



Request for Proposal (RFP) for Hiring of Agency for Refurbishment/Renovation of area under NeGD in Electronics Niketan, 6 CGO Complex, New Delhi.



**National eGovernance Division
Digital India Corporation
Ministry of Electronics and Information Technology
Government of India**

RFP for Hiring of agency for refurbishment/renovation of area under NeGD in Electronics Niketan,CGO Complex,New Delhi is invited on Single Stage 2 Bid System (Technical & Financial & design proposal). Tender documents may be downloaded from NeGD website <http://negd.gov.in> (for reference only) and CPPP website <https://eprocure.gov.in/eprocure/app> as per the schedule given in the **CRITICAL DATE SHEET as under-**

CRITICAL DATE SHEET

Published Date	16th August 2019
Bid Document Download / Sale Start Date and Time	16th August 2019 1500hrs
Pre – Bid Meeting	23rd August 2019 1200hrs
Bid Submission Start Date and Time	28th August 2019 1500hrs
Bid Submission End Date and Time	16th September 2019 1600hrs
Technical Bid Opening Date and Time	17th September 2019 1600hrs
Presentation on Layout/Design	18th September 2019 1100hrs to 1600hrs
Financial Bid Opening Date & Time	23rd September 2019 1600hrs

Section-1

Instruction to Bidders

1. Introduction

National e-Governance Division: The National e-Governance Division (NeGD) as an Independent Business Division under Digital India Corporation, Ministry of Electronics & Information Technology, Government of India.

2. Purpose of the RFP

The purpose of this RFP is to hire an agency for making design & execution work for refurbishment /renovation of area under NeGD in Electronics Niketan, 6 CGO Complex, New Delhi – 110003, involving civil / electrical / interior design /audio &video, access control work ,Hvac Works ,Fire Detection, Modular Furniture allied works. The Company will design & execute the scope of work of the NeGD as per specification mentioned in the Tender document.

3. Critical Information

Bidders are advised to study this RFP document carefully before submitting their proposals in response to the RFP Notice. Submission of a proposal in response to this notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.

4. Scope of Work

The broad scope of work is as follows:

The bidder shall be required to do an interior design, architecture & execution for the purpose of Refurbishment/Renovation of area under NeGD. **All the bidder shall need to examine and take actual measurements of the proposed site. Accordingly they have to submit detailed design/layout along with Mechanical, Electrical & Plumbing (MEP) drawings as per the requirements & specifications mentioned as per “Annexure – I” at the time of submission of the tender which will be reviewed by the Technical Committee constituted by the NeGD.** As this work will be time bound project so the selected bidder will have to execute and furnish the Job within 5 MONTHS from the date of award of work. This work will be in the areas of civil / electrical / interior design /audio & video, access control work, Hvac Works, Fire Detection, and Modular Furniture works, etc.

The bidder shall provide/support as per the above requirements in the following spaces of NeGD:

- a. **Conference Hall – For 50 person**
- b. **Reception Area plus waiting Hall (Design/Decor)**
- c. **5 to 6 Closed Cabins**
- d. **70 – 80 Workstations**
- e. **Pantry**
- f. **Server Room**
- g. **Store Room**
- h. **Tea/Coffee Lounge**
- i. **Fire safety**
- j. **Refurbishing of existing Toilets**
- k. **Entry & Exit Design & Doors**

5. Eligibility Criteria:

- i. The Agency may be a sole proprietary concern/firm, partnership firm or a Company and should be registered with the concerned legal entity in India
- ii. Average Annual financial turnover during the last 3 years ending 31.03.2019, should be at least 75 lakh.
- iii. The Bidder company must have executed three Refurbishment/Renovation works, each having a value of Rs. 1 crore during last 7 years ending 31.03.2019.

Following Supporting documents needs to be submitted to validate the above criteria:

- a. Registration Certificate.
- b. Audited accounts i.e. Profit & Loss Account and Balance Sheet for last three years.
- c. Income Tax Returns for the last three years along with copy of PAN Card.
- d. Copy of GST Certificate
- e. COA registration Certificate of the Architect associated with the company

6. Applying Procedure

6.1 The bidder is expected to carefully examine all the instructions, guidelines, terms and condition and of the RFP/RFQ. Failure to furnish all the necessary information as required by the RFP or submission of a proposal not substantially responsive to all the requirements shall be at bidder's own risk and may be liable for rejection.

6.2 Proposals shall be submitted in two parts. Each part should be separately bound with no loose sheets. Each page of all parts should be page numbered and in conformance to the eligibility qualifications should be clearly indicated using an index page. The proposals should not contain any irrelevant or superfluous documents.

The two parts of the Proposal should be as per following:

6.2.1. Technical Proposal (Envelope 1) –

- i. The envelope containing Technical Proposal along with design presentation shall be sealed and super scribed "Technical Proposal – Selection of company for making plan/design/architecture/specifications/Execution for refurbishing/renovation of area under NeGD" at office of NeGD i.e **4th Floor, Electronics Niketan Bldg., 6 CGO Complex, Lodhi Road, ND – 110003.**
- ii. The soft copy of the technical proposal to be submitted to negdadmin@digitalindia.gov.in.

6.2.2 Financial Proposal (Envelope 2) –

The sum of total cost of all the activities will be considered as the financial proposal.

The envelope containing Financial Proposal shall be sealed and superscripted "Financial Proposal-Selection of company for making plan/design/architecture/specifications/Execution for refurbishing/renovation of selected area in the office of NeGD." The quoted price shall be inclusive all Taxes (as applicable) and Charges. Local Travel, if any, required for project purposes shall be borne by the bidder, Envelope 1 & 2 should be put together in a single envelope along with other relevant documents and sent to address before end date of submission of tender as per Critical Date Sheet above. No bids will be entertain after the Bid submission date/time.

7. Earnest Money Deposit (EMD) & Performance Bank Guarantee (PBG)

- 7.1. **Earnest Money Deposit** of Rs. **5,00,000/- (Rupees Five Lakh Only)** is to be deposited electronically through RTGS in the account of Digital India Corporation. Bidders are required to submit details of the EMD payment during the time of Bid Preparation.

BANK Details for payment through NEFT/RTGS:

Bank Name – Bank of India (BOI), CGO Complex-Branch, Delhi

Account Number – 604810110001865

IFSC Code – BKID0006048

- 7.2. EMD (Interest free) of all unsuccessful bidders would be refunded by NeGD within thirty working days. Successful bidder would be returned upon submission of Performance Bank Guarantee (PBG).
- 7.3. The bid/proposal submitted without EMD, mentioned above, will be summarily rejected.
- 7.4. All Bidders need to submit a **Non Refundable Tender Fees of Rs 5900/- (Five Thousand Nine Hundred Only)** including 18% GST in the form Demand Draft in favor of Digital India Corporation, payable at Delhi **OR** NEFT as per details above (para 7.1), New Delhi
- 7.5. The EMD may be forfeited:
- If a bidder withdraws its bid during the period of bid validity.
 - In case a successful bidder fails to sign the contract in accordance with this RFP.

8. Pre- Bid clarification/Queries

All queries may be sent via email to negdadmin@digitalindia.gov.in on or before 26th August 2019 1600hrs.

9. Conditions of Engagement

The contractual engagement with Bidder Company will not be considered for any further task related to this project.

10. Evaluation of Bids

- 10.1 Bids will be evaluated on Technical and Financial criteria.

10.2 A minimum score of 80 out of 100 is required for qualifying in the technical bid evaluation. Financial bids of only those bidders will be opened who attain a minimum score of 80 out of 100 in the technical evaluation as per Technical Bid Parameters.

