



**Institute for Development and Research in
Banking Technology**
(Established by Reserve Bank of India)

Request for Proposal (RFP)

For

Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad

**Institute for Development and Research in Banking Technology
IDRBT, Castle Hills,
Road No.1, Masab Tank, Hyderabad – 500057, TS.**

November 2019

NOTE: This document contains 80 pages

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Disclaimer

This Request for Proposal (RFP) is not an offer by the IDRBT, but an invitation to receive response from eligible interested bidders for **Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad**. No contractual obligation whatsoever shall arise from the RFP process unless and until a formal contract is signed and executed by IDRBT with the selected bidder. This document should be read in its entirety.

Any product name / function used in this document are meant to be generic and do not refer to the product of any particular company. In case such proprietary terms have been inadvertently mentioned then such terms should be taken to refer to the generic technology. The Bidders with industry standard equivalent product name / function /feature under any other name will also be eligible to submit response to RFP.

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1. Statement of Purpose

IDRBT invites competitive sealed technical and commercial proposal from eligible, reputed, qualified organizations with sound technical and financial capabilities for **Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad** and having previous experience in designing and successfully handling, similar type of projects for Banks/FI/ Insurance companies/Government/PSUs/Autonomous Institutions in India.

IDRBT proposes to revamp the existing Data Center into Facility Area and Data Centre area so as to accommodate servers, network and security equipment considering the growth requirement for next 7 years with the latest State-of-Art technologies. This revamping should comply with latest Data Centre standards to provide High Availability of the hosted services at IDRBT, resilient to outages, safety and security.

The respondents shall appropriately estimate and design Total Solution meeting the requirements mentioned in this document, which shall guide the System Integrators in proposing an optimal system. The RFP also includes buy back of existing infrastructure that will be replaced, which includes dismantling and shifting from the site. This invitation to bid is open to all bidders meeting the minimum eligibility criteria as mentioned in this RFP document. Warranty period will be for three years from the date of acceptance and thereafter IDRBT at its discretion will enter into AMC for a period of 4 years based on assessment of technological obsolescence/advancement and services provided.

2. Introduction

Institute for Development & Research in Banking Technology (IDRBT) is an autonomous body established by Reserve Bank of India. The primary goal of the Institute is, as follows:

1. Development & Research in Banking Technology
2. The systemic requirements of the banking system
3. Offer training in banking technologies for Indian Banking sector
4. Act as a Certifying Authority (CA) for Bankers

3. *Objective of the project*

IDRBT has comprehensively employed technology over the years to efficiently discharge its duties in day to day functioning. IT applications are centrally hosted and the main objective of this RFP is for Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad for providing high uptime of the IT services on 24x7 basis to Member banks over INFINET & INTERNET network and IDRBT staff.

4. *Earnest Money Deposit (EMD)/ Bid Security*

- a. Bidders shall submit, along with their Proposals, an EMD of Rs. 1,90,000/- (Rupees One lakh ninety thousand only), in the form of irrevocable Bank Guarantee (BG) in the format specified in **Annexure – XII** issued by a scheduled commercial bank in favour of The Director, IDRBT, Castle Hills, Road No 1, Masab Tank, Hyderabad – 57, shall be acceptable to IDRBT.
- b. The EMD/BG amount is interest free, should be valid for a period of one year from the last date of submission of bid and will be refundable to the unsuccessful Bidders without any accrued interest on it.
- c. EMD of unsuccessful Bidders shall be returned within 30 days from the final result of the bidding process and declaration of the Successful Bidder and EMD of the successful bidder will be returned on submission the contract.
- d. Proposals not accompanied with the EMD/BG or containing EMD/BG with infirmity(ies) (relating to the amount or validity period etc.), mentioned above, are liable to be rejected.
- e. The EMD may be forfeited in the event of:
 - i. A bidder withdrawing its bid during the period of bid validity
 - ii. A successful bidder fails to sign the subsequent contract and provide performance Bank Guarantee in accordance with this RFP
 - iii. The bidder being found to have indulged in any suppression of facts, furnishing of

- fraudulent statement, misconduct, or other dishonest or other ethically improper activity, in relation to this RFP
- iv. A Proposal contains deviations (except when provided in conformity with the RFP) conditional offers and partial offers.

