brick masonry 230 mm thick with conventional / I.S. type Brick, in Cement Mortar (1:6) including striking joints on unexposed faces & raking out joints on exposed face, providing scaffolding for construction, curing etc. complete.	6	Cu. m				
21	Providing & constructing 2 nd class Burnt Brick masonry 100mm thick with conventional / I.S. type brick in c.m. (1:4) including providing R.C.C. Bond at 0.9 m interval, striking out joints on unexposed faces & raking out joints on exposed faces, providing scaffolding for construction, curing etc. complete	10	Sq.m .				

22	Providing & laying machine mixed plain cement concrete in grade M10 but having volumetric proportion (1:3:6) (Cement:sand:coarse aggregates) of specified thickness mix & gradation & including formwork if required, laying, spreading ramming, curing, etc. for all types of foundations below footings, walls, rafts, etc.complete all as directed by Engineering-in-Charge. [Location: For Plinth protection]	12	Cu. m				
23	Providing & Casting in situ RCC M20 of trap/granite /quartzite/ gneiss metal for Lintel, chajja, making base slab structure for water tank etc. as per design including formwork, laying, spreading, ramming, compaction, curing & roughening the surface if special finish is to be provided etc. complete.(Excluding steel)	6	Cu. m				
24	Providing & applying internal cement plaster 15 mm thick in a single coat in Cement Mortar (1:4) sanala finish over chicken wire mesh to concrete & brick surface in all position including all types of finishing such as cornice, molding, pattas, scaffolding & curing etc. complete as directed.[Note: For plastering work natural sand to used]	1550	Sq.m				
25	Providing & applying external cement plaster 20 mm thick over chicken wire mesh in double coat. First coat in c.m. (1:4) & Finishing coat in c.m. (1:2) with sand face finish to concrete & brick surfaces in all positions including all types of finishing such as cornice, molding, pattas, scaffolding & curing etc. complete as directed.[Note: For plastering natural sand to used]	800	Sq.m				

26	Providing & laying Ceramic tiles of size 450 X450X9mm (Make: R.A.K/NITCO/KAJARIYA/ SOMANY/BELL or equivalent) in required position laid on a bed of C:M (1:4) including neat cement float, filling joints with white / coloured cement slurry, cleaning curing etc. complete	280	Sq.m				
27	Providing & fixing 450X100 X9mm (Make: R.A.K/NITCO/KAJARIYA/ SOMANY/BELL or equivalent) skirting in required position with cement mortar including joint filling with white/coloured cement slurry cleaning curing etc. complete	360	R.M.				
28	Providing & fixing 300X300 X7mm antiskid ceramic tiles for flooring in toilets/Bath (make Nitco / Kajaria / Bell) in required position on C.M. (1:4) including neat cement float, filling joints with white / coloured cement slurry, cleaning curing etc. complete.	25	Sq.m				
29	Providing & fixing ceramic tiles in dado of size 200mmX 300mmX7 mm in toilets of approved quality & brand (make Nitco/Kajaria/Bell) in required position with cement mortar including joint filling with white/coloured cement slurry cleaning curing etc. complete. (Toilet, Bath & Kitchen)	170	Sq.m				
30	Providing & laying 60mm thick precast concrete paving blocks including ramming the ground laying ¼” crush metal in required slope ramming the same & laying blocks over it in proper slope & level and cleaning etc. complete. [Location: Plinth protection]	100	Sq.m				

31	Providing & constructing Kitchen counter/platform of 25 mm to 30mm thick high polished Jet Black granite stone top & fascia and including Kaddappa stone as sub base slab fixed in C:M. (1:3) granite fascia Patti including providing and fixing S.S. Sink with size 18" x 16" (make Tata / Nirali) Kitchen platform size (2.35Mtrs X 0.65Mtrs) with grating including waste coupling, PVC Waste pipe, up to Nahani trap cutting the plaster wherever required for anchorage of stone slab making good the same in required position with cement mortar including joint filling with white / coloured cement slurry cleaning curing etc. complete.	18	RM				
32	Providing & laying 20-25mm thick readymade edge cutting and polished Kota stone flooring slabs with cement mortar 1:4 bedding and jointed with gray cement slurry mixed with pigment to match the shade of the slabs, including rubbing, cleaning curing etc. complete.[Location: Staircase]	24	Sq.m				
33	Providing & laying 20-25mm thick readymade cut and polished Kota stone riser and threads including chamfering etc in cement mortar 1:4 and jointed with gray cement slurry mixed with pigment to match the shade of the slabs, including rubbing, cleaning curing etc. complete.[Location: Staircase]	20	Sq.m				
34	Providing & fixing MS Grill of approved design including 1 coat of primer and 2 coats of enamel paints etc. complete.	110	Sq.m				