Technical Bid Parameters:-

No	Parameters	Marks
1	Number of years providing similar service: More than 10 years – 15 points 06-10 years – 10 points 03-05 years – 05 points	15
2	Client profile – Number of Corporates, Government organizations/PSUs (list of clients to be enclosed with the technical bid) Above 10 – 25 points 06-10 clients – 15 points 03-05 clients – 05 points	25
3	Number of satisfied clients (certificate from client organization to be attached) 10 and above - 20 points 06 – 09 – 10 points 03 – 05 - 05 points	20
4	Turnover of the Company/Firm for 2018-19 (audited balance sheet or CA Certificate). More than – 5 Crore – 15 points Rs. 1 Crore to 5 Crore – 10 points Rs. 75 Lakh upto 99 Lakh - 05 points	15
5	(i) Presentation on Layout/Design (ii) Strength/ Manpower (iii) Process – Flow Chart (iv) Time Frame	25

Financial Bid Parameters:-

10.3 The contract will be awarded on L1 Basis as per the Financial Bid submitted by bidders qualified as per Technical bid (Scoring minimum 80 marks out of 100).

11. Performance Bank Guarantee

NeGD will require the selected bidder to provide a Performance Bank Guarantee, within 15 days from the date of award of work, for a value equivalent to 10% of the total price quoted and agreed by NeGD. The Performance Guarantee shall remain valid for a minimum period of at least 90 days beyond the date of completion of all the contractual obligations. The selected bidder shall be responsible for extending the validity date and claim period of the Performance Guarantee as and when it is due on account of non-completion of the project. In case the selected bidder fails to submit performances guarantee within the stipulate time, NeGD at its discretion may cancel the order placed on the selected bidder without giving any notice. NeGD shall invoke the performance guarantee in case the selected bidder fails to discharge their contractual obligations during the period or NeGD incurs any loss

due to Bidder's negligence in carrying out the project implementation as per the agreed terms & conditions.

12. Signing of Contract

Post submission of Performance Bank Guarantee by the successful bidder, NeGD shall enter into a contract, incorporating all clauses; pre-bid clarifications and the proposal of the bidder between NeGD and the successful bidder.

NeGD reserves the right to terminate the services of the successful bidder at any stage of the work for reasons of unsatisfactory performance or for any reasons not in control of NeGD. NeGD shall provide a notice of a minimum of 15 calendar days (in Writing) for such termination, clearly citing the reasons for the same. NeGD shall, however, make all payments related to the milestones (as per schedule of payments specified herein), provide such milestones have been met to the full satisfaction of NeGD.

13. Payment terms and Conditions

The work will be done in different phases like dismantling, partitioning, cabling/ electrical/ Air condition wiring/plumbing, Base preparation of partition, switch sockets, flooring, false ceiling, equipment installation/painting/polishing, glass fitting, furniture etc. as per scope of work. However, payments will be made on submission of running bills by the vendor after satisfactory report by an Inspection committee constituted with the approval of P&CEO, NeGD.

14. Blacklisting

The Bidder shall furnish an undertaking by furnishing an affidavit on a Rs. 10/- stamps paper duly attested by a Notary Public to the effect that the firm has not been blacklisted for any fraudulent activities by any Central Government/ State Government or any PSU or agency of Central Government/State Government of India, as on the date of bid submission as per the format provided in **"Annexure – II"**. If at any stage of bidding process or during the currency of the contract, any suppression/ falsification of such information is brought to the knowledge of NeGD, NeGD shall have the right to reject the bid or terminate the contract, as the case may be, without any compensation to the Bidder in along with an undertaking to the effect that the said firm would abide by the terms and conditions of NeGD contained in the present RFP.

15. Right to Terminate the Process

NeGD may terminate the RFP process at any time without assigning any reason. NeGD makes no commitments, express or implied, that this process will result in a business transaction with anyone. Further, NeGD reserves the right to: Accept or Reject any/ all RFPs submitted by the bidder/Cancel the process at any time without any liability and assigning the reasons thereof.

This RFP does not constitute an offer by NeGD.

16. Bidder shall submit its financial proposal as per the Table given below. The quoted price shall be inclusive of all Taxes and charges (as applicable),

Scope of work	Amount
As per RFP	Amount to be filled by Bidder
Taxes (As applicable)	Amount to be filled by Bidder
Other Charges (As applicable)	Amount to be filled by Bidder
Total Amount	Including Taxes and charges

Section -2

General Terms and Conditions for the Contract

Following are the general terms and conditions for the contract.

i. Applicability

These general conditions shall apply to the extent that they are not superseded by provisions in any other part of the contract.

ii. Standards of Performance

The selected bidder shall perform the services and carry out its obligations under the contract with due diligence, efficiency and economy, in accordance with generally accepted techniques and practices used in the industry and with professional service standards recognized by international professional bodies and shall observe sound management practices. The Selected Bidder shall always act, in respect of any matter relating to the contract, as faithful service provider to NeGD and shall, at all times, support and safeguard NeGD legitimate interests in any dealings with third parties.

iii. Contract Amendment

No variation in or modification of the terms of the contract shall be made except by written amendment signed by both parties to the contract

iv. Delay in selected Bidder's Performance

- a. The selected Bidder shall provide services in accordance with the time schedule specified in section 1 (para 4 "Scope of Work) of this RFP.
- b. Any unexcused delay by the bidder in the performance of its implementation /service / other obligations as per conditions of the contract shall render the selected Bidder liable to any or all of the following sanctions;
 - forfeiture of his performance security,
 - imposition of liquidated damages, and / or
 - Termination of the contract for default

- c. If at any time during performance of the contract, the selected bidder should encounter conditions impeding timely implementation of the services, performance of services, the selected bidder shall promptly notify NeGD in writing of the fact of the delay, the likely duration and its cause(s), before the scheduled delivery date. NeGD shall evaluate the situation after receipt of the notice and may at their discretion extend the time schedule for delivery.

v. Liquidated damages / Penalty

If the selected bidder fails to perform the services within the time schedule specified in section 1, para 4 of the RFP and the delay is due to the sole performance of the bidder, NeGD shall without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 1% of the contract value of the incomplete activities of the assignment for every one week (seven days) or part thereof of delay, up to maximum deduction of 10% of the contract price. Once the maximum is reached, NeGD may consider termination of the contract pursuant to the conditions defined in section on Termination (section 1, para 15).

vi. Force Majeure

a. Notwithstanding the provisions of Clause on Termination and Delay in selected bidder's Performance, the selected bidder shall not be liable for forfeiture of his performance security, liquidated damages or termination for default, if and to the extent that, his delay in performance or other failure to perform his obligations under the contract is caused due to circumstances beyond his reasonable control and is the result of an event of Force Majeure.

b. For purposes of this Clause, "Force Majeure" means an event beyond the control of the selected bidder and not involving the selected bidder and not involving the bidder's fault or negligence and not foreseeable. Such events may be inclusive, but are not limited to wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes. If a Force Majeure situation arises, the selected bidder shall as soon as possible notify NeGD in writing of such conditions and the cause thereof. Unless otherwise directed by NeGD, the selected bidder shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

vii. Governing Language

The Governing Language of the contract will be English.

viii. Applicable Law

The Contract shall be interpreted in accordance with the Indian Laws and will be subject to the exclusive jurisdiction of a competent court of jurisdiction within the city of Delhi.

ix. Firm Prices

The prices quoted for the providing the services shall be firm throughout the period of contract and shall not be subject to any change.

x. Deduction

Payments, as envisaged in price schedule, shall be subject to statutory deductions, for which the selected bidder is liable under the agreement against this RFP.

xi. Documents prepared by the selected bidder

All documents, specifications, reports and other documents prepared by the selected bidder in the execution of the Contract shall become and remain the property of NeGD and before termination or expiration of the contract the selected bidder shall deliver all such documents, prepared under the contract along with a detailed inventory thereof, to NeGD.

xii. Cancellation of the contract

NeGD reserves the right to terminate the resultant contract for convenience at any time during its term by giving the selected bidder 15 (fifteen) days" notice of the same. NeGD's only obligation towards the selected bidder in the event of termination for convenience shall be to pay the selected bidder for services performed prior to the effective date of termination to the satisfaction of NeGD.

xiii. Conflict of Interest

a. The bidder represents that it is not a party to any agreement which represents a conflict of interest with its role under this assignment or the terms of the resultant Agreement which materially and adversely affects the selected bidder's ability to perform the defined services for NeGD. Further, selected bidder agrees that it will not enter into any agreement or business relationship during the term of the resultant Agreement that could place him in a conflict of interest position.

