

ISSUED TO M/S _____

Limited TENDER DOCUMENT

**ONLY FOR CONTRACTOR/VENDOR EMPANELLED WITH DEHRADUN REGIONAL
OFFICE FOR**

**FURNISHING OF
UNION BANK OF INDIA**

AT

Ecb MUZAFFANAGAR

**OFFICE OF THE
ASSISTANT GENERAL MANAGER
UNION BANK OF INDIA
RO, MEERUT**

Last Date & time for receiving
Of sealed tenders.

: 12.07.2022 at 3:00 p.m.

Place and date of opening of : 12.07.2022 at 4:00 p.m. in the Office of RH, /DRH tenders
Union Bank of India,
Regional Office, Meerut,
Begum pull, opp. GIC, Meerut-250001

TENDER FOR THE FURNISHING OF UNION BANK OF INDIA AT Ecb MUZAFFARNAGAR**DETAILS OF TENDER**

1. Details of work to be done : Interior / Furnishing & Allied Electrical Work.
2. Form of Contract : Item wise rate
3. Earnest Money : Rs. 48,000/- (Twenty Five thousand only) in form of Demand draft in favor of Union Bank of India payable at Meerut .
4. Period of contract / time of Completion : 4 Weeks
5. Last Date & time for receiving of sealed tender. :12.07.2022 at 3:00 p.m.
6. Liquidated damages for non-completion of work in time : 1.0% of the contract value per week subject to a max of 10% of the contract value.
7. Defect Liability Period : 12 months (Twelve months) from the date of virtual completion as certified by Architect / employer.
8. Retention amount for 12 months: 3% or subject to a max of 10% of the actual bill.
9. Period of submitting of Final bill. : 15 days form the date of completion.
10. Mobilisation Advance / Secured Advance : No. Mobilisation Advance / secured Advance will be given to the Contractor.
11. Place and date of opening of: Tenders 12.07.2022 at 4:00 p.m. in the Office of the Chief Manager (P&D) Union Bank of India, RO, Meerut. Begum pull, opp. GIC, Meerut-250001


**ASSISTANT GEN. MANAGER,
 UNION BANK OF INDIA,
 R.O. MEERUT**

**TENDER FOR THE FURNISHING OF UNION BANK OF INDIA AT Ecb
Muzaffarnagar(6872)**

GENERAL CONDITIONS

1. The Contractor shall sign each page of this tender.
2. Payment to the Contractor Agency shall be made as per actual work done at site.
3. Quantity of work may increase or decrease at site as per requirement, which shall not affect the rates quoted by the contractor.
4. Furnishing works including electrical works etc. shall be done to the complete satisfaction of Bank and Architect-in-charge.
5. All teak / Cedar wood / rubber wood to be used should be knotless which is to be polished with all background surface preparation coarses maintaining the visibility of wood grains.
6. The rates to be quoted shall include the cost of material, labour charges, carriage, sales-tax, or any / all other taxes any required hardware etc.
7. The contractor agency shall keep particular vigil on his workers / carpenters / painters etc. to maintain very good workmanship of all items, failing which no payment shall be made and no claim of material / labour used shall be made to him in any case, and the same work shall be executed by him again without charging any extra cost.
8. All rates shall be quoted in words & figures & any cutting over writing shall be signed.
9. All items to be executed as per drawings, if any change is required, the same shall be brought to the notice of Architect-in-Charge.
10. Any tender / quotation containing clerical or arithmetical mistakes shall be rejected.
11. Any addition, alteration or correction shall be signed and stamped properly.

12. Contractor agencies are advised (before quoting the rates) to inspect the site of the proposed work. He must go through all drawings and specifications and documents.
13. The Bank reserves the right to accept / reject any tender / quotation without assigning any reason.
14. The Contractor agency should have already executed works of furnishing interiors & exterior, civil works of very good workmanship.
15. Quality of material and workmanship rejected by the Architect / Concerned Authorities shall be removed immediately by the contractor and rectified / replaced.
16. No advance payment shall be made to the Contractor on supply of any material supplied at site for execution. Payment shall only be made on execution of any concerned / particular item.
17. The rates shall include the cost of coat of anti termite treatment on all wooden frame work and all commercial ply / board used for partitions and paneling, furniture etc. The contractor/s shall have to dismantle & dispose the existing counters, tables & partitions within the quoted cost of the total furnishing works.
18. Rates for partitions, paneling, wall cladding and false ceiling shall include cutting and making good of necessary cut-outs/chiseling to be made for electrical conduits, switch boards etc.
19. Bank shall not be responsible for any lose or damage to the contractor/labour due to any natural calamity during the course of construction. Contractor is liable to make good all the damages if any, till the work is completed and handed over to the Bank authorities.
20. Any payment to the contractor on account of execution of work, whether it is running payment or final, shall be verified by the Architect-in-Charge.
21. Unless, otherwise mentioned all materials to be used shall be I.S.I. marked. Failure to do so, the work may be rejected and in that case contractor shall have to remove the defective materials and replace / re-do the work for which no claim shall be entertained.
22. The total work shall be supervised by the Architect-in-Charge and he/she shall be kept fully informed by the contractor regarding the progress of work.
23. Bank may award the work in part or whole to a single party or any other party.
24. It may please be noted that the Bank is not bound to allot the work to the lowest party. And as such, the allotment of work shall be based on workability of rates quoted by the contractor on account of quality work.
25. The bank reserves the right to reject any or all the tenders without assigning any reason whatsoever.
26. The earnest money deposited shall not carry any interest and will be refunded to the unsuccessful tenderers.



27. Earnest money paid by the contractor shall be forfeited by the Bank if contractor fails to undertake the job if he is communicated about acceptance his rates/tender.
28. The contractor shall take all the necessary precautions while working and to safe guard adjacent property, Bank's property, Bank's Employees, and traffic persons.
29. All the rates quoted are inclusive of removal of rubbish/ debris collected during the progress of work, rejected materials etc.
30. The contractor shall not directly or indirectly sublet the work to other party without written permission of the Bank.
31. The quantities mentioned in schedule are provisional and likely to increase/decrease to any extent or may be omitted thus altering the aggregate value of the contract. No claim for loss of profit / business shall be entertained on this account.
32. The Bank reserves the right to distribute the work for which quotations have been called, among more than one parties, if found necessary. No claim in this respect shall be considered and the contractor agrees to cooperate with other agencies appointed by the Bank.
33. All the workers of the contractor must be properly covered by an insurance policy under "Workman's Compensation act" and "Fatal Accidents Act". The contractor at his own expenses arrange to effect and maintain until the virtual completion of the contract, insurance policy in the joint name of Bank and the contractor against this risk to be retained by the Bank until the virtual completion of the work, and indemnify the Bank from all the liabilities arising out of such events. In case of delay, contractor shall arrange to extend insurance policy till work is completed.
34. All the work should be completed within the specified period in the tender. If the work is delayed due to the reasons beyond the control of the contractor, he should keep intimating the Bank explaining, therein the reasons for such delays, immediately and if in the opinion Bank's authorities the delay is justified, the contractor shall be granted extension in time limit.
35. The contractor shall furnish well in time before work commence at his own cost, colour samples, samples of materials or workmanship that may be called by Bank's Architect / Engineer for approval. Rates quoted shall cover for such preliminary work.
36. All the glass panes, door handles/ hinges, electric fittings, fans, furniture, records, floors etc. are to be thoroughly cleaned after the work is completed.
37. The rates quoted by the contractor shall be firm throughout the duration of contract (including extension of time if any granted) and will not be subject to any fluctuation due to variation in cost of material and labour.
38. Conditional tenders are liable to be rejected.