 - f. The physical copy of Bank Guarantee must be submitted before the technical bid opening.

5. Bid Submission

Bidders should submit their responses as per the procedure specified in the RFP would include all the related documents mentioned in a sealed cover, such as:

- a. Earnest Money Deposit
- b. Eligibility Criteria response
- c. Technical Proposal in a separate sealed cover
- d. Commercial proposal in a separate sealed cover
- e. Additional certifications/documents E.g. Power of Attorney, certificates on turn over etc.

The Technical and Commercial bids shall be submitted in a separate sealed envelopes clearly super scribing on the envelope “Technical Bid for **Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad** as per Tender No IDRBT/SYS/GR/562/2019-2020 dated 4th November 2019” & “Commercial Bid for **Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad** as per Tender No IDRBT/SYS/GR/562/2019-2020 dated 4th November 2019” on or before 3:30 PM of 29th November 2019.

6. Bidders Eligibility Criteria

Bidders must meet the following eligibility criteria. Bids of non-compliant bidders will not be technically or financially evaluated.

- a) A Bidder submitting the proposal in response to this RFP shall hereinafter be referred to as “Bidder / System Integrator/ Vendor” interchangeably.

- b) The Bidder shall provide evidence that it is a current legal entity.

- c) The company must have local office in Hyderabad for ensuring timely support, Local GST registration / Relevant documents are to be submitted. Last year GST returns should be submitted.
- d) The Bidder/System Integrator should be an authorized representative /partner of respective OEM products and should have back-to-back arrangement with OEM for Warranty and AMC, Certificate for the same to be provided along with Technical bid. A Letter of warranty and support from respective Original Equipment Manufacturer's (OEM) shall also be submitted in addition to a letter from respective Manufacturer's Authorization Form for the contract period.
- e) The bidders who have built data centre(s) for only their own use are not eligible. However, bidders who have built data centre for commercial use are eligible.
- f) The Bidder should have experience in **Revamp, Supply, Implementation and Maintenance of Data Centre Facility** for the organizations like National Banks / FI / Insurance Companies / PSUs / Government / Autonomous institutions as under:
- i. One project of value not less than Rs. 75,00,000/-
- OR**
- ii. Two projects of value not less than Rs. 60,00,000/-
- OR**
- iii. Three work orders of value not less than Rs. 40,00,000/-
- Relevant documents of Purchase Orders & Work Completion Certificates are to be submitted.
- g) The Bidder must warrant and provide details of technical strength, skill set, manpower details, organization structure and shall have atleast one Accredited Tier Designer certified professional(s) with minimum three years experience and OEM certified engineers or equivalent certification on supplied Bill of Material, to be employed in this project and have been sufficiently involved in similar service.

- h) The bidder should be profit-making company for last 3 years with minimum cumulative turnover of Rs. 10 Crores or above in the last three years.
- i) The last three (2016-17, 2017-18 & 2018-19) financial years' audited Balance Sheet and Profit and Loss reports should be provided duly signed by concerned authorities.
- j) The Bidder shall provide references (including Referee names and contact details) in respect of major projects of similar type completed in the last three (3) years.
- k) The Bidder must warrant that they are not blacklisted by any entity and or there is no legal action being taken against it for any cause in any legal jurisdiction. If such an action exists and the Bidder considers that it does not affect its ability to deliver the RFP requirements, it shall provide details of the action(s) of the previous orders for similar works for the past three years. (Self-Declaration to be submitted).
- l) The bidder shall furnish the relevant documents fulfilling the eligibility criteria along with the bid, otherwise the bid is liable for rejection. Therefore, the bidder is advised to study all terms and conditions of the tender including technical and commercial specifications for submitting complete and comprehensive tender. Failure to comply with any of the terms and conditions or instructions of the offer with insufficient particulars which are likely to render fair comparison of tender as a whole impossible may lead to rejection even if otherwise it is a competitive offer/ tender.
- m) Details regarding the fulfillment of the eligible criteria should be submitted as per **Annexure – I**.