b. Bidders have an obligation to disclose on assignment of the project, any situation of actual or potential conflict that impacts their capacity to serve the best interest of their employer, or that may reasonably be perceived as having this effect. If the bidder fails to disclose said situations and if NeGD comes to know about any such situation at any time, it may lead to the disqualification of the bidder during bidding process or the termination of its contract during execution of assignment.

xiv. Conciliation

In the event of any dispute between the selected bidder and NeGD, either Party may require such dispute to be referred to the President and CEO, NeGD for amicable settlement, and upon such reference, the said persons shall meet no later than 7 (seven) days from the date of reference to discuss and attempt to amicably resolve the Dispute. If such meeting does not take place within the 7 (seven) day period or the Dispute is not amicably settled within 15 (fifteen) days of the meeting or the Dispute is not resolved either Party may refer the Dispute to arbitration in accordance with the provisions of the clause "Arbitration".

xv. Arbitration

If the parties cannot resolve the Dispute within that period then any such dispute or difference whatsoever arising between the parties to this Contract out of or relating to the construction, meaning, scope, operation or effect of this Contract or the validity of the breach thereof shall be referred to a sole arbitrator to be appointed by mutual consent of both the parties herein. If the parties cannot agree on the appointment of the arbitrator within a period of one month from the notification by one party to the other of existence of such dispute, then the Arbitrator shall be appointed by the High Court of the jurisdiction in the city of Delhi. The provisions of the Arbitration and Conciliation Act, 1996 will be applicable and the award made there under shall be final and binding upon the parties hereto, subject to legal remedies available under the law. Such differences shall be deemed to be a submission to arbitration under the Indian Arbitration and Conciliation Act, 1996, or of any modifications, Rules or re-enactments thereof. The Arbitration proceedings will be held at the jurisdiction in the city of Delhi. Any legal dispute will come under the sole jurisdiction in the city of Delhi. The place of arbitration proceedings shall be Delhi.

End of RFP Document

National e-Governance Division

Digital India Corporation

Annexure - I

**SCHEDULE OF QUANTITIES FOR SUPPLY, ERECTION, TESTING AND COMMISSIONING
OF ELECTRICAL WORKS FOR RENOVATION OF OFFICE ELECTRONICS NIKETAN, 6
CGO COMPLEX LODHI ROAD**

SN	DESCRIPTION OF ITEM	UNIT	Estimated
	SUB-HEAD -IX : AUDIO VIDEO SYSTEM		
1	CONFERENCE ROOM		
a.	Projector: DLP projector, Brightness 3,000 Lumens, Resolution 1280 x 800 WXGA, Contrast 1,800:1, Input signals VGA, SVGA, XGA, WXGA, WXGA+, SXGA, WSXGA+, UXGA, MAC16" NTSC, NTSC4.43, PAL, PAL-M, -N, SECAM; 480i, 480p, 576i, 720p, 1080i, 1080p, Colour depth: 16.77 mil. Computer: 1 x 15-pin D-sub (VGA), Digital input: HDMI port, Video: S-Video terminal x 1 RCA pin terminal (composite) x 1, Audio: Input terminals: stereo mini jack x 1, RCA pin terminal (L/R) x 1, Output terminal: stereo mini jack x 1 Up to 20,000 hours without lamp replacement	No	1
b.	Ceiling Mount Kit for Above Projector	No	1
c.	Motorized Projection Screen: Aspect Ratio 16:9, Matt White, IR/RF remote module, Screen Size - 100" Diagonal	No	1
d.	Display Panel: Screen Size 75", Resolution 1920 X 1080(FHD), Pixel Pitch(mm) 0.21(H) x 0.63(V), Brightness(Typ.) 450 nit, Contrast Ratio 5000:1, Built-in Wi-Fi and mobile app compatibility, High-bandwidth Digital Content Protection (HDCP) daisy chain, Display Port 1.2 support, HDMIx2, DVI, VGA, RS232, USB, RJ45, BUILT-IN WiFi, Built-in-Speakers / Inbuilt Media Player 24x7 Operation	No	2
e.	Wall Mount Bracket for above system	No	2
f.	Desktop Connection Box: Flip Top, Flush Mount, 1 HDMI, 1 VGA, 1 Audio, 1 LAN, 1 USB, 1 Power Point (220-240V)	No	6
g.	Matrix Switcher: 6x2 multiport matrix switcher with HDMI and CAT ports, 4K@30Hz and 3D capabilities, 4x HDMI 1.4 input + 2x CAT input, 2x independent AV output, Up to 170m transmission distance over CAT, Balanced analog audio inputs and outputs, Event Manager, Two ports per output: mirrored HDMI + CAT, Zero frame delay, Fully HDCP compliant. Advanced EDID Management	No	1
h.	HDBaseT transmitter with built in Event Manager: Extends DVI, HDMI, VGA + Audio + Ethernet + RS-232 + IR + GPIO over a single CAT5e...CAT7e cable up to 170 m distance, 4K and UHD video, Embedded 7.1 HBR audio support, Auto select mode: video and audio priority modes	No	6
I.	HDBase T Receiver for single CAT cable: DVI and HDMI extension supporting 4K and 3D, Extends DVI or HDMI + Ethernet + RS-232 + IR over one CATx cable up to 170 m distance, HDCP compliant, CEC, EDID transparent	No	6

j.	Overhead Microphone: Super-cardioid electret condenser, Designed for demanding applications where extended frequency range, high SPL handling, fast transient response and small size are required, Nearly flat response from 40 Hz to 20 kHz and a supercardioid pattern, Equivalent noise level 24 dB(A)	No	6
k.	Digital Audio Processor- 8 balanced microphone / line input; use bare wire interface terminal, 8 balanced output; use bare wire interface terminal, 24 bit/48kHz A/D, D/A conversion, up to 96kHz sampling rate, 64bit processing core with up to two high-speed DSP processing chips, Built-in digital automatic mixing function (/S better than or equal to 8-channel input version)	No	1
l.	2-Way Wide-Dispersion Ceiling Speaker: Rated Input 30 W (High Impedance), Impedance 100 / 70 V line, 16 Ω , 8 Ω , Sound Pressure Level 90 dB (1 W, 1 m), Frequency Response 70 Hz - 20 kHz (-10 dB), 50 Hz - 20 kHz (-20 dB)	No	8
m.	Mixer Power Amplifier: Rated Output 240 W, Frequency Response 50 - 20,000 Hz (± 3 dB), Distortion Under 1% at 1 kHz, 1/3 rated power, Input MIC 1 - 3, AUX 1,2, Phantom Power DC +21 V (MIC 1)	No	1
n.	HD Video Conference System: Dual HD, 4-way 1080p30, 720p60, 720p30, PTZ 10x camera/phone OR PTZ 10x camera/dual micpod, H.239/SIP (BFCP) dual video and presentation, HD 1080P30/720P60 PTZ CAMERA, H.261, H.263, H.263+, H.264 and H.239 and BFCP compliant, Dual omni-directional microphones, 100 Hz up to 16 kHz, with 1 year Warranty	No	1
o.	Enterprise-class control system: 3-Series Control Engine, Onboard 512MB RAM & 4GB Flash memory, One RS-232/422/485 COM port with hardware and software handshaking, Two RS-232 COM ports with software handshaking only, Eight IR/serial, eight relay, and eight Versiport I/O ports. IPv6 ready	No	1
p.	Apple iPad with Docking Station with Wireless Access Point	No	1
q.	Relay System 8 Port	No	1
r.	Equipment Rack- 20U	No	1
s.	Standard HDMI (M) to HDMI (M) Cable 50'	No	4
t.	Standard HDMI (M) to HDMI (M) Cable 3'	No	14
u.	VGA+Audio 3'	No	8
v.	Speaker cable	Mtr	100
w.	Cat 6 STP Cable with Connector	Mtr	150
x.	Microphone cable	Mtr	150