35	Providing & fixing M.S. framed door using M.S tube 25mm and 1mm thick M.S Sheet on both sides and MS angle 40 x 40 x 5, 1 sq.cm. rigid bar with 1mm thick MS sheet on single side as per approved desing including necessary fittings such as hinges, tower bolt, handle, locking arrangement and one primer & two coats of enamel paint as directed by engineer in-charge with all leads, lifts etc. complete.[Location: Stair Case entrance door & terace door]	10	Sq.m				
36	Providing & laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc. consisting of following operations.	270	Sq.m				
	a)Applying and grouting a slurry coat of neat cement using 3.15 Kg/sq.m. of cement admixed with proprietary water proofing compound conforming to IS:2645 over the RCC slab including cleaning the surface before treatment.						
	b)Laying cement concrete using broken bricks / brick bats 25 mm to 100 mm size with 500% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with proprietary water proofing compound conforming to IS:2645 over 20 mm thick layer of cement mortar of mix 1:5 admixed with proprietary water proofing compound confirming to IS:2645 to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.						

	c)After two days of proper curing applying a second coat of cement slurry admixed with proprietar						
	d)Finishing the surface with 20 mm thick joint less cement mortar of mix 1:4 (1 cement:4 coarse sand)admixed with proprietary waterproofing compound conforming to IS:2645 and finally finishing the surface with trowel led with neat cement slurry and making of 300 x 300 mm square						
	e)The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer In charge. With average thickness of 120 mm and minimum thickness at khurra as 65 mm.						
37	Providing & fixing colour glazed earthenware wash hand basin of size 18" x 12" with water pillar cock, brackets rubber plugs & stop cock & necessary pipe connections including PVC waste pipe upto the outside face of the wall etc complete. [Make:Parryware/Cera/Simplo]	8	Nos.				
38	Providing & applying acrylic base antifungal weather proof exterior Paint APEX with two and more coats over external sand faced plastered finish walls including preparation of surfaces etc complete. [Make: Asian/Burger/Nerolac]	800	Sq.m				

39	Providing & applying of 1 st quality washable Oil Bond distemper (O.B.D) (readymade) applying standard quality cement primer and putty of approved manufacturer preparing surface by rubbing zero no. sand paper & applying standard quality paint of required shade and colour complete as directed manufacturers specification etc. complete.[Make: Asian/Burger/Nerolec]	1550	Sq.m				
40	Providing & applying Synthetic Enamel Paint (Oil Paint) to ceilings, walls including applying standard quality primer and putty of approved manufacturer preparing surface by rubbing zero no. sand paper & applying standard quality paint of required shade and colour complete as directed manufacturers specification etc. complete.[Make: Asian/Burger/Nerolec]	320	Sq.m				
41	Providing & fixing 40 mm thick readymade edge cut and both side polished kaddappa stone slabs with applying synthetic enamel paint for shelves and cupboards fixed in cement including making grooves in the wall cleaning curing etc complete.	16	Sq.m				
42	Providing window sills, jams & lintel bottom in 20mm thick granite patti in stepping manner with chamfered edge polishing on both side faces on a bed of C.M.(1:2) & applying adhesive for anchorage including cement float filling joints with slurry, curing polishing & cleaning curing etc complete.	33	Sq.m				

43	Providing and Fixing TMT steel reinforcement including cutting , bending, hooking, binding with steel wire, placing in position steel reinforcement for RCC lintel, chajja work at all level with chair, supports, cover etc. complete.	600	KG				
44	Providing & fixing chicken wire mesh over external / internal walls to receive cement plaster in all position including nailing, scaffolding as directed by engineer in-charge with all leads, lifts etc. complete.	2400	Sq.m				
45	Providing & fixing in position Indian type vitrious China orrisa W.C. Pan, with P trap brick masonry around the pan including 10 litre flushing cistern of standard make flush pipe from tank to inlet connector etc. complete.[Parryware/Cera/Simplo]	8	Nos.				
46	Raising of existing Chamber of approximate size 900 mmX600mm with brick masonry internal and external neat finish cement mortar plaster & IPS in the bottom with half round channel, hunches etc. & externally finished with rough cement plaster in c.m. (1:4) in single coat with R.C.C. Manhole cover with frame, refilling etc. complete.	8	Nos.				
47	Providing & fixing 150X100 mm S.W. gully trap in brick masonry chamber with 1:3:6 P.C.C. 100 mm thick, chamber finished externally with cement plaster (1:4) 230X300 with cover & frame etc. complete	4	Nos.				