7. Terms & Conditions

- a) All bids and supporting documentation shall be submitted in English.
- b) The **Revamp, Operationalize and Maintenance of Data Centre Facility at IDRBT, Hyderabad** should be completed within 4 (Four) Months from the date of purchase order.

- c) The Scope of Work shall be with a single bidder, it is selected bidder's complete responsibility to Execute and Maintain the project during contracted period.
- d) All costs and charges, related to the bid, shall be expressed in Indian Rupees only and the total cost is inclusive of installation charges and customization charges. IDRBT will not take into consideration, for any variation in the \$ price.
- e) The cost of bidding and submission of the bids is entirely the responsibility of the Bidders, regardless of the conduct or outcome of the tendering process.
- f) IDRBT reserves the right to reject all or any of the quotations without assigning any reason thereof.
- g) The bidder should work in close association with other vendors/service providers/System Integrators working for IDRBT during project execution.
- h) All offers of the bidders shall be unconditional and once accepted whether with or without modifications by IDRBT shall be binding between IDRBT and such Bidder. However, this is a binding document between IDRBT and respondents till the completion of selection process and notification of award and till a contract is signed between IDRBT and the Bidder in the process in case both parties initiate and expedite certain actions pending the execution of a contract.
- i) This RFP document is structured in such a way that the Bidders fully understand and acquaint themselves with the requirements of IDRBT and respond to RFP.
- j) The Bidder is required to carefully examine the specifications and documents and fully inform himself as to all the conditions of matters, which may in any way affect the works or the cost thereof. If any Bidder finds discrepancies or the omissions in the specifications and documents or is in doubt as to the true meaning of any part, he shall at once request in writing for an interpretation/clarification, to the IDRBT. Such clarifications shall be submitted before due date preferably before pre-bid meeting. The clarifications found necessary will be furnished in the form of corrigendum/ Addendum to all the Bidders, which will form part of the Bid documents.

- k) Verbal clarifications and information given by the IDRBT or his employee(s) or his representative (s) shall not in any way be binding on IDRBT.
- l) A written statement by the Bidder stating that he will fully meet the requirements of the specifications will take precedence over standard literature accompanying the Bid.
- m) If the Bidder submits literature specifically prepared for the Bid and such literature contains any statements or data inconsistent with the requirements of the Bid documents, those statements and data will be construed as intended, and may lead to disqualification of the Bid. Bidders are warned to strike out and initial any conflicting conditions, qualifications or delivery terms.
- n) The decision of IDRBT shall be final and IDRBT reserves the right to accept or reject the total proposal or part thereof based on its own evaluation of the offers received, or on the basis of stability, capabilities, track records, reputation among users and other similar credentials of a vendor. When IDRBT makes any such rejection, IDRBT is not be bound to give any reason and / or justification in this regard to the vendor.
- o) Consortium / Joint Ventures are not permitted with the RFP.
- p) The bidders are required to adhere to tendering norms and no undue explanation, request for change in due date of bid submission, etc. will be offered by the Institute. Any request of any kind from the bidder before the bid submission due date must be forwarded to the undersigned in writing. The Institute reserves the right to accept or reject the bidder request without offering any explanation or reason for the acceptance or rejection. However, in case of any change/amendment in the tender content, all vendors participating in the tendering process would be informed in writing and sufficient time would be provided to adhere to such change/amendment.
- q) The successful bidder has to submit the Non-disclosure agreement (NDA) signed by the Bidder's Authorized Signatory. Relevant documentary evidence authorizing the authorized signatory to sign must be submitted.

8. *Signing of contract*

IDRBT will issue Purchase order (PO) to the bidder qualified as winner or L1 upon evaluation of bids. Upon the receipt of the purchase order, the Bidder shall be required to enter into a contract with the IDRBT within 15 days from the date of issue of purchase order or within such extended period mutually agreed by both parties.