**SCHEDULE OF QUANTITIES FOR SUPPLY, ERECTION, TESTING AND
COMMISSIONING OF ELECTRICAL WORKS FOR RENOVATION OF OFFICE
ELECTRONICS NIKETAN, 6 CGO COMPLEX LODHI ROAD**

S.NO	DESCRIPTION OF ITEM	UNIT	Estimated
SUB-HEAD - I : INTERNAL WIRING			
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.		
a)	Group -C	Point	51
	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.		
b)	Group -C	Point	78
2	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required		
a)	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Metre	2517
b)	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	520
c)	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Metre	1100
d)	4 x 6 sq.mm + 2 x 6 sq.mm. earth wire	Metre	10
e)	4 x 10 sq.mm + 2 x 10 sq.mm. earth wire	Metre	0
f)	4 x 16 sq.mm + 2 x 16 sq.mm. earth wire	Metre	10
3	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required. (For light plugs to be used in non residential buildings).	Each	142
4	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	Each	26
5	Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	1
6	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32amps 240 volts "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	Each	0

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SCHEDULE OF QUANTITIES FOR SUPPLY, ERECTION, TESTING AND COMMISSIONING OF ELECTRICAL WORKS FOR RENOVATION OF OFFICE ELECTRONICS NIKETAN, 6 CGO COMPLEX LODHI ROAD

S.NO	DESCRIPTION OF ITEM	UNIT	Estimated
7	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
a)	20mm dia PVC conduit	Metre	600
b)	25mm dia PVC conduit	Metre	400
c)	32mm dia PVC conduit	Metre	200
	TOTAL RS.		
	SUB-HEAD II - FANS & LIGHT FIXTURES:		
1	Supplying, fixing, connecting, testing and commissioning of 1x45 watt LED light fixture suitable for 600x600 ceiling with electronic ballast, with integral ballast, profiled diffuser, grey colored body, suitable mounts, suspension cables complete as required similar to philips cat no. RC365B LED33-5000 PSU OD GR/havells cat no. LHEDDOP7PL5W042	Each	90
2	Supply, installation, connecting, testing and commissioning of illuminated exit sign with 1 x 3 watt LED lamp including providing maintenance free batteries & charger capable of working for 2 hr duration mounted on ceiling/wall complete with the approved EXIT self adhesive labels as per site requirement as required.	Each	2
3	Supplying, fixing, connecting, testing and commissioning of Bulkhead type light fitting complete with, wire guard, holder, electronic ballast 1 x 6 W LED lamp including connections etc. as required.	Each	0
4	Supplying of surface/ recessed type LED down-lighter with high efficiency white reflector and high transmissive diffuser, fitting complete with, holder, electronic driver, heat sink and LED (less than 10% THD), low depth with die cast aluminium housing 1 x 15W LED with CRI >70, including with driver connections etc. as required.	Each	35
5	Supplying of surface/recessed type LED down-lighter with high efficiency white reflector and high transmissive diffuser, fitting complete with, holder, driver, heat sink and LED (less than 10% THD), low depth with die cast aluminium housing 1 x 10W LED with CRI >70, including with driver connections etc. as required.	Each	0
6	Supplying, erection, connecting, testing and commissioning of wall bracket fan 400 mm sweep with step speed regulator complete as required.		
a)	400 mm sweep	Each	20
7	Supplying, erection, connecting, testing and commissioning of following size heavy duty exhaust fan complete with gravity louver and connection with 3 core flexible wire as required.		
c)	200 mm dia fresh air fan	Each	3

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S.NO	DESCRIPTION OF ITEM	UNIT	Estimated
8	Supplying, fixing, connecting, testing and commissioning of 1200mm sweep ceiling fan 5-star rate as per BEE complete with blades, down rod, shackle insulator, canopy etc. including providing of electronic step regulator with face plate matching the existing modular switches as required.	Each	0
9	Supplying, fixing, connecting, testing and commissioning of mirror light luminaire with 1 x 14 watt complete with electronic ballast, lamp including connection etc. complete as required.	Each	4
10	Supply, installation, connecting, testing and commissioning of Occupancy sensor including all wiring in the existing conduits required.	Each	9
TOTAL RS.			
SUBHEAD- III: M.V. PANELS/ DISTRIBUTION BOARD			
1	Supplying and fixing following way prewired vertical type TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's, terminal connectors for all incoming and outgoing circuits, duly prewired with adequate size of FR PVC insulated copper conductor upto the terminal connector/ neutral link, earthing etc as required (But without MCB/ RCCB/ Isolator). (Note : Prewired vertical type MCB TPDB is normally used where 3 phase outlets are required.)		
a)	4 way Double door	Nos.	0
b)	8 way Double door	Nos.	3
c)	12 way Double door	Nos.	1
2	Supplying and fixing following rating, four pole, 415 volts, Isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
a)	63 amps	Nos.	4
3	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
a)	Single pole	Nos.	108

**SCHEDULE OF QUANTITIES FOR SUPPLY, ERECTION, TESTING AND
COMMISSIONING OF ELECTRICAL WORKS FOR RENOVATION OF OFFICE
ELECTRONICS NIKETAN, 6 CGO COMPLEX LODHI ROAD**

S.NO	DESCRIPTION OF ITEM	UNIT	Estimated
4	<p>Supplying, installation, testing and commissioning of cubical type MV Panel as per IEC:61439-I made out of 14 SWG sheet steel, totally enclosed IP-54 protection, free standing, floor mounted dust and vermin proof, indoor type compartmentalized powder coated of approved shade after antirust treatment (with min seven tanks) suitable with busbar interconnection with suitable size of copper lead/solid Aluminium strips, control circuits & bottom base channel of MS section not less than 100mmx50mmx5mm (thick), Fabrication shall be done in transportable section ,entire panel shall have a common earth busbar at rear with 2 nos earth stud cable alleys, cable gland plates in two half as required as per single line diagram & specification enclosed with the following switchgears.(Floor Panel)</p> <p>INCOMER:- 1 Nos.250 Amps. TPN MCCB (35 KA) with electronic releases. 1 Set phase indication lights (R, Y, B) 1 No. Volt Meter (digital type) with inbuilt VSS & control fuses. 1 No. 0-250 Amp. Ammeter (digital type) with inbuilt ASS</p> <p>BUS BARS:- 300 Amps. TP&N aluminium bus bars (35 KA)</p> <p>OUT GOINGS:- 6 Nos. 63A FPN, MCB</p>	Set	1
5	<p>Supplying, installation, testing and commissioning of cubical type MV Panel as per IEC:61439-I made out of 14 SWG sheet steel, totally enclosed IP-54 protection, free standing, floor mounted dust and vermin proof, indoor type compartmentalized powder coated of approved shade after antirust treatment (with min seven tanks) suitable with busbar interconnection with suitable size of copper lead/solid Aluminium strips, control circuits & bottom base channel of MS section not less than 100mmx50mmx5mm (thick), Fabrication shall be done in transportable section ,entire panel shall have a common earth busbar at rear with 2 nos earth stud cable alleys, cable gland plates in two half as required as per single line diagram & specification enclosed with the following switchgears. (Main UPS Panel)</p> <p>INCOMER:- 1 Nos.63Amps. FP MCCB (25 KA) with electronic releases. 1 Set phase indication lights (R, Y, B) 1 No. Volt Meter (digital type) with inbuilt VSS & control fuses. 1 No. 0-63 Amp. Ammeter (digital type) with inbuilt ASS</p> <p>BUS BARS:- 100 Amps. TP&N aluminium bus bars (35 KA)</p> <p>OUT GOINGS:- 6 Nos. 63A FP, MCB</p>	Set	1
6	<p>Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.</p>	Each	6
	TOTAL RS.		
	SUB-HEAD -IV : L.T. CABLES		

**SCHEDULE OF QUANTITIES FOR SUPPLY, ERECTION, TESTING AND
COMMISSIONING OF ELECTRICAL WORKS FOR RENOVATION OF OFFICE
ELECTRONICS NIKETAN, 6 CGO COMPLEX LODHI ROAD**