39. The successful tenderer is bound to carry out any item of work necessary for the completion of the job even those such items are not included in schedule of quantities.
40. If in any case of work required to be abandoned, the contractor shall not be entitled for any claims and he will be paid as per the actual work done till that period.
41. Decision of the Bank shall be final and binding on any matter connected with the work. The matter of any dispute shall be decided after mutual discussions based on the terms and conditions of this contract. However, if the matter can not be resolved then the same shall be referred to the respected qualified person in agreed to both the parties and his opinion shall be binding on both the parties. However, this is precourse to any legal action in this regard.
42. If at any stage during the progress of work, it is observed that the contractor is not progressing the work with due diligence, care of lagging much behind the schedule or fails to gear up the work despite instructions from Bank's Architect, the Employer (Bank) reserves the right to terminate the contract with 7 days notice. In such case the contractor shall be liable to pay the Employer to pay any extra cost involved for the completion of the said work and will not obstruct any way in completing the work through other agency. After completion of entire work the contractor shall be paid for the actual work executed by him at the quoted rates after deducting any claims, damages. In case of such termination the security deposit held by the Bank will be forfeited.
43. Contractor shall follow all rules / regulations in force and should posses the license for employing labour and also follow all safety measures, labour bye laws and shall be responsible for any lapse.
44. At any stage i.e. during the execution of work, any kind of change reqd. Whether it is in design or specification the same has to be in-corporated by the contractor.

CONTRACTOR

UNION BANK OF INDIA

TENDER FOR FURNISHING WORKS FOR UNION BANK OF INDIA, e-CB BRANCH, MUZAFFARNAGAR, UP.

A		FURNISHING WORKS (BRANCH & ATM)	Qty	Unit	Rate (Rs.)	Amount
S. No.		Description				
1		FALSE CEILING (Including ATM Ceiling)				
	a.	Providing and fixing GYPSUM BOARD FALSE CEILING in levels as per the detailed drawing - made up of G.I frames as specified by Gypsum India/Saint -Gobain Gyproc and 12mm thick Gypsum board with suitable suspenders fixed to the ceiling. Ceiling section, perimeter channel of size 20X27X30 mm and 0.55 mm thick for light fittings, AC Grills, diffusers, suspenders etc. shall be standard sections supplied by Gypsum India/ Saint Gobain. Spacing of intermediate channels shall be at 1200 mm c/c and ceiling section at 457 mm c/c. The work includes taping and jointing, applying primer, two or more coats of plastic emulsion paint of approved shade ICI/ASHIAN PAINTS make, making cut-out for light fixtures /fittings, etc. The Final coat shall be done with FOAM ROLLER and no brush marks should be visible. Providing of perimeter channels / beading etc. as per drawing complete in all respects.(All measurement in sqft only and finished surface area shall be measured)	545	sqft		
	b.	GRID FALSE CEILING(24" x 24") 24"x24" Grid False Ceiling Providing and fixing in the true horizontal level false ceiling system of Armstrong world industries. The suspension system shall be the Armstrong Trulock Silhouette revealed profile grid system with 15mm wide flanges incorporating a 3mm or 6mm central recess color black or white revealed Silhouette main runners and cross tees to have mitered ends with birds mouth notches to provide mitered cruciform junctions. Main runners to be spaced at 12mm c/c fixed by using 2mm pre straightened GI Wire.Main tee,rotary stitched of size 15mm x44mmx3600mm at every 1200mm c/c maximum and 1200mm cross tee of size 15mmx44mm x1200mm at every 600 mm c/c maximum and 600 mm c/c cross tee of size 15 mm x 44 mm x 600 mm at every 1200mm c/c maximum and 19mmx19mmx3000 wall angle All as per the design and instructions Architects (make- Armstrong)All as per the design and instructions Architects. (make- Armstrong)	567	sqft		
2		PARTITIONS				
	a1	Low height Partition Providing & fixing of LOW HEIGHT PARTITION (HT. 4'-0") made of 2"x2" aluminium tublar section framework (18 gauge) 2'0" c/c both ways 10 mm MDF BOARD of approved make on both faces finished with 1mm thick laminate of approved shade. Till the height of 3'-3" and 1'-3"(10mm thk.) toughened glass on top complete with teak beading. The spirit polishing teak sections of approved shade as per drawing Complete in all respects to the complete satisfaction of the Architect.	RO	sqft		
	a2	Full height Partition Providing & fixing of FULL HEIGHT PARTITION up to ceiling level partly glazed, made of 2"x2" aluminium tublar section framework (18 gauge) 2'0" c/c both ways 10 mm MDF BOARD of approved make on both faces finished with 1mm thick laminate of approved Make and shade. minimum 8 mm thick toughened glass of approved make with etching/taping as required) on the glazed portion. The work includes spirit polishing on woodwork and teak beading etc. Complete in all respects to the complete satisfaction of the Architect. Including doors but excluding cost of door closers, mortise locks.	1038	sqft		
	b	SEMI GLAZED PARTITION- Cash Cabin Partition/ Branch Manager Cabin Providing & fixing of partly glazed (12mm toughened glass of approved make as per design). made of 2"x2" aluminium tublar section framework (18 gauge) 2'0" c/c both ways 10 mm MDF BOARD of Approved Make on both faces finished with 1mm thick laminate of approved make & shade The work includes providing a 6" x 9" voucher cut out with tray, spirit polishing of shade on woodwork and steam beach beading etc. Including doors but excluding cost of door closers mortise locks. Complete in all respects to the complete satisfaction of the Architect./Engineer.	333	sqft		
	c	Cash Cabin front Partition With 12 mm toughened Glass including fixing. Complete in all respect.	50	sqft		
	d	Providing and fixing 1.5x 4/5 feet 12 mm toughened Glass on all tables /counters complete as per drawing including glass support. Glass has to fixed as vertical partition in the front end of the counter (towards customer side) to restrict direct access of customer	35	sqft		
	(i)	Knight latch for cash cabin door.(Make Godrej)	2	no.		
	(ii)	Mortise locks with handles.(Make Godrej)	6	no.		
	(iii)	Hydraulic Door closer.(Make Godrej/ Universal)	6	no.		
	(iv)	Floor springs for Glass door.(Make Godrej/ Universal)	3	no.		
3		GLASS DOORS WITH LOGO (BM CABIN,MAIN ENTRANCE & ATM DOOR)				
	A	Providing and fixing of (3'-0" 3'-6" X7'-0")12mm toughened glass door with18" long SS handles, floor spring (Ozone,) etc, locking arrangement of brass make at top of standard make(patch fitting), including fixing of Frosted strip vision film & bank logo as directed by the Bank/ Architects.	75	sqft		
	B	FIXED GLAZING Providing and fixing external FIXED GLAZING comprising of 12 mm thick toughened glass of approved Make with top, bottom and vertical U Channel frames comprising of powder coated (shade as approved) 14 gauge Aluminium members of approved shade 1.5mm avg. thick top, bottom & vertical member with clip sections as per specifications and drawings to complete satisfaction of the Architect.	110	sqft		
	C	BLOCK DOORS Providing and fixing solid core 38 mm solid core flush door finished with lippings in all side with necessary door hinges , cylindrical locks(golden, Godrej) , door clouser, door stoppers, etc with a frame work of T.W./Beech wood size 75mm x 62.5mm with necessary hold fast fixed to the wall/partition. 1 mm laminate to be fixed on both sides duly finished,edges to be finished with wooden lippings.A wooden moulding size 1.5"x2/8" to be provided all along the periferi of the frame work in the both sides . All the wooden area to be duly polished as per specification of the Architect. In case of Partly glazed door 8 mm thk etched toughened glass with granular blasting/sand blasting as per design of the Architect to be fixed with necessary mouldings.				
	a	Partly glazed door with out etching & frosting				
	i	7'-0" x 2'-6" Cash cabin door	No.	2.00		
	ii	7'-0" x 3'-0" (ups door,Electrical room)	No.	2.00		
	iii	(7'-0" X3'-0") for PASSAGE DOOR & Record Room	No.	3.00		
	b	Blocked doors				
	i	7'x2'-6" (Safe Room)	Nos	1		
4		COUNTERS AND TABLES				
	a	Providing and fixing MANAGER'S TABLE with 10mm beveled toughened glass of approved make to be fitted on top obtain the total height of 2'-6" as per detailed drawing, made up of 19mm board of approved Make and finished with 1 mm thick laminate of approved make, and shade. Table(with one side drawer unit and another side drawer unit) shall be provided with drawers sliding on telescopic channels and one cabinet with proper locking arrangements and keyboard with telescopic channels . The work includes providing and fixing of foot rests, shelf for CPU, furniture locks, wire managers, spirit polishing of steam beach/ white cedar beading etc. and The inner exposed surfaces to be finished with 0.8mm thick laminate of approved shade. complete in all respects to the entire satisfaction of the Architect/Bank.				
		Table size: 5'-6" x 3' 0" / 2'-9" x 2'-6"	RO	no.		
	b	SIDE CREDENZAS (Must be made loose without fixing to wall/partition.) : Providing and fixing SIDE CREDENZAS including in Manager Cabin of size 3' to 4'0" x 1'3" x 2'6" made of 19mm board of approved make finished with 1 mm thick laminate of approved Make and shade on top, back, sides and front having two drawers and cabinet below complete with all accessories like locks, handles, megnetic catcher etc. Teak wood beading on all exposed edges with spirit polish. (Should not be attachead with partitions)	RO	no.		