9. *Bidding Process*

A two stage bidding procedure will be followed. The response to the present tender should be submitted in two parts i.e. the Technical Bid and the Commercial Bid.

a. **The Technical Bid:** The Technical Specifications for Revamp, Operation/maintenance and Maintenance is enclosed as **Annexures II A to VII A**. The bidders are required to use Technical Bid Formats as Annexures II A to VII A for submitting Technical Bid highlighting the features of proposed Bill of Material, compliance with documentary evidence.

- The OEM should have their service centre in Hyderabad and should have manufacturing unit in India. Documents should be provided.
- The OEMs should also provide certificate that all Equipment's offered are not declared End of Life and End of Support for a minimum of 7 years from the date of acceptance.
- The bidders shall submit the documents including but not limited to the following as part of the technical bid:
 - i. Detailed DC layout with cross section view
 - ii. Cable Tray Layouts
 - iii. AC Layout including piping.
 - iv. Lighting and Switch socket layout.
 - v. Fire Detection layout
 - vi. CCTV Layout covering entire DC area and other supporting areas.
 - vii. Drawing indicating locations of sensors and configuration diagrams for Access Control System and Rodent Repellent System
 - viii. Facility area Layout
 - ix. Datasheet/Technical Brochures of all the Equipment proposed in Data Center

- x. Detailed BOQ for all components and subsystems. Each subsystem BOQ shall contain detailed break-up of the components and quantities without prices.
 - xi. Support Methodology
 - xii. Escalation Matrix
 - xiii. The bidder shall provide a comprehensive list of periodic maintenance tasks for all subsystems/equipment
- b. **The Commercial Bid:** The bidders are required to submit a Commercial bid as per the Summary Commercial Bid format enclosed as **Annexure VIII**, also submit the detailed Bill of Quantities as per **Annexures II B to VII B**.
- c. In the first stage, only the '**Technical Bids**' of those who fulfill the **Eligibility Criteria** will be opened and evaluated. Those bidders satisfying the technical requirements of **Annexure – II A to VII A** as determined by the IDRBT and as per the requirements/specifications and the terms and conditions of this document, shall be short-listed.
- d. In Second Stage, '**Commercial bids**' of the technically qualified vendors will be opened. The commercial bids will be evaluated based on L1 criteria. The bidder who quote the lowest price shall be considered as L1. Total cost of ownership on which L1 will be decided is equal to the initial cost plus periodic cost including AMC discounted at 8 %.
- e. The Bidder must organize the bid in accordance with the format specified in the tender document. The Bid is liable to be rejected if any commercial details are found along with the technical bid.
- f. A detailed set of annexures is provided to the Bidder for formulation of responses covering sections such as documents, technical bid form, declarations to be submitted and technical specifications etc. The list of such annexures is provided in the table below:

Sno	Formats	Description
1	Annexure - I	Bidder Eligibility Criteria
2	Annexure – II	Technical Specification for Civil Work
3	Annexure – III	Technical Specification for Electrical Work
4	Annexure – IV	Technical Specification for Smart Row/Cabinet/Micro DC System

Sno	Formats	Description
5	Annexure – V	Technical Specification for Cooling System
6	Annexure – VI	Technical Specification for Data Cable
7	Annexure – VII	Technical Specification for IBMS Package
8	Annexure – VIII	Summary of Commercial Bid Format
9	Annexure – IX	Commercial Bid Format for II to VII respectively
10	Annexure – X	Manufacturer Authorization Form (MAF)
11	Annexure – XI	Performance Bank Guarantee
12	Annexure – XII	Bank Guarantee Pro-forma
13	Annexure - XIII	Technical Deviation Statement
14	Annexure – XIV	Proposed Interior Layout
15	Annexure – XV	Approved Makes of Components
16	Annexure – XVI	Non-Disclosure Agreement Format

10. Technical and Solution Requirement Specifications

The bidder is required to propose the Bill of Material meeting the features/functional requirements of IDRBT as per the Bill of Quantities with Technical Specifications as indicated in Annexure **II to VII** in this tender.