S.NO	DESCRIPTION OF ITEM	UNIT	Estimated
1	Supply, laying and testing of under noted sizes of Aluminium conductor XLPE insulated PVC sheathed & sleeved armoured and overall PVC sleeved 1.1 KV grade power distribution cables conforming to relevant IS code and as per specification in ground (including trenches) through pipe or on wall / racks cable trays including dressing and clamping the cable with MS zinc passivated clamps etc. as required.		
a)	3.5 x 95 sq.mm	Metre	10
b)	3.5 x 50 sq.mm	Metre	10
c)	4 x 25 sq.mm	Metre	50
d)	4 x 16 sq.mm	Metre	120
2	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.		
a)	3.5 x 95 sq.mm	Each	2
b)	3.5 x 50 sq.mm	Each	2
c)	4 x 25 sq.mm	Each	6
d)	4 x 16 sq.mm	Each	6
3	Supply, laying and testing of under noted sizes of Copper conductor XLPE insulated PVC sheathed & sleeved armoured and overall PVC sleeved 1.1 KV grade power distribution cables conforming to relevant IS code and as per specification in ground (including trenches) through pipe or on wall / racks cable trays including dressing and clamping the cable with MS zinc passivated clamps etc. as required.		
a)	4 x 25 sq.mm	Metre	30
b)	4 x 16 sq.mm	Metre	10
c)	4 x 10 sq.mm	Metre	10
d)	4 x 2.5 sq.mm	Metre	20
4	Supply and making end termination with brass double compression gland including providing and crimping of copper solderless lugs / ferrules for XLPE armoured power copper conductor cable 1.1 KV grade of following sizes:-		
a)	4 x 25 sq.mm	Set	2
b)	4 x 16 sq.mm	Set	2
c)	4 x 10 sq.mm	Set	2
d)	4 x 2.5 sq.mm	Set	4
5	Supply and fixing of cable tray/steel work in position including clamps, frame work of flats, angle iron, channel with fabrication work including cutting, bending, welding, drilling bolting etc. as per design as required. One coat of primer and 2 coats of enamel paint of approved shade shall be provided.	Kg.	100
6	Supplying and installing following size of perforated pre-painted M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.		
a)	150 mm width X 50 mm depth X 1.6 mm thickness	Metre	40

**SCHEDULE OF QUANTITIES FOR SUPPLY, ERECTION, TESTING AND
COMMISSIONING OF ELECTRICAL WORKS FOR RENOVATION OF OFFICE
ELECTRONICS NIKETAN, 6 CGO COMPLEX LODHI ROAD**

S.NO	DESCRIPTION OF ITEM	UNIT	Estimated
a)	300 mm width X 50 mm depth X 1.6 mm thickness	Metre	40
	TOTAL RS.		
	SUB-HEAD -V : EARTHING		
1	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	1
2	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	1
3	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm)	Metre	10
4	Supplying and laying 25 mm X 5 mm G.I. strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	Metre	5
5	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required.	Metre	10
6	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	Metre	5
7	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	Metre	150
8	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	Metre	50
9	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Metre	10
	TOTAL RS.		
	SUB HEAD-VI : T.V. & TELEPHONE SYSTEM & CONDUITING FOR LAN SYSTEM		

**SCHEDULE OF QUANTITIES FOR SUPPLY, ERECTION, TESTING AND
COMMISSIONING OF ELECTRICAL WORKS FOR RENOVATION OF OFFICE
ELECTRONICS NIKETAN, 6 CGO COMPLEX LODHI ROAD**

S.NO	DESCRIPTION OF ITEM	UNIT	Estimated
1	Supplying and drawing following pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.		
a)	4 Pair (8 core)	Metre	10
b)	2 Pair (4 core)	Metre	1775
2	Providing, laying connecting and testing of multi-core telephone armoured cable of conductor size 0.6 mm dia annealed copper conductor PVC insulated PVC sheathed jelly filled (as per DOT specification) cable as required		
a)	100 Pair telephone cable	Metre	0
b)	50 Pair telephone cable	Metre	100
c)	20 Pair telephone cable	Metre	0
d)	10 Pair telephone cable	Metre	10
e)	5 Pair telephone cable	Metre	50
3	Providing, fixing connecting and testing of under noted size of solderless telephone tag block Krone make in surface/recess in wall required size of M.S. box with hinged lockable cover duly stove enamel painted.		
a)	200 pair tag block	Each	0
b)	50 pair tag block	Each	2
c)	20 pair tag block	Each	0
d)	5 pair tag block	Each	1
4	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		
a)	20mm dia conduit pipe	Metre	400
b)	25mm dia conduit pipe	Metre	100
c)	32mm dia conduit pipe	Metre	10
5	Providing, laying and fixing 80 dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep) and re-filling etc as required	Metre	10
6	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.		
a)	Supplying and fixing M.S. box with modular type telephone (RJ-11) outlet complete as required.	Each	71
7	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required.		
a	Supply and fixing of 75mm x 75mm x 60mm deep metal box on surface or in recess for RJ-45 outlets	Each	71
TOTAL RS.			

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COMMISSIONING OF ELECTRICAL WORKS FOR RENOVATION OF OFFICE
ELECTRONICS NIKETAN, 6 CGO COMPLEX LODHI ROAD**

S.NO	DESCRIPTION OF ITEM	UNIT	Estimated
SUB-HEAD -VII : FIRE DETECTION SYSTEM			
1	Supply, installation, testing and commissioning of UL listed integral microprocessor (not micro-controller) intelligent multi cooperative type addressable photoelectric or multi cooperative type optical smoke detectors based with moisture free & rust free in base complete as per specifications as required.	Each	19
2	Supply, installation, testing and commissioning of UL listed integral microprocessor (not micro-controller) intelligent addressable type heat detector (combined rate of rise and fixed temperature) consists of two independent thermistors, designed to automatically compensate changes in ambient temperature with moisture free & rust free terminals in base complete as per specifications as required.	Each	0
3	Supply, installation, testing and commissioning of UL listed integral microprocessor (not micro-controller) intelligent addressable ductable photoelectric or optical smoke detectors based with moisture free & rust free in base enclosed in air sample box complete as per specifications as required.	Each	2
4	Supply, installation, testing and commissioning of addressable type manual call point, 1 stage with in-built LED, lighting up automatically to confirm its actuation complete as per specification as required.	Each	3
5	Supply, installation, testing and commissioning of UL listed wall mounted hooter with strobe (100 dba) complete as per specification as required.	Each	3
6	Supply, installation, testing and commissioning of addressable input/output/control module for shutting down AHU's, lift pressurization fans and ventilation fans etc. including power supply for driving the control module as per requirement.	Each	0
7	Supply, installation, testing and commissioning of UL listed surface type mounted directly on ceiling/ recessed 1/4-1/2 tap changer directional sounders with line matching transformer complete as per specification as required.	Each	19
8	Supplying, fixing, testing and commissioning of UL listed telephone talk back units (fire fighter telephone hand set) compatible to MFACP complete as required.	Each	0
9	Supplying, wiring, testing and commissioning of point wiring for speakers with 2 core 1.5 Sq.mm cu. shielded copper conductor wire including loop wiring from MFACP in M.S conduit with conduit accessories complete as required.	Each	285