c	CASH COUNTER Providing and fixing of CASH COUNTER 2'-6"/3'-9" high made up of 19mm board/ply of approved make and finished with 1 mm thick laminate of make, shade as approved and as per detailed drawing. 2'-6' wide working table top, key board tray, drawer with telescopic channels (TOP DRAWER SHOULD BE DIVIDED INTO SECTIONS SO AS TO PILE DIFFERENT CURRENCY NOTES SEPERATELY) and cupboard. <i>All exposed surfaces (such as counter front, sides, drawers and cupboard etc) to be finished with 1mm thick laminate of approved make.</i> The inner exposed surfaces shall be finished with 0.8mm thick laminate of off white shade. The work includes fixing of furniture locks, wire managers, spirit polish of steam beach wood beading/ lipping etc. complete in all respects to the entire satisfaction of Architect. Transaction top should be minimum 18" and (5'-0" Average Length)	2	no.		
d	WORK STATIONS TABLE Providing and fixing of COMPUTER work Stations as per layout plan and and 10mm beveled Toughened glass of approved make to be fitted on top obtain the total height of 2'-6" high working top (As per drawing) made up of 19mm board / ply of approved Make, finished with 1 mm thick laminate of approved Make, shade as approved as per the detailed drawing . The tables shall have as per approved shade and color. <i>All exposed surfaces (such as counter front, sides, drawers and cupboard etc) must be finished with 1mm thick laminate of approved make. Table top shall be finished with 1mm thick laminate. The inner exposed surfaces to be painted over one coat of primer and enamel paint of approved shade.</i> Each unit of table shall be provided with keyboard tray with telescopic channels. The work includes fixing of wire managers, locks, footrests, spirit polishing the steam beach beading, lipping, exposed frame, etc. as per drawings, and The inner exposed surfaces shall be finished with 0.8mm thick laminate of approved shade. complete in all respects to the complete satisfaction of the Architect/Bank.				
a	Officers Table (4'-6" x 2'-6" x 2'-6")	RO	nos		
b	Clerk / staff tables (4'-6" x 2'-6" x 2'-6")	RO	nos		
c	Help Desk (4'-6" x 2'-0")	RO	no		
5	MISCELLANEOUS FURNITURE				
a	Providing & fixing STORAGE CABINETS independent units (movable) 12 feet long (maximum) 4'-6" ht and 1'-6" deep as per layout plan made up of 19mm board/ply of approved make and finished with 1mm thick laminate of approved make, shade and as per detailed drawing. <i>one shelves made up of 19mm thick board, each drawer(with lock) & cabinet(with lock) 19mm thickness portion every place must be finished with proper liping/ margin teak wood finish.</i> In side and back shall be finished with 0.8mm thick laminate of approved Make and color The work includes supplying, fixing of hinges, magnetic catchers, handles, locks, teak lipping etc as specified. complete in all respects.	RO	rft		
b	Full height STORAGE CABINATES upto 8'-6" false ceiling hight specification as per (a)	RO	Sqft		
c	Half height STORAGE CABINATES upto 4'-0" hight specification as per (a)	RO	Sqft		
e	Providing & fixing ELECTRICAL PANEL BOXING of 9'-0" ht and depth as per size of the electrical panel, layout plan made up of 19mm board / ply of approved Make and finished with 1mm thick laminate of approved Make & shade , in side to be finished with 0.8mm thick laminate of approved mke & colour. A fix glass window should also be given to show the indicator LEDS of the panel inside. The work also includes supplying, fixing of hinges, magnetic catchers, handles, Steam Beach lipping, Ventilator Grill etc complete in all respects to the complete satisfaction of the Architect.	125	sqft		
f	COLUMN / WALL PANNELING Providing and fixing of COLUMN PANNELING as per design, consisting of 9mm thick MDF BOARD of approved Make fixed on wall with made of 2"x2" alluminium tublar section framework (18 gauge) 2'-0" c/c both ways. The above shall be laminated with 1mm thick mica of approved Make, The work includes sprit polishing of wood beading, complete in all respects as per detailed drawings to the complete satisfaction of the Architect.	320	sqft		
g	Providing and fixing 4' - 0" ht. WICKET GATE between the counters to check the movements of customers inside the restricted area. Fully paneled door shutter including the door frame made up of styles and top rail, bottom rail using 1st class hardwood, 9mm ply of approved Make to be fixed on both faces finished with 1 mm thick laminate of approved Make. The work includes providing and fixing necessary hardware SS finish latches, butt hinges etc., steam beach beading etc. (spirit polished) as per drawings to the full satisfaction of the Architect, complete in all respects.	1	no.		
h	WRITING LEDGE Providing and fixing writing ledge as per design made out 19mm comm. board with necessary grove patterns with 1.0mm laminate. 10mm thk machine polished glass to be provided on top of the writing ledge. Small boxes to be made out of 12mm comm. ply to be made on top of the writing ledge finished with 1.0 mm laminate, inside enamel painted .The work to be completed as per design and approval of the architect.	1	no.		
i	SUGGESTION BOX Providing and fixing Suggestion box as per design made out 19mm comm. board with necessary grove patterns with 1.0mm laminate, 10mm thk machine polished glass to be provided on top of the writing ledge. Small boxes to be made out of 12mm comm. ply to be made on top of the writing ledge finished with 1.0 mm laminate, inside enamel painted .The work to be completed as per design and approval of the architect.	1	no.		
j	CHEQUE DEPOSIT BOX Providing and fixing Suggestion box as per design made out 19mm comm. board with necessary grove patterns with 1.0mm laminate, 10mm thk machine polished glass to be provided on top of the writing ledge. Small boxes to be made out of 12mm comm. ply to be made on top of the writing ledge finished with 1.0 mm laminate, inside enamel painted .The work to be completed as per design and approval of the architect.	1	no.		
6	PAINTING WORK Providing & applying two or more coats of Oil bound distemper on dry surface over a coat of plaster and primer including cleaning, rubbing, sand papering and preparation of surface.				by landlord
7	NOTICE BOARD/ SOFT BOARD Providing and fixing soft board with necessary framework with 12mm bwp plywood on top 12 jolly board to be fixed finished with fabric @Rs80 , with necessary mouldings duly polished along the periferi. The work to be completed as per approval and satisfaction of the Architect.	9	Sft		
8	ACP WALL PANELLING Providing & Fixing ACP sheet (4 MM THK)panelling with 2 1/2" x 1 1/2" Aluminium framework at 2'-0" c/c fixed over the existing wall/ partitions. Approved Make- ALUCOBOND/ ALUDECOR	200	Sft		
	GST extra as applicable	Total			