11. Scope of Work

The scope of Work shall be with a single bidder. It is selected bidder's complete responsibility to execute and maintain the project during contracted period, not limited to the following:

- a. The proposed layout and floor plan with measurement is enclosed as **Annexure XV**
- b. The bidder should revamp the Data Centre with the following facilities

Table – I

Sr.No	Facility Area	Sr.No	Data Centre Area
1	Conference Room.	1	Telecom Room for MUX Termination (INTERNET and INFINET)
2	Face-to-Face Verification and interaction room for CA.	2	Network Room (Switches, Routers and Firewall)
3	Visitors Lounge/waiting room.	3	Separate Electrical, UPS & Battery Room with proper partition.
4	CA helpdesk Room	4	IDRBT LAN Server Room

Sr.No	Facility Area	Sr.No	Data Centre Area
5	IT helpdesk Room	5	CA Server Room
6	Storage and Staging Room for Systems department	6	Server Room for RBI
7	Store room for CA		

- c. **Total Solution:** Total Solution shall cover supply, delivery, unloading, handling, assembly, erection on site of complete infrastructure. Furnishing detailed documentation on design calculations, drawing, data, test reports, circuit diagrams, operations manuals, service manuals, instruction manual, installation, testing and configuring of the systems with specified quantities, descriptive literature as required and shall include sufficient detailed performance information to enable evaluating the item as to soundness, reliability, serviceability, and efficiency. If drawings, data and/or literature are submitted that would require modifications to meet the specifications, these modifications should be clearly indicated. The proposed Bill of Material should be supplied and complete in all respects as part of the Total Solution.
- d. The selected bidder shall complete and obtain IDRBT approval of Project Execution Plan of the Data Center in line with the requirements and specifications mentioned in this RFP.
- e. **Location and Environment:** The Data Center subsystems shall be designed for the following ambient conditions as per the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE):
- Temperature (Max): 45° C
 - Temperature (Min): 7.3° C
 - Relative Humidity: 0 to 95%
 - Seismic: Zone II
- f. **Partitions :** The Data Center Facility should be implemented as Per **Table I**, the Data Center Corridor is divided into two major parts the first part will be used for Facility Centre Area and next part for Data Centre Area with biometric/access card. The main entrance door should be at entrance, an emergency exit door which can be opened from inside only.
- g. **Safety Measures:** Safety Instructions, signboards, directions for facilities with self-illuminating stickers etc. No Electrical/Data Cables should be Loose terminated / Free landing or visible

outside. Instructions on Handling, storage, precautions and checklist at various stages till the User Acceptance Test is completed and during Project Maintenance period.

- h. **Project Timelines:** The Project shall be completed in all respects as per the below timelines from the date of issue of Purchase order.

	Scope of Work	Initiation process	Period of Completion
1.	Submission of Data Center drawings, data sheets, detailed Project Execution Plan and delivery schedule of materials to the site.	IDRBT will issue a PO to the successful bidder. Date of PO will be taken as zero date.	1 week from the date of issue of Purchase order.
2.	Supply, Installation, Configuring and Testing of specified equipment, material, facilities and services for establishment of Datacenter	IDRBT's approval of the data center design drawings, data sheets and delivery schedule of materials (Within 1 Week)	3 Months from the date of award of PO
3.	Comprehensive onsite Warranty and Service Support for 4 years after warranty.	Acceptance Certificate issued by IDRBT	7 years from the date of issue of Acceptance Certificate

- i. **Project Execution Plan :** The bidder should submit a time plan/ CPM/ PERT chart indicating time to be taken in different activities and total time in completion of the project.
- j. **Downtime:** The Project Plan should clearly mention the minimum downtime required for shifting /moving/erecting during implementation can be taken up in a phased manner in live environment. Any critical work having even remotest possibility of impacting Data Centre work has to be taken up in a phased manner.
- k. **Warranty and AMC Services :** To provide Three years Comprehensive warranty period from the UAT/acceptance of the solution, post warranty Maintenance/AMC services for a period of 4 years of the supplied BoQ.