48	Providing, fixing & jointing C.I. Soil pipes of heavy quality Indo Swedish or equivalent make with fitting such as plug or plain bends of sets, tees, cowls with cement joints & heavy clamps & making holes in walls & floors, testing to joints rectifying of leakage etc. complete.						
	a) 100mm dia C.I. waste pipe	32	RM				
	b) 75mm dia C.I. waste pipe	64	RM				
49	Providing, fixing & jointing 65mm dia PVC pipes with fitting such as plug or plain bends of sets, tees joints & heavy clamps & making holes in walls & floors, testing to joints rectifying of leakage etc. complete. [Supreme/Prince/Astron]	0	RM				
50	Providing & fixing 75 mm dia Nahani traps with C.P. grating on top etc. complete.	16	Nos				
51	Providing, laying, jointing, fixing & testing G.I. 'C' class (make Swastik TT / Zenith/ Sidharath / equivalent) with G.I. tested fittings or laid underground with necessary excavation, refilling & leveling & fitting heavy clamps & making holes in walls & floors, testing to joints rectifying of leakage etc. complete.						
	a) 40 mm dia	0	RM				
	b) 25 mm dia	50	RM				
	c) 15 mm dia	170	RM				
52	Providing & fixing various types of valve & cocks & other fittings flat etc complete.						
	a) 15 mm dia C.P. Stop cock	24	Nos				
	b) 15 mm dia C.P. Pillar cock	8	Nos				
	c) 15 mm dia C.P. Shower	8	Nos				
	d) 15 mm dia C.P. Bib cock	8	Nos				

	e) 15 mm dia C.P. Long body bib cock	16	Nos				
	f) 15 mm dia C.P. Mixer cock	8	Nos				
	g) 15mm patti gate valve	8	Nos				
	h) 25mm patti gate valve	8	Nos				
	i) 40mm patti gate valve	4	Nos				
53	Providing & fixing in position anodized (as per I.S. 1868/1982 aluminum sliding black powder coated window of three track with all necessary sections fixtures & fastenings in nylon casing & self locking latch fitted in vertical section, shutters including 4 mm thick plain glass and mosquito net with all required screws, nuts, fittings & fixture etc. complete all as directed by Engineer-In-charge.	45	Sq.m				
54	Providing & fixing in position anodized (as per I.S. 1868/1982 aluminum louvered black powder coated window with all necessary sections fixtures & fastenings in nylon casing & self locking latch fitted in vertical section, shutters including mosquito net with aluminum frame and all required screws, nuts, fittings & fixture etc. complete all as directed by Engineer-In-charge.	12	Sq.m				
55	Providing & fixing in position anodized aluminum black powder coated fixed window including all necessary section fixtures & fastening including 4 mm thick plain glass with provision for Exhaust fan complete all as directed by Engineering-in-charge.[Location: Kitchen]	4	Sq.m				

56	Providing and fixing 300 mm radius marble piece at corner in bath and kitchen including making groove in walls & fixing in cement mortar (1:2) and finishing with white cement .	16	Nos				
57	Providing & Fixing flush Doors with T.W. frames (Frames size 125mm x 75mm) fixed with 6 no. of hold fast in walls, including primer coat with side hung solid core panel bonded block board flush door of 30 mm thick with teak lipping including three coats of enamel paint with three 100 mm hinges & all necessary C.P. fittings such as aldop -1, tadipatti-1, tower bolt-1, Hinges-3, door stopper-1 & handles-2 to each door etc complete.	70	Sq.m				
58	Providing & fixing latch of standard make of europa to main door with separate eye view, safety chain etc complete.	8	Nos				
59	Providing & fixing Granite stone frame made in granite slab of 18mm thk. granite patti in stepping manner with chamfered edge polishing on both side faces & on a bed of C.M. (1:2) & applying adhesive for anchorage including cement float filling joints with slurry, curing polishing & cleaning curing etc complete with PVC door (make Sintex) at toilet & bath as directed by engineer in-charge with all leads, lifts etc. complete. [MAKE: SINTEX/RAJSHRI or equivalent]	16	Nos.				