RECOMMENDED MAKE TO BE USED		
SR.	DESCRIPTION	MAKE / BRANDS
1	MDF. (Medium Density Fibre Board) – CONFIRMING TO IS : 12406 - 2003. (Density: 750 – 850 Kgs/m ³) colour code follow as per Bank Norms.	CENTURY/GREENPLY/ ARCHIDPLY
2	PLYWOOD – BWP (Boiling Water Resistant, Termite Resistant & Borer Resistant) – CONFIRMING TO IS: 303.	CENTURY/GREENPLY/ ARCHIDPLY
3	BLOCK BOARD – CONFIRMING TO IS : 11255 - 2003.	CENTURY/GREENPLY/ ARCHIDPLY
4	FLUSH DOOR – CONFIRMING TO IS : 2202 (Part – 1) – 1991.	CENTURY/GREENPLY/ ARCHIDPLY
5	LAMINATE – CONFIRMING TO IS : 2046-1995.	CENTURY/GREENLAM/ ARCHIDPLY
6	Lipping & Moulding	First Class Teak Wood
7	Gypsum ceiling	Gypsum India, Saint - Gobain Gyproc india
8	Grid Ceiling	Armstrong, Dexune
9	GI Support system for False Ceiling	GYPSTEEL ULTRA
10	Adhesive	Fevicol SH.
11	Locks Handles & all other hardware	Godrej, Dorset
12	Glass	Modi/Asahi(Tata), Saint Gobain
13	Aluminium	Jindal/ Hindalco/ NALCO
14	Door Closer	OZONE/Dorma
15	FLOOR SPRING	OZONE/GODREJ
	Vertical Blinds	Vista
16	Paint	Nerolac / Asian Paints
17	Wood Preservative	Bison by British Paints / Termiscal by ICI
18	Cement	ACC / Ambuja/Birla Plus
19	Preservative	Solignum/Black Japan / Termiscal
20	Sanitary Fittings	Kohler / Hindware
21	CP fittings	Jaguar
22	GI pipe	Jindal/ Bhushan
23	Floor & Wall tiles	Nitco/Kajaria
24	Overhead Water tank	Sintex

NOTE:
1- The contractor is strictly advised to use the makes specified/approved by the Bank/Architect, unspecified items will not be paid until they are changed with the specified ones.
2- The Plywood used for the work shall be BWR (Boiling water proof range) confirming to IS 303.

Place:

Date: Signature of contractor with seal

SUPPLY / PROVIDING AND FIXING OF MODULAR FURNITURES FACTORY FITTED FOR UNION BANK OF INDIA, -CB BRANCHII MUZAFFARNAGAR.

[illegible]

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BILL OF QUANTITY FOR ELECTRICAL WORK FOR UNION BANK OF INDIA,e-CB BRANCH, MUZAFFARNAGAR, UP.

ELECTRICAL WORKS (BRANCH & ATM)					
S.No.	DESCRIPTION OF WORKS	UNIT	QTY	RATE	AMOUNT
A.	POINTS & WIRING				
1	LIGHTS POINTS				
1	Wiring for light point/ fan point/ wall fan point/ exhaust fan/ light sockets etc. with 1.5 sq.mm. PVC insulated 1100 V Grade copper conductor (FRLS) wires & 1.5 sq.mm. copper earth wire in concealed/ surface using 16 SWG MS conduits, accessories such as bends, tees, saddles, draw boxes, mounting boxes, inner plates, cover plates, ceiling rose etc. (wherever required) and chromium plates brass screws/ rowel plug etc. The circuit wiring starting from DB to point control box/ switch box using 2 X 2.5 sq.mm PVC insulated 1100 V grade multistranded copper conductor wire & 2.5 sq.mm. PVC insulated earth wire (color code to be used). (Flexible conduit/ elbow not allowed). The conduit to be laid in ceiling with proper clamps/ wall/ floor and filling the chase with cement mortar and finishing the same in original form/ wooden partition/ above false ceiling with proper clamps etc. all complete.				
	(Wherever required as per standard specifications).				
	i) Each circuit shall have independent earth wire.				
	ii) Each point shall be earthed.				
	iii) Circuit wiring is to be included in point wiring rates.				
i	Primary points controlled by one 6 amp. Modular switch.	Nos.	50		
ii	Secondary light points controlled by one 6 amp. Modular switch.	Nos.	27		
iii	One call bell point with ceiling rose/ 6amp. 3 pin sockets controlled by one 6 amp. Push Modular switch. With call bell	Nos.	1		
iv	One wall fan/ ceiling/ exhaust fan point with 6-amp 3pin socket controlled by one 6 amp. Modular switch. The switch should be at switchboard level.	Nos.	17		
v	One 5 pin socket controlled by one 6 amp. Modular switch complete assembly includes plate box etc. Dependent	Nos.	12		
vi	Same as serial no 1 but using 2*1.5 + 1*1.5 Sq.mm Copper Conductor FRLS wires from DB to first 6A, 5 Pin modular socket controlled by one 6A switch and looped to the nearest second point with same 2*2.5 + 1*2.5 Sq.mm copper conductor wires FRLS insulated 1100V grade (max 3 points per circuit).				
a	Primary Point	Nos.	12		
b	Secondary Point looped	Nos.	5		
2	POWER POINTS				
	Same as serial no.1, but wiring for 16 Amp, 6-pin sockets by using 2* 2.5 sq.mm. PVC insulated 1100 V grade copper conductor wire with independent 1* 2.5 sq.mm earth wire from D.B. to first point 1 st socket and 1 st to 2 nd , socket with 2*2.5 sq.mm and 1*2.5 earth wire including providing and fixing of 16 Amp, 6 –pin socket with 16 Amp. Switch. (Modular type switch/ socket/ plate etc. complete assembly) max 2 points per circuit.				
a)	Primary Point	Nos.	8		
b)	Secondary Point	Nos.	5		
3	AC POINTS FOR INDOOR & OUTDOOR UNITS				
3(a)	Same as serial no.1, but wiring for A/C socket by using 2*6 sq.mm. PVC insulated 1100 V grade copper conductor wire and earthing with 1*4.0 sq.mm. PVC insulated 1100 V grade copper conductor wire with modular type AC box (tiny trip type) with socket complete in all respects controlled by 25/32 A SP MCB to be provided near indoor unit. The point starts from DB to stabilizer to the point near the indoor unit including top. Items should be executed after approval from Bank/ Architect.	Nos.	0		
3(b)	Same as serial no.1, but wiring for A/C socket by using 2*4 sq.mm. PVC insulated 1100 V grade copper conductor wire and earthing with 1*4.0 sq.mm. PVC insulated 1100 V grade copper conductor wire of weather proof type AC box with socket complete in all respects controlled by 25 A MCB to be provided near outdoor unit. The point starts from DB to the point near the outdoor unit.	Nos.	7		
4	COMPUTER POINTS (UPS)				
a	Wiring with 2x1.5 sq.mm. + 1x1.5 sq.mm. PVC insulated 1100 V grade multi stranded copper conductor wires in 2 mm thick PVC conduit from UPS DB to computer point. Each point to have 3 nos. 6 amps. 5 pin modular type sockets, one 6 amps modular switch with all accessories, inner/ outer plates, metal box etc. and to be fixed on wooden partitions/ by grouting on wall etc. as per requirement at site. The switch should be fixed above the top of counter with indicator and sockets under the counter. b) Same as above but looped from the above 1st point to 2nd, point and 2nd point to 3rd point. (Maximum 3 points in a circuit)				
	Primary Points	Nos.	12		
	Secondary Points	Nos.	3		