**SCHEDULE OF QUANTITIES FOR SUPPLY, ERECTION, TESTING AND
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S.NO	DESCRIPTION OF ITEM	UNIT	Estimated
10	Supplying, laying, testing and commissioning of 2x1.5 sq.mm. of mineral insulated copper conductor fire survival with outer sheathed seamless welded copper cable approved by LPCB and as per IEC60331, BS-5839-1, BS-6387 and BS-7346 standards along with accessories/ termination glands as per BS/EN60702 part-2 and all necessary materials to complete. The cable shall sustain 950 deg C. For 3 hours.	RM	330
a)	Wiring for smoke/ heat detectors		
b)	Wiring for Input/Output modules.		
c)	Wiring for manual call point.		
11	Supplying, laying, testing and commissioning of point wiring for hooters with strobe circuits with 2 pair 1.5 sq.mm copper conductor flexible wire (1 pair shielded and 1 pair unshielded) including loop wiring from MFCP in M.S. conduit with conduit accessories complete as required.	RM	150
	TOTAL RS.		
	SUB HEAD-VIII: UPS SYSTEM		
1	Supply, installation, testing & commissioning of micro processor /DSP controlled 30 KVA UPS in Parallel with IGBT based rectifier to achieve THDI < 2% for linear load and < 3% for non linear load, with 15 mins backup, battery racks, circuit breaker, input power factor of greater than 0.99 at 100% loading, output power factor .8 and efficiency should be 92% minimum with True Online Double Conversion (VFI as per IEC 62040-3) UPS using PWM IGBT technology on charger and inverter section, with galvanic isolation transformer connected at output end, Three Phase input and Three phase output UPS system with networking Network Management Ethernet Card along-with software for SNMP / Web-based monitoring of UPS, Remote UPS Control, IBMS compatible, logging & reporting of UPS data and all interconnection cabling and as per specifications as required.	Set	1
	TOTAL RS.		
	SUB HEAD- IX: CCTV SYSTEM		
1	Supply, installation, connecting, testing and commissioning of the following components for IP- CCTV system complete as required.		
	1/2.7" CMOS IP Dome Camera , Picture Elements 1080p (1920 x 1080 pixels), Resolution 1080p / 720p / VGA, 30 FPS (All Resolutions) ,True Day/Night with Removable IR Cut Filter, IR Illuminator (25 Meter Max Effective Range) 850nm, Minimum Illumination 0.0001 (0.0 With IR Illumination), Dynamic Range 69dB, Compression(H.264, MJPEG), Bandwidth Configurable , Max Streams -4, Gain Control AGC, White Balance Auto / Manual / ATW , Backlight Compensation On/Off, 3-9mm Vari focal.		
a.		Nos	12

SCHEDULE OF QUANTITIES FOR SUPPLY, ERECTION, TESTING AND COMMISSIONING OF ELECTRICAL WORKS FOR RENOVATION OF OFFICE ELECTRONICS NIKETAN, 6 CGO COMPLEX LODHI ROAD

S.NO	DESCRIPTION OF ITEM	UNIT	Estimated
	Monitoring software video surveillance all channels real-time live monitoring simultaneously in single PC, Support for various video format : H.264, MPEG-4, MJPEG , Support for various video resolution: megapixel (1M, 2M, 3M), Full HD, 4CIF, Half D1, VGA, CIF, Powerful E-map based monitoring, Remote PTZ control and power area zoom, Support for various search and playback options : date and time based search : event (alarm, motion, intelligent video) based search: normal playback, backward playback, fast/slow playback, step playback , Notification in case of event occurring : highlighting in the border of video window : display event log message in real time, Back up capability : manual back up: AVI, REC1, SEC format, Multi-level user access and authority management , Support for multi-language user interface, Automatic search of network cameras for quick and easy configuration, Easy device management (configuration, firmware upgrade), Inputs to ibms system complete as required.		
b.		Nos	1
c.	24 port network switch with PoE cisco make	Nos	1
	Supply Installation, Testing & Commissioning of Suitable storage for above cameras with storage capacity of 10 TB (to be provided) and provision (without storage) for 30 days recording space for storage rack of all cameras in 25 fps, 720 dpi resolution, 24x7 working in full capacity recording with 20% spare capacity, scalable upto 90 days. The vendor shall furnish detailed calculation for the same.		
d.		Nos	1
e.	Wall mounted 6U closed racks with power supply complete as required for the network racks	Nos	1
f.	Supply , laying, terminating, testing of cat-6 cable in FRLS existing PVC conduits	RM	600
	Supply Installation, Testing & Commissioning of Intel i7 4th Generation processor 3Ghz, 4GB RAM with 2TB hard disk, DVD-RW/keyboard/optical mouse/LAN card/19" LED monitor, Minimum 6 USB ports. With pre-loaded licensed Windows 7 Professional software, software license for remote monitoring of CCTV system as per specifications.		
g.		Nos	1
	Supply, installation, testing and commissioning of color high resolution LED monitor of comprising of 1 nos. 32 inch display complete with all supports, accessories.		
h.		set	1
i.	RJ-45 outlets near the cameras	Nos	12
j.	Media Converter SM/SFP Module	Nos	1
k.	LIU to Media converter connectivity.	Nos	1
l.	8 port loaded fiber LIU box with pigtails and couplers	Nos	1
	TOTAL RS.		
	SUB-HEAD -X :ACCESS CONTROL		
1	Supply, installation, connecting ,testing and commissioning of the following components for access control system complete as required.		
a	proximity card reader	Nos	3
b	Proximity card reader with keypad	Nos	3
c	EM lock for single leaf door	Nos	3
d	Emergency door release – break glass type	Nos	3
e	power supply unit	Nos	1
f	card reader interface	Nos	1
g	network controller suitable for 16 door/ Reader interface	Nos	1

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NO	DESCRIPTION OF ITEM	UNIT	Estimated
h	Proximity cards printed as per clients requirement corporate 1000 35 bit	Nos	200
i.	Access card photo ID printer, camera	set	1
j.	Client server base Enterprise level Application for Access Control, Guard Tour management, GUI, Antipass back, Reports in Inbox, Unlimited User log-ins, Door Scheduling, Unlimited logins, Event Notification, POP ups, Evacuation Control & Mgt. (Muster point module), Public Area Control, Critical Area Control, Shift Roasters & Mgt., Air Locking, suitable to integrate with existing client database system, ibms system, with necessary licenses complete as required.	Nos	1
k	Supply Installation, Testing & Commissioning of Intel i7 4th Generation processor 3Ghz, 4GB RAM with 2TB hard disk, DVD-RW/keyboard/optical mouse/LAN card/19" LED monitor, Minimum 6 USB ports. With pre-loaded licensed Windows 7 Professional software as per specifications.	Nos	1
TOTAL RS.			

Sr.No.	MR/DSR-2016 Code	Description	Estimated	Unit
1	MR	VRV units :		
		Supply, installation, testing and commissioning of fully factory assembled Variable Refrigerant Volume / Flow type multi unit air conditioning and heating system complete with indoor and outdoor units with individual controller for cooling & heating type operations.		
		The compressor shall be high efficiency scroll or rotary type which shall be capable of inverter control i.e changes its speed in accordance to the variation in cooling / heating loads.		
		The quoted price to include all taxes, lifting, shifting, positioning at site of all the equipment and fittings, remote controls, topping up of refrigerant R-410A or R-407C, MS Frame work for outdoor units, installation, vibration isolators, wheather proof electrical panel with all such items required to fulfill the intent and purpose as laid down in specifications and drawings as required to make the whole system as required.		
		(Approved makes: Daikin/LG/Samsung/Mitsubishi/Bluestar)		
1.1		Outdoor Units		
i)	MR	48 HP	1	No
1.2		Indoor units		
i)	MR	Round Flow Cassette Type Units (1165 cfm/5.0HP)	3	Nos.
ii)	MR	Round Flow Cassette Type Units (742 cfm/3.2HP)	10	Nos.
iii)	MR	Round Flow Cassette Type Units (671 cfm/2.5HP)	3	Nos.
		(Approved makes: Daikin/LG/Samsung/Mitsubishi/Bluestar)		
2	MR	Supply, installation, testing and commissioning of corded remote controls as per drawing and specifications.	16	Nos.
		(Approved makes: Daikin/LG/Samsung/Mitsubishi/Bluestar)		
3	MR	Supply, installation, testing and commissioning of centralised remote controllers as per drawing and specifications.	1	Set
		(Approved makes: Daikin/LG/Samsung/Mitsubishi/Bluestar)		
4		Supply, installation, testing and commissioning of copper refrigerant piping for the above indoor and outdoor units.		
		copper piping shall be properly supported and it shall include the cost of all the fitting, insulation, UV coating and all required fittings, joints etc. as per drawings of the following sizes (the insulation shall be 13/19mm thick closed cell nitrile rubber tubular insulation and all internal and external pipes shall run on proper cable trays)		
i)	MR	41.9mm OD (insulation 19 mm thickness)	50	Rmt
ii)	MR	34.9mm OD (insulation 19 mm thickness)	25	Rmt
iii)	MR	28.6mm OD (insulation 19 mm thickness)	25	Rmt
iv)	MR	22.2mm OD (insulation 13 mm thickness)	50	Rmt
v)	MR	19.1mm OD (insulation 13 mm thickness)	50	Rmt
vi)	MR	15.9mm OD (insulation 13 mm thickness)	50	Rmt
vii)	MR	12.7mm OD (insulation 13 mm thickness)	50	Rmt
viii)	MR	9.5mm OD (insulation 13 mm thickness)	125	Rmt
		(Approved makes: Rajco/Mandeo/Shreechayam)		
5	MR	Supply, installation, testing and commissioning of 2core X 1.5 mm ² copper wire in PVC conduit as per specifications (for transmission).	350	Rmt
6	MR	Supply, installation, testing and commissioning of 2core X 1.5 mm ² copper wire in PVC conduit as per specifications (for remotes).	200	Rmt
7	MR	Supply, installation, testing and commissioning of double earthing GSS between panel & equipment	1	Lot