60	Providing & fixing in position openable 30mm thick wooden mosquito net shutters in main door opening & with all necessary sections, fixtures & fastenings & self closing hinges fitted in vertical section of shutter including accessories such as aldop -1, tadipatti-1, tower bolt-1, Hinges-3, door stopper-1 & handles-2 to each door etc complete.	20	Sq.m				
61	Providing & fixing Doors for cupboard with T.W. frame of size 75 mm x 50 mm with good quality 18mm ply wood shutter with TW lipping, externally finished with lamination & internally painted with white enamel including necessary C.P. fittings such as hinges-6, door closer magnet-2, C.P. cloth hanger rod-1, Handles-2 & lock-1 etc. complete	47	Sq.m				
62	Providing & fitting PVC double layered water tanks with a capacity of 2000 ltr including necessary inlet/outlet, wash outlet, ball cock & over flows pipes, G.I. connections fitting etc completed as directed etc complete.	4	Nos				
63	Providing & fitting Stainless steel Curtain rods with end caps to doors & windows opening in position with all required screws, nuts, fittings & fixture etc. complete all as directed by Engineer-In-charge.	48	RM				
64	Providing & fitting Mirror above Wash basin in position having size 0.46 x 0.60 with all required screws, nuts, fittings & fixture etc. complete all as directed by Engineer-In-charge.	8	Nos.				

65	Providing & fitting C.P. finish make Jaguar/ Essco/Metro/Parryware, Bathroom/toilet accessories & fittings in position with all required screws, nuts, fittings & fixture etc. complete all as directed by Engineer-In-charge.						
	a) Towel Rod	8	Nos.				
	b) Ring to hold towel	8	Nos.				
	TOTAL (B)						
	(C) ELECTRIC WORK Concealed Electric Wiring Work						
1	Dismantling Internal and External existing cables & mains of all types & sizes along with the existing lights, fans, plug points with wire in casing capping, PVC conduit or TW batten complete with fitting such as batten holder, ceiling rose, switches, and disposing off the unwanted materials and debris out of the premises & refilling holes with cement if required for two blocks (08 Quarters) including meter room, staircase ,etc, all as directed by the Engineer In charge.[Note: Electrical fitting such as MSEB meter,Fan, Fan regulator, tube light and any reusable fittings should be handed over to Electrical department of Institute.]	2	Job				

2	<p>Point wiring:Wiring & Drawing for light point/ fan point/ exhaust fan point/ call bell point/5/15Amp Light Power points (Points directly controlled from Switch board or ,MCB D.B.) with 2X1.5 sq.mm FR PVC insulated copper conductor single core multistrand wires in surface / recessed medium class 2 mm thick 25 mm dia PVC conduit,with modular switch,modular light power point socket , modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required including fish wire, chasling & making good to the damage with wire mesh to original finish.</p> <p>Note:1.:Each Light points/fan points etc shall be considered as one Light points.Note:2.: Power points of 5A,5/15 Amp which is independent shall be considered as one Light points under above categories.</p>	160	point s				
3	<p>Wiring for circuit/ submain wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core multistrand wires in surface/ recessed medium class 2 mm thick 25 mm dia PVC conduit as required including fish wire, chasling & making good to the damage with wire mesh to original finish</p>						
3.1	<p>2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire (For 5 Amp Socket)</p>	400	Rmt				
3.2	<p>2 X 4 sq. mm + 1 X 2.5 sq. mm earth wire (For 5/15 Amp Socket)</p>	240	Rmt				
3.3	<p>2 X 6 sq. mm + 1 X 2.5 sq. mm earth wire (From meter room till DB)</p>	450	Rmt				

4	Supply & fixing following modular switch/ Socket on the existing modular plate & switch box including connection but excluding modular plate etc. as required						
4.1	5/6 amps switch (For Controlling 5/6Amp Power socket)	32	Nos.				
4.2	5/15 amps switch (For Controlling 5/15Amp Power socket)	56	Nos.				
4.3	5 pin 5/6 amp socket outlet (For Power socket) with shutter	32	Nos.				
4.4	6 pin 15/16 amp socket outlet (For Power socket) with shutter	56	Nos.				
4.5	Telephone socket outlet with shutter	8	Nos.				
4.6	TV antenna socket outlet with shutter	8	Nos.				
4.7	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	16	Nos.				
4.8	Supplying & fixing Ding dong bell on teak work/ sunmica top board including connections as required. as directed by engineer in-charge with all leads, lifts as per model flat etc. complete..	8	Nos.				
5	Supply and fixing modular blanking plate on the existing modular plate & switch box with matching colour including connection but excluding modular plate etc as required.	80	Nos.				
6	Supply & fixing following size/modules, galvanised GI box along with modular base frame and cover plate for modular switches in recess etc as required. . (Item may be executed only if required and at places where point wiring is excluded)						