b	Wiring with 2x1.5 sq.mm + 1x1.5 sq.mm PVC insulated 1100 V grade multi stranded copper conductor wires in 2mmthick PVC conduit from UPS DB to computer point. Each point to have 1 nos. 16 amps 5 pin modular type sockets, 1 No's 16 amps modular switch with all accessories, inner/ outer plates, metal box etc and to be fixed on wooden partitions/ by grouting on wall etc as per requirement at site. The switch should be fixed above the top of counter and sockets under the counter. or as directed by the engineer in charge for the rack supply in PA rack, CCTV etc. b) Same as above but looped from the above 1st point to 2nd point (Maximum 2 points in a circuit)				
	Primary Points	Nos.	3		
	Secondary Points	Nos.	2		
	PART (A) SUB TOTAL				
	GST @.....				
	PART (A) SUB TOTAL INCLUDING GST				
B.	CONDUITING FOR TELEPHONE, COMPUTER & CONDUITING, WIRING FOR T.V. SYSTEM.				
1	TELEPHONE SYSTEM				
1.1	Wiring for VOICE from Jack Panel in data rack to computer workstation with Cat-6 voice cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type. This work includes supply and laying of CAT-6 cable in PVC conduits throughout the length, from the I/O hub to the point.	Nos.	4		
1.2	Supplying, laying, effecting terminations, testing and commissioning of 0.51 mm dia Cu. Conductor, twisted, colour coded with polythene capor barrier, telephone cables in the existing tray or in conduit including providing &fixing conduit pipe or cable tray as required from building tag block to the floor as				
a)	Supplying & fixing 20 pair krone tag block with enclosure.	Nos.	0		
b)	P/L 20 Pair of PVC insulated PVC sheathed multi core jelly filled armored telephone.	Mtr.	45		
c)	Panasonic Electronic Modular Switching System MODEL NS-300 (Digital IP PBX SYSTEM) For 6 CO Lines 2 Digital Extension and 16 Extensions, with DISA Greeting Message and Extension Caller ID Expandable upto 6 co & 32 Extensions.	Nos	0		
d)	MDF with Krone Modules 50 pairs with connector	Nos	1		
2	COMPUTER NETWORKING				
2.1	Wiring for computer networking from Jack Panel in data rack to computer workstation with Cat-6 computer cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type, this work includes supply and laying of CAT-6 cable in PVC conduits throughout the length, from the I/O hub to the point.	Nos.	12		
2.2	Cleaning & Re- fixing 9 U (Rack with glass door, opening in the front power panel 1 (horizontal), cable manager 1 lock & key).	Nos.	1		
2.3	Cleaning & Re- Installation, Testing & Commissioning of 24 port Jack Panel.	Nos.	1		
2.4	Supplying and fixing Patch Cord-2 Meter- (DBPS Mounting Cord)	Nos.	8		
2.5	Supplying and fixing Patch Cord-1 Meter-	Nos.	7		
3	Supply and fixing of 1.6 mm thick G.I. Box along with RG 6 T.V Co axial socket with Cover Plate.	Nos.	0		
4	Supply, drawing, connecting, testing and commissioning of T.V Coaxial cable RG 6 in existing conduit.	RM	0		
	PART (B) SUB TOTAL				
	GST @				
	PART (B) SUB TOTAL INCLUDING GST				
C.	CABLES, MAINS & SUBMAINS				
i	Supplying all materials and laying/ pulling 1100 volts grade PVC insulated copper conductor wires (FRLS) in MS conduit with all fixing accessories after cutting the floor, wall and the like etc. and plastering the floor level to original. Conduit must be 30 mm below the floor finish level. Items should be executed after approval from Bank/ Architect.				
ii	2 X 4 sq.mm. + 1 X 4 sq.mm.	RM	0		
iii	2 X 6 sq.mm. + 1 X 6 sq.mm.	RM	0		
iv	2 X 10 sq.mm. + 1 X 6 sq.mm. (Branch UPS DB)	RM	45		
v	1 X 10 sq.mm. Cu wire for earthing. (UPS Input/Output)	RM	45		
vi	4x10 sq.mm. +2x6sq.mm (Panel to TPN)	RM	45		
v	Supplying, laying, testing & commissioning of 3.5 C X 16 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination accessories. Clamps etc. as required as per specification (Light DB + Power DB).	RM	25		
vi	Supplying, laying, testing & commissioning of 4 C X 35 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10-gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination accessories. Clamps etc. as required as per specification (AC DB).	RM	25		

vii	Supplying, laying, testing & commissioning of 3.5 C x 50 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armored cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination accessories, Clampsetc. as required as per specification. (Mains)	RM	0		
PART (C) SUB TOTAL					
GST @					
PART (C) SUB TOTAL INCLUDING GST					
D.	DISTRIBUTION BOARD				
	Supplying, installing, testing & commissioning of surface/recessed mountings, Double door 415 volts TPN MCB distribution board of steel, 1.6 mm thick dust phosphatized and painted, inclusive of 100 amps, tinned copper bus bars, earth bar, common neutral link, din bar for mounting of MCB's detachable gland / knock out plate & with built in loose wire box, and superior make terminal connectors for all incoming and outgoing circuits duly prewired with adequate size of PVC insulated copper wires between the bus bars and the MCB's as well as the in-comer and upto the terminal connectors/ neutral link and ready for installation of following ways as required.				
	Use 'B' curve MCB's for lighting & small power circuits, 'C' curve for motor duty i.e. for pumps, AC motors, window and split AC's etc. & 'D' curve for UPS DB's i.e. for computers/ PC's circuit. Main in-comer & outgoing circuit MCB's shall be selected accordingly i.e. type B,C & D. Contractor to select the MCB's accordingly as per the nature of the circuit/ load.				
	Each DB shall have separate neutral links of rating not less than 100A for each phase. The main incoming neutral link shall be in addition to three outgoing neutral links and shall be of 125 A.				
	UPS DB's shall have a dedicated Earthing link fixed on insulated supports, which will be in addition to body earth link.				
	All internal inter connecting wiring with in the DB's shall be PVC insulated flexible copper conductor wires of adequate capacity as per the current rating. Inside each DB, a DB chart is to be fixed. Items should be executed after approval from Bank/Architects				
a	4-way TPN DB (LIGHT DB/ Power DB)	No.	1		
	In-comer :-				
	1 No. 40 Amp TPN (10 KA) MCB with 40 A DP MCCB (100 MA) each phase				
	Outgoing :-				
	6 Nos. 6/10 Amp (10 KA) SP MCB				
b	4-way TPN DB (AC DB)	No.	1		
	In-comer :-				
	1 No. 63 Amp TPN (10 KA) MCB with 63 A DP MCCB (100 MA) each phase				
	Outgoing :-				
	6 Nos. 10/16/25/32 Amp (10 KA) SP MCB				
c	4-way SPN DB with 2 Nos. 40 A (10 KA) DP MCB (For UPS Input)	No.	2		
d	(2+8)-way SPN DB (For UPS Sub DB)	No.	1		
	In-comer:-				
	1 No. 40 Amp DP (10 KA) MCB with 25 A DP MCCB (100 MA)				
	Outgoing:-				
	6 Nos. 6/10/16/25Amp (10 KA) SP MCB				
e	8 Way SPN DB for ATM complete with lock & Key Arrangement with 40A DP MCB & 32 A DP RCCB (100 mA) and Outgoing as 4 No's of 6/10/16/25/32 A SP MCB as directed by the engineer in charge for E-Lobby AC- 2 No's and Light.	Nos.	1		
f	6 Way SPN DB for ATM complete with lock & Key Arrangement with 25 A DP MCB & 25 A DP RCCB (100 mA) and Outgoing as 4 No's of 6/10/16/ SP MCB as directed by the engineer in charge for ATM UPS points.	Nos.	1		
PART (D) SUB TOTAL					
GST @					
PART (D) SUB TOTAL INCLUDING GST					
E	(LIGHT FITTINGS & ACCESSORIES)				
	Supplying, installation with hanging support, testing and commissioning of following light fixtures with electronic Ballasts, Tubes, lamps, all fixing materials including connecting wires etc. all complete as per the directions of Engineer-in-charge (All LED Light Fixtures should be covered with minimum 3 Years onsite replacement warranty). Items should be executed after approval from Bank/ Architect.				
i	LED 18 W tube 4'-0" As specified in tender document or approved by Bank/Architect.	Nos.	20		
ii	FULL GLOW 2 X 2 LED 36 W slim Smart Panel of make As specified in tender document or approved by Bank/Architect.	Nos.	19		