Sr.No.	MR/DSR- 2016 Code	Description	Estimated	Unit
8		H.R.V Unit : Supply, installation, testing and commissioning of Heat exchanger units (HRV) in double skin construction, constructed out of extruded Aluminium section frame with puf insulated panels, blowers, plate to plate type Aluminium heat exchanger and filters. The unit will have two separate passages one for supply of fresh air and the other for exhaust of cool air from the rooms after the recovery of energy. Efficiency of these heat exchangers shall be 60-65%. The plate to plate heat exchanger shall be rigid thermally bonded seamless Aluminium channels separated by extruded aluminium spacers of the following capacity. The unit shall be complete as per drawings and specifications.		
a)	MR	1200 CFM (Approved Makes: VTS/Systemair/Zeco/Vikram Hitech)	1	No
9		Control Panel for HRV Units : Supply, installation, testing and commissioning of the following cubicle type openable front, sheet steel wall mounted control panels sleeve type Al. bus bar including anchoring into the wall. These panels shall be complete in all respects as per the drawings and the specifications. The panel shall include the following accessories : i) Suitable MPCB ii) Terminal block for power distribution. iii) Single Phase Preventor and push buttons. iv) Phase indicating lights and indicating lights for ON/TRIP status, auxiliary contacts v) Ammeter and suitable size CF and Voltmeter vi) All starters shall have suitable potential free contacts The number of HRV Units Panel shall be as detailed below :		
a)	MR	16 amps TP. MCB with 2 nos 1.0 HP DOL Starters (Approved Makes: EAPL/Triolite/Advance)	1	Set
10	MR	Propeller Type Fan Supply, installation, testing and commissioning of Propeller type free discharge exhaust fans complete with motor, fan, exhaust Louvers as per drawings and specifications.		
b)	MR	250 mm dia	5	Nos
11	DSR	Rectangular ductwork Supply, installation, balancing and commissioning of factory fabricated GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter, dampers, vanes, hangers, supports etc as per approved drawings and specifications of following sheet thickness complete as required.		
a)	16.12.1.1	24 Gauge (thickness 0.63mm sheet)	100	Sqm
12	MR	Volume Flow Limiters: Supply, installation, testing and commissioning of VFLs (Volume flow limiters) complete with its body, dampers, regulator, setting arrangement for regulating the fresh air into rooms in round shape as per drawings and specifications.		
a)		4" dia	16	Nos
13	DSR	Fresh Air Intake/Louvers/VCDs : Supply, installation, testing and commissioning of MS powder coated grilles with dampers, louvers for Fresh air intake.		
	MR		1	Sqm
14	MR	Supply, installation, testing and commissioning of flexible duct connections constructed of fire resistance flexible double canvas sleeve as per the drawings and specifications.		
			1	Sqm

Sr.No.	MR/DSR- 2016 Code	Description	Estimated	Unit
15.	MR	Supply, installation, testing and commissioning of MS powder coated Exhaust Louvers without dampers but with wire mesh jali for exhaust.	1	Sqm
16	MR	Supply, installation, testing and commissioning of CPVC pipe with 6 mm nitrile rubber insulation specifications of below sizes		
a)	MR	40 mm dia	25	Rmt
b)	MR	32 mm dia	25	Rmt
c)	MR	25 mm dia	90	Rmt
17	MR	Supply, installation, testing and commissioning of		
i)		alised floor/wall mounted type made of 2 mm thick steel sheet duly painted complete as per the specifications and drawing and as detailed below :		
		1 no. 150 Amps TPN MCCB incomer with kWh meter, phase indicating lamps with control fuse & toggle switch, voltmeter and selector switch, ammeter with CTs and selector switch		
		1 set 150 Amps triple pole with neutral AI. Bus Bars duly sleeved		
		1 nos. of 125 Amps MCCB outgoing for VRV/OD units with star delta starter	1	No.
18	MR	Supply, installation, testing and commissioning of		
		PVC insulated sheathed 1.1 KV grade armoured underground sizes of Al/Cu conductor XLPE insulated PVC sheathed & sleeved armoured and overall PVC sleeved 1.1 KV grade power distribution cables conforming to relevant IS codes and as per specifications in ground/trenches through pipe or on wall/racks cable trays including dressing and		
a)	MR	3 C X 25 mm2 Aluminium Cable	150	Rmt
c)	MR	3 C X 6 mm2 Copper Cable	50	Rmt
		(Approved Make: KEL/Skytone/Polycab/Havells)		
19	MR	Earthing :		
		Supply, installation, testing and commissioning of following double earthing continuity conductor of Cu from Panels to respective equipment on surface or recess as per drawings and specifications.		
a)	MR	25 mm X 5 mm strip	75	Rmt
b)	MR	8 SWG wire	100	Rmt
GRAND TOTAL DSR+MR				

**LIST OF APPROVED MAKES
FOR CIVIL/INTERIOR FITOUT, AC & FURNITURE WORKS**

Material	Make
1 Laminates	: Merino, Green Lam, Century, Euro, Formica
2 Adhesives	: Fevicol , JeevanJor , Vamicol , 3M
3 Door Closers	: Ozone / Safex / Hardwyn
4 Slide Rails	: Ozone / Safex / Hardwyn
5 Door Locks & Hardware	: Doorset / Indo / B& R / Harison / Hardwyn
6 Central Locks (Cupboards)	: Godrej, Ozone, Dorset
7 Block Board	: Green, Duro, Century
8 Commercial Ply	: Century, Green, Duro
9 Paints/ Primer	: ICI DULUX / Asian Paints, Berger, Nerolac
10 Glass	: Saint-Gobain, MODI Guard, AIS, Asahi
11 MDF	: Green Panelmax / Nuwood / Action Tesa/
12 Mirror	: Modi Float, AIS, Saint Gobain, Asahi
13 Veneer	: Flamingo/Century/ Archidply / Garnet / Bhutantuff
14 Synthetic Enamel Paint	: ICI DULUX / Asian Paints, Berger, Nerolac
15 Doors & Windows Fixture	: Haffle / Ozone / Hettich
16 Door Floor Spring	: Haffle / Ozone / Hettich
17 Acrylic Solid Surfaces merino	: Corian Du Pont, Samsung Starron, LGNeonexx,

18	Gypsum Plaster Boards and Framework	: India Gypsum, La Farge, BORAL
19	Cement	: L&T, ACC, JK Cement, Birla Cement Ultratech
20	Steel	: SAIL, TISCO, RASHTIYA ISPAT (RINL)
21	Vitrified Tiles	: Kajaria / Somany / Nitco / Orient
22	Ceramic Tiles	: Kajaria / Somany / Nitco / Orient
23	Wall Tiles Dado	: Kajaria / Somany / Nitco / Orient
24	Tile Grout	: Laticrete, Bal Endura, Unitile
25	Silicon Sealants	: WACKER, GE, DOW CORNING
26	Plaster Of Paris (POP)	: JK, Sakarni, Birla
27	Flush Door	: Century / Sreen / Asiandoor
28	Fire Doors	: Promat, Shakti Met, Sukri
29	Air Conditioning Units	: Daikin, Hitachi, Toshiba, Voltas, Blue Star
30	Modular Furniture	: BP Ergo (HNI) / Coasta Wood / Herman Miller
31	Chairs	: BP Ergo (HNI) / Coasta Wood / Geiken
32	Mineral fiber ceiling	: Armstrong / Dexune / EarCon / R.K
33	Acoustical ceiling	: Armstrong / Dexune / EarCon / R.K
34	Mineral wool / Rockwool	: UP Twiga / Lloyd Insulation
35	Frosted Film	: 3M / Lamex
36	Printed Film	: 3M / Lamex
37	Carpet	: MR Décor / Unitex
38	Laminate Flooring	: Armstrong / Sachet / Greenlam