6.1	1 or 2 Module (For Power socket/ELV Purpose)	8	Nos.				
6.2	3 Module (For Power socket/ELV Purpose)	32	Nos.				
6.3	6 Module (For Power socket/ELV Purpose)	8	Nos.				
6.4	8 Module (For Power socket/ELV Purpose)	16	Nos.				
6.5	12 Module (For Power socket/ELV Purpose)	24	Nos.				
7	Supplying and fixing of 25 mm sizes of 2mm thickness PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. (Empty Conduit for Low Voltage)	300	R.M.				
8	supplying & Drawing of concealed 0.5mm dia. FRLS PVC insulated annealed copper conductor, unarmoured telephone cable in in the existing surface/ PVC conduit with termination as per model flat.	200	R.M.				
9	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required including fish wire, chasling & making good to the damage with wire mesh to original finish	160	R.M.				

10	Supply, Installation, Testing and Commissioning of prefabricated recessed type MCB DB with CRCA sheet fabrication with powder coated body concealed in wall or on support structure suitable for minimum 10 MCB's as per requirement. Incomer MCB- DP 40 A and outgoing MCB -3 nos. of SP 6A , 6Nos. of SP 16 A MCB as per requirement fitted with bus bar, as directed by engineer in-charge with all leads, lifts as per model flat etc. complete.	8	Nos.				
11	Supplying of capacitor type 1200 mm sweep ceiling fan complete with down rod, blades, shakle etc. with high breeze, high speed for operation on 230V, 50 Hz. Single phase A.C. supply confirming to IS 374-1979 and with double ball bearing system The fan shall be green as per BEE norms.	16	Nos.				
12	1x36 Watt fluorescent tube light fittings with Electronic Ballast having power factor >0.98 and and lamp holders duly wired ready to use for 230 Volts ,50 Hz, single phase A.C. supply to IS :10322 as per quality requirements & including 1 no tube light to each fitting as per model flat.	26	Nos.				
13	Supply, of Exhaust fan 150mm light duty 230 V AC 50 Hz 450 mm 1400 RPM with condenser complete erected in position with n/c materials Fan motor with moisture treatment and class E insulation & With bird protective screen	8	Nos.				
14	Providing & Fixing 16mm thick and of suitable size to fit all meter room accessories and made of Fiber board as Meter board in meter room as directed by engineer in-charge as per model flat etc. complete.	2	Nos.				

15	Providing, fitting & installing 32/63-400 Kikat switch in meter room as directed by engineer in-charge as per model flat etc. complete.	6	Nos.				
16	Providing, fitting & installing 2 pole 40A MCB switch in meter room as directed by engineer in-charge as per model flat etc. complete.	8	Nos.				
17	Providing, fitting & installing 100 A Bus bar in meter room as directed by engineer in-charge as per model flat etc. complete.	2	Nos.				
18	Providing & Earthing with G.I. earth plate of size 600x600x6mm with 25x3 mm GI strip as an earth conductor in 3 mtr deep & 1mtr wide pit with 3/4" G.I. pipe for watering refilling the pit including construction of cement concrete chamber with C.C. cover & funnel for watering as directed by engineer in-charge as per model flat etc. complete.(Scope including excavation by manual/Machines /Boaring, Charcoal, salt, or Bentonie slurry etc)	2	Nos.				
19	Supplying & fixing on wall or underground GI earth strip of size 25 x 3 mm earth conductor as directed by engineer in-charge as per model flat etc. complete.	20	R.M.				
	TOTAL (C)						

	D) REBATE OFFERED :						
	Credit for dismantled material						
	a) Reinforced MS steel bar	200	kg				
	b) Wash basin including fittings	8	No.				
	c) Orissa pan	8	No.				
	d) Doors	48	No.				
	e) Windows	48	No.				
	f) Showers	8	No.				

	g) Bibcock / Stpcock / Wheel valves	56	No.				
	h) G.I. pipes various diameters 15-40mm	220	RM				
	i) C.I. pipes various diameters 75-110mm	100	RM				
	TOTAL (D)						

Grand total (A+B+C-D) =