iii	Supplying, fixing, testing and commissioning of 12 W LED commercial type down lighter of make As specified in tender document or approved by	Nos.	38		
iv	LED Strip for cove lighting 12 W per 5 M with driver and necessary installation fittings Led strip light (5 mtr.) make as specified in tender document or approved by Bank/Architect.	Nos.	0		
v	Supply, installation, testing and commissioning of following fans with all fixing materials like white Polycarbonate 2 mm Hylem sheet cover, down rods, fan box as required etc. all complete as per the directions of Engineer-in-charge.				
a	Wall mounted fans 400 mm dia. make As specified in tender document or approved by concerned office in charge.	Nos.	9		
b	Supply & fixing of 230 mm exhaust fan 'Ventilair DX W' with self-closing louvers and plastic body with all accessories etc. complete of make As specified in tender document or approved by concerned office in charge.	Nos.	4		
c	Ceiling Fan- Supply, Erecting, and testing of approved/specified make ceiling fans complete with down rod, canopy, blades and Electronic speed regulator 230-250 volts including connection with all necessary materials as required. Make- Usha/ Havells/Crompton	Nos.	4		
PART (E) SUB TOTAL					
GST @.....					
PART (E) SUB TOTAL INCLUDING GST					
F. EARTHING SYSTEM					
1	Supply, Installation, Testing and Commissioning of Maintenance Free Earthing system made up of copper bonded rod of 10 feet length, 23 mm dia. (Minimum copper bonding shall be 0.25mm) along with Rod-to-Conductor connectors, Earth enhancement material, Pit Cover and other accessories as required and as per specification and other applicable codes (include chamber for earthing, Earthing certificate to be submitted along with the bill).	Nos			
2	Supply, Installation, Testing and Commissioning of Maintenance Free Earthing system made up of copper bonded rod of 10 feet length, 17.2 mm dia. (Minimum copper bonding shall be 0.25 mm) along with Rod-to-Conductor connectors, Earth enhancement material, Pit Cover and other accessories as required and as per specification and other applicable codes (include chamber for earthing, Earthing certificate to be submitted along with the bill).	Nos	3		
3	Providing and fixing of Copper/ GI strips in surface or in recess for loop earthing etc. as required.				
i	25 mm x 3 mm copper strip in B-class GI pipe	RM	0		
ii	25 mm x 5 mm GI strip	RM	0		
iii	Providing and fixing 2 X 6mm Cu earth wire in PVC conduit on surface or in recess for loop earthing along with the existing surface/ recess cable as required.	RM	90		
PART (F) SUB TOTAL					
GST @.....					
PART (F) SUB TOTAL INCLUDING GST					
G. MAIN PANEL AND METER BOARD					
	Designing, fabrication, supply, installation, testing and commissioning of front operated cubicle type compartmentalized, front access, free standing on 75MM "I" MS channel, dust and vermin proof (IP 42 degree protection) panel suitable for use at 415V, 3 phase, 4-wire 50Hz system suitable for fault level of required value symmetrical at 415V fabricated from 2mm thick CRCA MS sheets with hinged, gasketted (Metal based neoprene) lockable doors having structural reinforcement including 3mm thick gland plates on top and bottom, lifting hooks, GI earth strip of required size with 2 no's earth terminals, 2 no's 230V AC operated 250 mm X 250 mm size axial fans for exhaust of heat with On-Off toggle switches including 2 coated primer and 2 power coated paint finish of approved shade over metal surface cleaned and treated with seven tank process complete with interconnections etc. as per specifications as required. Main panel board of approved make (Should be CPRI Approved, Type of Approval as instructed by the concerned office in charge)				
	As per the following specifications, (Part IV - Substation) and IS: 8623 comprising of followings panel mounting switchgears etc. as required, should be CPRI Approved. IS: 8623 comprising of followings panel mounting switchgears etc. as required, should be CPRI Approved. Note: Type of CPRI testing shall be as per Architect/ Bank's instructions. All switchgears shall have provision for entry of cables from the top or bottom through Cable Alley.				
	All live accessible parts shall be shrouded and all equipment shall be finger touch proof. The busbars insulation shall be with heat shrinkable sleeves SMC/ DMC shrouds and busbar supports shall be used. Padlocking facility shall be provided on all outgoing feeders' doors and switch handles shall be lockable in OFF position.				
	Suitable arrangement shall be made for termination of multiple incoming cables.				
	All KA values indicated shall be ICS breaking capacity				
	GA drawings shall be got approved by concerned office in charge.				
a.	Floor panel shall consists of : -				
	Items should be executed after approval from Bank/ Architect.				

	INCOMER				
	1 no. 100 Amp 4P On Load Change over switch with 1 No. 100 Amps, TPN MCCB (25 KA) with extendable rotary handle each thermal over current, instantaneous, Short circuit release, Earth fault.				
	BUSBARS				
	125 amps TPN pole bus bar chamber of suitable length with copper bus bars. All bus bars and interconnections shall be of suitable size copper strips.	Set	1		
b.	INDICATING PANEL				
	Digital flush type class-1.0 accuracy multifunction meter showing V, A, PF etc. with 3 Nos. Current Transformers of 125/5A ratio, 15 VA Class-1.0 metering. - 1 sets				
	Red/Green/Amber ON/ OFF/ TRIP indicating lamps with 2A SP MCB backup protection.				
	1 set of three phase indicating lamps along with 2A SP MCB backup protection.				
	Restricted Earth fault relay with 3 Nos. current transformers of 125/5 ratio, 15 VA Class 5P 10 (Numeric Relay not required.)				
	Under voltage, Overvoltage & phase reversal relay for persisted voltage of 105-180% & 20-95% of rated voltage (Numeric Relay not required).				
	OUTGOINGS: -				
	2 Nos 40 A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For Light DB & Spare)				
	3 Nos 40 A DP MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars.				
	2 Nos 63 A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (for AC and Power DB)				
	The electrical panel as described above and specifications complete.	Set	1		
	PART (G) SUB TOTAL				
	GST @.....				
	PART (G) SUB TOTAL INCLUDING GST				
I	OUTDOOR TYPE GLOW SIGN BOARD WIRING				
a.	Supply laying of Main line with 2x2.5 + 1x 1.5 Sq.mm through MS conduit from main panel	Mtr.	10		
b.	To Glow Sign Board				
	Supply installation of 16 Amp. DP MCB at main entrance Glow sign Board with Timer of reputed make-Samsung	Nos.	1		
	PART (I) SUB TOTAL				
	GST @.....				
	PART (I) SUB TOTAL INCLUDING GST				
	GROSS SUB TOTAL (PART A + PART B + PART C + PART D + PART E + PART F + PART G + PART H + PART I)				
	GRAND TOTAL AMOUNT				