LIST OF APPROVED MAKES OF EQUIPMENT**For Electrical Works**

S.NO	DESCRIPTION	MAKE
1.	415V Switchgear Boards / Panels	Precision System Control, Adlec,
2.	MCB Distribution Boards	Schneider electric/ L&T /Legrand /ABB/ Siemens India
3.	Moulded case Circuit Breaker	Schneider electric/ L&T /Legrand /ABB
4.	Miniature Circuit Breaker	Schneider electric/ Legrand /L&T /ABB/ Siemens India
5.	Change over switches	HPL/ Socomec / L&T / equivalent
6.	Voltage Transformer	AE/Kappa/Matrix/ Pragati.
7.	Current Transformer	AE/Kappa/ Matrix/ Pragati.
8.	E.L.C.B./ R.C.C.B.	Schneider electric/ Legrand/L&T/ABB
9.	Timers	Siemens/L&T/ Havells
10.	Push Buttons	Siemens/L&T/ Havells
11.	Indicating lamps	Siemens/L&T/ Havells
12.	Fuses and fuse bases	Siemens/L&T/ Havells
13.	KWH Meters	AE/ Conzerve/ Rishabh/ Trinity
14.	Selector switches and rotary switches	L&T/ Kaycee/ Philips/ equivalent
15.	Indicating Instruments	AE/ Conzerve/ Rishabh/ Trinity
16.	PVC insulated FRLS copper wires	Finolex/ Havells/ Skytone/ Polycab/ KEI/L&T/ Rallison
17.	PVC rigid conduits	Atul / BEC/AKG
18.	M.S Conduits (ISI Mark)	Atul /BEC/AKG

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19.	Modular Switches, Sockets, Plugs etc.	Legrand /Havells/ L&T/ Anchor Roma/ MK Elements
20.	Industrial sockets in sheet steel enclosure With MCB	Schneider electric/ Legrand / L&T/ ABB
21.	Light Fitting	Philips / Legero/ Regent/
22.	Ceiling fans/Exhaust Fans	CGL/Havells/ Bajaj/ Usha
23.	LT Cables	Skytone / KEI / Polycab/ Finolex/ Havells
24.	Fire Alarm System	System sensor / Notifier/ Agni/AnG/Honeywell/ Tyco/ Revive
25.	Speaker	Philips / Ahuja / Bosch
26.	Data Cable	Amps / Systimax/ D Link/ Legrand- LCS2/ Pannet
27.	UPS	Tata Liberty/ Emerson/APC
28.	Digital Voltage Stabilizers	V-Guard/ Servo/Microtek

LIST OF APPROVED MAKES OF EQUIPMENT

For Fire Fighting Works

S. No	Details of Materials / Equipments	Manufacturer's Name
1	G.I./M.S	: Jindal Hissar/Tata/
2	pipes. Forged	: equivalent VS / KS/
3	Fittings.	: equivalent
4	Valves	: Zoloto/Kartar/Advance
5	Paints	: ICI DULUX / Asian Paints, Berger,
6	Pressure Gauge	: Nerolac H Guru/Fiebig/ Equivalent.
7	Fire Fighting Equipments	: Minimax/Newage/Ceasefire
8	Sprinklers	: Tyco/Grinnel/Best/HD
9	Welding	: Advani/Victor/ Equivalent
	Rods GI	Chilly/GMGR/ equivalent
	Hangers	

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**LIST OF APPROVED MAKES OF
EQUIPMENT**

For Plumbing Works

S. No.	Details of Materials / Equipments	Manufacturer's Name
1	Vitreous China Sanitaryware	: Hindware/Parryware/ Cera
2	C.P. Brass fittings	: Jaquar/Kohler/Hindware
3	G.I. pipes.	: Jindal Hissar/Tata/ equivalent
4	G.I. pipes fittings.	: K.S. / Unik / Zoloto
5	Valves	: Zoloto / Leader / Kartar
6	Paints	: ICI DULUX / Asian Paints, Berger, Nerolac
7	Urinal Sensor	: Hindware/Parryware/ Cera
8	Geyser	: Venus/Racold/Bajaj
9	Sink	: Neelkanth/Jayna/Parryware
10	Gratings,Cleanouts,Funnels	: Jayna/GMGR/Neer

LIST OF APPROVED MAKES FOR HVA works

S.No.	Equipment/ Materials		Manufacturer's Name
1.	DX type split air conditioner (Cooling Only)		Carrier Daikin Toshiba Bluestar Voltas
2.	Inline / Propeller Fan		Ostberg Kruger Systemair Airflow
3.	Axial Flow Fan(AMCA Certified)		Systemair Kruger Airflow Greenhack Flaktwoods
4.	VAV Box With Controller and Capacitive touch screen thermostat		Johnson Control Ruskin Titus Cynor TraeTrox
5.	Factory Made Duct		Wave Rolastar Zeco
6.	Pipe / duct supports		Gripple Easyflex Hilti
7.	Grille / Diffuser / Dampers		Pineaire Cynor

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			Systemair Ruskin Titus Mapro Trox
8.	Insulated Flexible duct		Pineaire Conair Ruskin Titus Mapro
9.	Anchor Fastener		Gripple Hilti Easyflex
10.	Insulation		
11.	Microban Closed Cell Elastomeric nitrile rubber (with factory laminated 7 mill black woven fiberglass cloth as required)		Armacell(Armaflex) K-Flex Aerolam
12.	Acoustic insulation Nitrile Rubber with antimicrobial property		Armacell (Arma Sound) K-Flex Aerolam

S.No.	Equipment/ Materials	Manufacturer's Name
13	Starter Panel for fans	ABB L&T Honeywell Siemens
14	Fire Sealant	Paramount Polytreat Foster Bostik
15	Fire Wrap/Board/Paint	Paramount Polytreat 3M Foster Bostik
16	Copper Pipe & fittings	Rajco Mandev Tubes Mehta Tubes
17	uPVC Drain Pipe	Astral Supreme AKG
18	Miscellaneous	

i.	Vibration Isolator		Dunlop Easyflex Resistoflex
ii.	Flexible Pipe Connection		Pineair Easyflex Ruskin Titus
iii.	Flexible duct connector		Pineair Easyflex Ruskin Titus

Annexure – II

DECLARATION (To be given on a stamp paper of Rs. 10/-)

I, Mr. / Ms. / Dr. _____ Son / Daughter /Wife
of Shri _____Proprietor / Partner / Director, a
authorized signatory of the Company / Firm / Agency, namely M/s
_____ is competent to sign this declaration
and execute this tender document;

2. I have carefully read and understood all the terms and conditions of the tender and undertake to abide by them;

3. The information / documents furnished along with the above application are true and authentic to the best of my knowledge and belief. I / we, am / are well aware of the fact that furnishing of any false information / fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law;

4. I do hereby undertake that the Company / Agency / Firm shall comply with all statutory provisions relating to Goods & Service tax and any other taxes / Acts / Rules relevant to the matter and in case any liability arises on CERC on this account, the Company / Agency / Firm shall bear the same;

5. It is also certified that the Company / Firm / Agency namely M/s_____ having its registered office

at_____ has not been black-listed by any Government organization or Public Sector Undertaking (PSU).

Name & Signature of Authorized Signatory

Mobile No:_____

E-Mail ID:_____

Seal of the Company