APPROVED MAKE LIST

S.N.	DESCRIPTION	Approved Makes
1	PVC Conduit	Precision/AKG
2	Ceiling Junction Boxes	Home lite/ANCHOR
3	Wires & cables	R.R./Havells/ Polycab
4	Modular Switches, Sockets etc	Legrand/Havells/L.& T.
5	Lighting Fixtures	Philips/Wipro/ Crompton
6	M.C.B./RCCB/RCBO etc	Legrand/Havells/L&T
7	Distribution Boards	Same As Above
8	MCCB	Schneider Legrand Havells
9	Change Over Switches	H.P.L./A.B.B./Standard/ L.& T.
10	End Termination accessories	Dowells/Usha/Brecco/Cosmos
11	Telephone Cables & accessories	Havells, Krone, Finolex,
12	Fans/Exhaust fans	Crompton Havell/USHA
13	Music Speakers	Philips/Bosch/Ahuja
14	Amplifiers	Philips/Bosch/Ahuja
15	DVR	Samsung, Honeywell, HIKVISION
16	Rg11, CAT5/CAT6 cables/Telephone wires	Legrand, Molex, D'Link, AMP
17	CCTV Dome Camera	Honywell, HIKVision
18	Hard Disk drive	Seagate, HIKVISION
19	Smoke/Heat/Optical Fire Detectors	Edward, Siemens, Appolo Or other
20	Response Indicators, Hooters	Edward, Siemens OR other ISI
	Telephone Tag Block	Krone

Place:

Date:

Signature of contractor with seal

AIR-CONDITIONING WORKS, UNION BANK OF INDIA, e-CB BRANCH, MUZAFFARNAGAR.

Sr. No	Particulars	Product Model No.
1	3.0 TR Ceiling Suspended Cassette Unit 3 Star Non- Inverter Model or equivalent	
2	2.0 TR Ceiling Suspended Cassette Unit 3 Star Non- Inverter Model or equivalent	
3	1.5 TR Ceiling Suspended Cassette Unit 3 Star Non- Inverter Model or Equivalent	
4	2.0 TR Wall mounted Split Unit 3 Star Inverter Model	
5	1.5 TR Wall mounted Split Unit 3 Star Inverter Model	
6	1 TR Wall mounted Split Unit 3 Star Inverter Model	

Note: For any make, if OEM doesn't has specific star rating for the product but that product has equivalent energy saving as compared to the star rating, then vendor shall mentioned the same against the model number.

AIR-CONDITIONING WORKS:

Air-conditioning System (Inverter Model/ 3 Star - Wall mounted Split Unit/ Ceiling Suspended Cassette unit)

Equipment Make – Toshiba/ OGeneral/ Mitsubishi Heavy Industries- 3 star split.

model – cassette (inverter units) with copper condenser

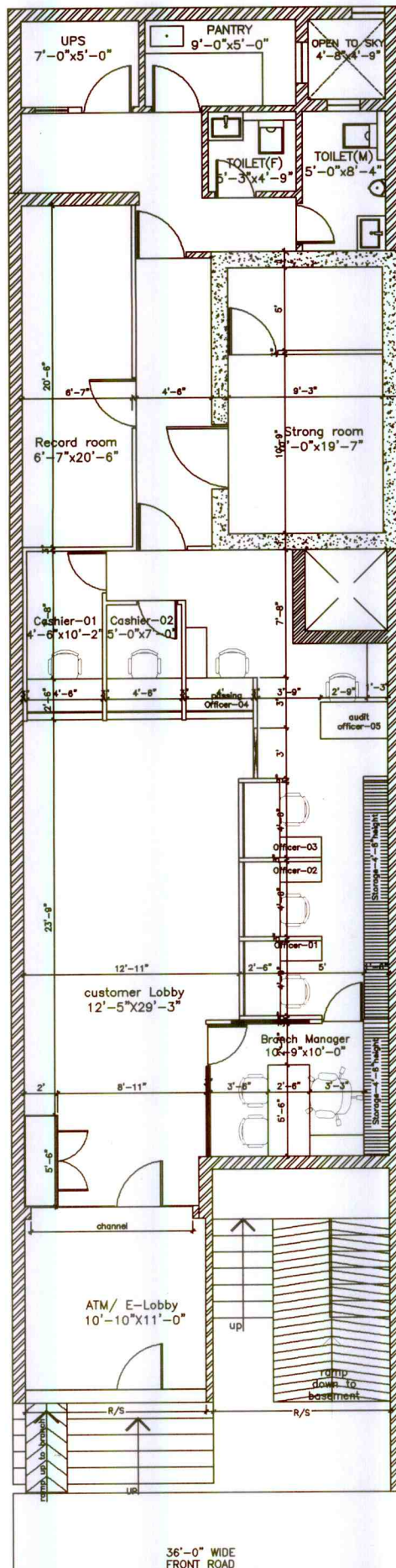
All the work of Drain pipe/copper pipe/cable shall be properly supported by clamps from the slab.

AIR-CONDITIONING WORKS:

Sr. No	SPLIT TYPE AIR CONDITIONERS				
A.	PART -A				
	HIGH SIDE WORK				
	Description	Unit	Quantity	Rate	Amount
1	Supplying, erection, testing and commissioning following wall mounted Split/ Roof mounted cassette units of (Toshiba/ O-General/Mitsubishi Heavy Industries) with cordless remote complete with all necessary fittings duly insulated with 9 mm thick nitrile rubber pipe insulation with (evaporator coil – copper only), fan and fan motor, machine control panel improved Refrigerant Joints, .Air conditioners shall be fitted with hermetically sealed type suction cooled reciprocating or discharge cooled rotary compressor or scroll compressor. Compressor unit operating on R-22/ R-410. All complete as per drawing, approval and instructions of the Employer (Rates to be inclusive of Copper refrigerant pipe with insulation and Drain pipe up to 5 Mtr. length).				
a	1.0 TR wall mounted split unit (Minimum 3-Star rating Non- inverter type) including all necessary fittings and mountings as specified by the manufacturer.	Nos.	0		
b	1.5 TR wall mounted split unit (Minimum 3-Star rating Non- inverter type) including all necessary fittings and mountings as specified by the manufacturer.	Nos.	3		
c	2 TR wall mounted split unit (Minimum 3-Star rating Non- inverter type) including all necessary fittings and mountings as specified by the manufacturer.	Nos.	4		
d	1.5 TR Cassette type unit with 4 way/ round air flow including all necessary fittings and mountings as specified by the manufacturer (Three phase). (5 star or Equivalent energy saving latest model Inverter Type)	Nos.			
e	2.0 TR Cassette type unit with 4 way/ round air flow including all necessary fittings and mountings as specified by the manufacturer (Three phase). (3 star or Equivalent energy saving latest model Inverter Type)	Nos.			
f	3.0 TR Cassette type unit with 4 way/ round air flow including all necessary fittings and mountings as specified by the manufacturer (Three phase). (3 star or Equivalent energy saving latest model Inverter Type)				
	PART A –HIGH SIDE WORK SUB TOTAL AMOUNT				
	GST @.....				
B.	PART –B				
	LOW SIDE WORK				
1	EXTRA REFRIGERANT PIPING				
	Supplying and laying of Extra copper refrigerant piping with nitrile rubber pipe insulation, both of size as specified by the manufacturer suitable for 1.0 TR/ 1.5/2.0 TR Split type AC and 2.0/3.0 TR Cassette AC (From Indoor to outdoor Units) Beyond 3 M.				
a	For 1.0 T Split unit	Mtr.			
b	For 1.5 T Split unit	Mtr.	45		
c	For 2.0 T Split Unit	Mtr.	100		
d	For 1.5 T Cassette Unit	Mtr.			
e	For 2.0 T Cassette Unit	Mtr.			
f	For 3.0 T Cassette Unit	Mtr.			
2	DRAIN PIPING				
	Providing and fixing drain piping up to drain as directed by the engineer in charge with all accessories e.g. elbows, unions, sockets, reducers, reducing tees, nipples etc. Complete job including cutting chiseling in walls, fixing with GI clamps, floor and making good of all chases/ cuts etc. and discharging the drain into a floor trap/ gully as per site conditions with insulation, both as specified by the manufacturer.				
a	25 mm dia PVC drain pipe for Split AC	Mtr.	150		
b	32 mm dia PVC drain pipe for Cassette AC	Mtr.	75		
c	40mm dia PVC drain pipe for Cassette AC	Mtr.			

3	AUTOMATIC VOLTAGE CONTROLLER				
	Stabilizer shall be Automatic version with copper coil transformer and the voltage selection range shall be minimum depending on lowest peak recorded average in a month. Precise output voltage range (130V-170V to 240V -270 V). Ensure the rating of Stabilizer shall be in accordance with max rated power of ACs considering instantaneous peak load fluctuation.				
	Providing and fixing Stabilizer with 3-4 step relay and input voltage range of 130-270 V and output to be 230-240 V (Blue bird/ Logic state/ Inline/ V-Gaurd/Equivalent Reputed Make) (copper winding).				
a	5 KVA (For 3.0/ 2.0 TR Split AC)	Nos.			
b	4 KVA (For 1.5/ 2.0 TR Split AC)	Nos.	4		
c	3 KVA (For 1.0/ 1.5 TR Split AC)	Nos.	3		
4	AIR-CONDITIONERS STAND WITH MS- CAGE				
1	Providing and fixing of lockable caging for outdoor unit grouted on wall or on roof with open able shutter made of 10 X 10 mm MS square bars placed vertically @ 5" c/c welded with 40 X 3 mm MS flat all- round. The frame shall be of angle 35mm*35mm and it shall be fixed to wall or roof with proper MS bracket to tackle the weight of outdoor unit. Item includes all necessary hardware, priming coat, synthetic enamel paint, hanger, clamps other accessories etc. All complete as per approval and instructions of the employer. Size shall be adequate for AC outdoor size & sufficient space around the outdoor suitable for servicing purpose for Outdoor unit.				
a	For 1.0 TR Hi Wall split units	Nos.	0		
b	For 1.5TR Hi Wall split units	Nos.	3		
c	For 2.0 TR Hi Wall split units	Nos.	4		
d	For 2.0 TR ceiling mounted cassette unit	Nos.			
e	For 3.0 TR ceiling mounted cassette unit	Nos.			
5	ELECTRICAL CABLES				
	Suitable IS/BIS standard Cable of 1.1-2.2 KV, Multi strand, FRLS 2- 4 C / 1.5/2.5 -6.0 Sqmm) as per design requirement of Peak load calculation of specific ACs system installed at site with 1"/1.5"/2" PVC conduit pipe between indoor/outdoor unit				
a	Supplying and laying of Extra Electrical interconnecting control cable from indoor to outdoor of size as specified by the manufacturer suitable for 1.0 TR/ 1.5/2.0 TR Split type AC.	Mtr.	25		
b	Supplying and laying of Extra Electrical interconnecting control cables from indoor to outdoor of size as specified by the manufacturer suitable for 2.0/ 3.0 TR Cassette type AC.	Mtr.	0		
6	TIMER				
a	Supplying, installation and commissioning of automatic 24 HRS. programmable TIMER of required capacity to run A.C. alternately (L&T/ Sumsung / Panasonic reputed make).	Nos.	1		
7	CORE CUTTING				
a	Core cutting member in Non RCC with civil works required at site etc.	Nos.	7		
	PART B				
	GST @.....				
	PART B – LOW SIDE WORK SUB TOTAL AMOUNT				
	GRAND TOTAL (PART A + PART B) EXCLUDING GST				

Note: The rates quoted includes all other taxes, duties, loading, unloading, transportation, other expenses etc. to site only GST will be paid Extra



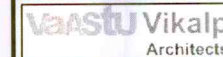
PROJECT NAME:
INTERIOR FURNISHING & ELECTRICAL WORKS OF
PROPOSED e-CB BRANCH, DHANUAPUR,
MUZAFFARPUR.

CLIENT NAME & ADDRESS :



Union Bank of India, Regional Office,
First Floor, Begum Bridge Road, Opp Govt.
Inter College, Meerut, Uttar Pradesh- 250001

CONSULTANTS NAME & ADDRESS :



Sh-24, First Floor, 828 Square, Garh Road,
Meerut- 250002
E-mail- vva.global@gmail.com
Mob:- +91-9997591118, +91-9890328902

ARCHITECT:

Manoj Kumar

NORTH:

DRAWING TITLE :
Proposed Layout Plan

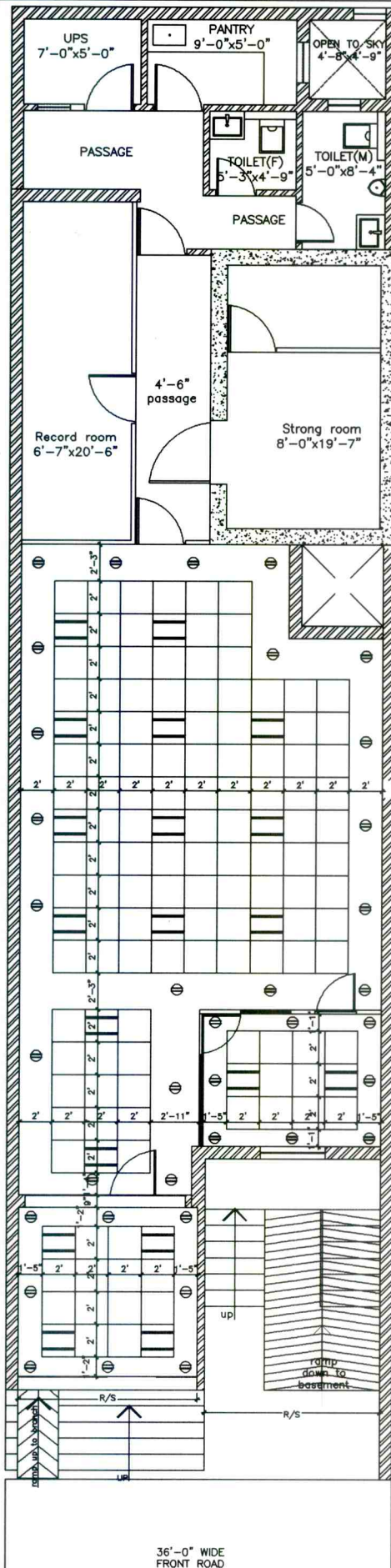
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1 / 1

DEALT :
Sardar Verma
SCALE :
1/75

CHECKED :
Ar. Manoj Kumar
DATE :
18 June 2022

DRAWING NO. :
VVA/BANK/UBI/KCZ/ LP

OPTION/ REVISION
01 / R-0



PROJECT NAME:
INTERIOR FURNISHING & ELECTRICAL WORKS OF
PROPOSED e-CB BRANCH, MUZAFFARPUR,
MUZAFFARPUR.

CLIENT NAME & ADDRESS :



Union Bank of India, Regional Office,
First Floor, Begum Bridge Road, Opp Govt.
Inter College, Meerut, Uttar Pradesh- 250001

CONSULTANTS NAME & ADDRESS :



3B-24, First Floor, 828 Square, Garh Road,
Meerut- 250002
E-mail- vva.global@gmail.com
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ARCHITECT:

Manoj Kumar

NORTH:

DRAWING TITLE :
FALSE CEILING

SHEET No.
1 / 1

DEALT :
Sandeep Verma

CHECKED :
Ar. Manoj Kumar

SCALE :
1:75

DATE :
15 June 2022

DRAWING NO. :
VVA/BANK/UBI/KCZ/ LP

OPTION/ REVISION
01 / R-0