- I. **Buyback:** Dismantling Data Center (except washrooms) and disposing of demolished debris. The equipment should be purchased under buyback from IDRBT with no downtime, a details list buyback items to be prepared in coordination with IDRBT for approval.
- m. **Bill of Material:** Revamping of Data Center shall be undertaken as per Bill of Quotation proposed by the selected bidder, the Bill of Quotation proposed shall be brand new and complete with all components necessary for its effective and trouble-free operation. Such components shall deemed to be within the scope of Bidder's supply irrespective of whether those are specifically mentioned in the specification, his bid and/or the commercial order or not.
- n. Handing over of the Data center after successful completion of project & issue of Provisional Acceptance Certificate by IDRBT and Handing over process shall include all above documentation and completion of training.
- o. **Civil Works:** The scope of civil works shall include but not limited to construction of Civil and Interiors works comprising of fire rated partitions, false ceiling, flooring and associated works for Internal & external walls / Partitions, Wall finishing and Painting, False Flooring, fixing of Fire Rated Metal Doors, fixing of Glass Doors, Furniture for Work stations in Facility Area and Data Centre Area as per approved layout and site requirements. Necessary civil works for installing Electrical, Earthing, HVAC (Heating, Ventilation and Air Conditioning), cable trenching, storage and other associated systems in accordance with the regulatory/statutory requirements, as per technical specification **Annexure – II**. The civil work should be undertaken across EFC 2nd Floor as per Table I, except washroom area.
- p. **Electrical Work:** The Scope includes, Supply, Installation, Testing and Commissioning of Lighting and work station cabling for all the Data Center Area and Facility Area. Db to be considered for Distribution of UPS Power to the lights & Work Station Area, also input cabling from 60 kVA DG Set located at Ground floor to Lighting DB located at second Floor, as per technical specification **Annexure – III**
- q. **Smart Row/Cabinet/Micro DC System/:** To implement Smart Rack infrastructure for Servers. Smart row/ In row system for Servers, Installation with all accessories like Copper piping and cables as per BOQ, as per technical specification **Annexure – IV**

- r. **Cooling System:** The cooling systems should be implemented across EFC 2nd Floor as per **Table I** and complete requirements as per technical specification **Annexure – V**.
- s. **Industrial Split AC :** Supply, Installation, Testing and Commissioning of Comfort Air Conditioning System comprising of ceiling suspended Cassette / Split units / Industrial Split AC, Outdoor units, Base stands, support channels, refrigerant piping, gas, drain piping, electrical cabling, control cabling, civil works and insulations, installed with Copper piping wherever required. The temperature should be maintained between 21 to 23 degree Celsius with humidity at 50 with +/- 10.
- t. **Split / Comfort Air-Condition:** Comfort air-conditioning systems shall maintain room temperature of 24°C with the outside ambient temperature of 45° C. All outdoor units shall be placed in coordination with IDRBT Estate team.
- u. **I/O and Network Cabling:** Supply, Installation, Testing and Commissioning of Passive Networking Solution comprising of Copper with I/Os, Patch Panels, Patch Cables, Faceplates, Cable trays, labelling & conduits, Rack mount Automatic Transfer Switch (ATS) based on, and complete requirements as per technical specification **Annexure – VI**.
- v. **IBMS Package:** Supply, Installation, Testing and Commissioning Safety and Security System comprising controllers, detectors, cables, conduits complete along with all accessories for Fire Detection and Alarm System, Access Control System, CCTV Surveillance System, Rodent Repellant System, Alert Generation System, certifications from NFPA, TIA942, Local standards/regulatory codes, IBMS room having seating space for two people, as per technical specification **Annexure – VII**.
- w. The **bidder should** fix all the technical problems, provide and implement upgrades, updates free of cost to IDRBT, as and when released by the OEM during warranty and AMC period.
- x. The **bidder** shall address statutory requirements, network and security audit **recommendations** suggested by IDRBT from time to time on regular basis without additional cost to IDRBT.

- y. The **bidder** to provide all necessary hardware and software required to make this solution work strictly as per following technical specifications. The specifications given are minimum. Bidder can quote equivalent or higher technical specifications to the IDRBT's requirements. However, no weightage would be given for higher configurations.
- z. The **successful** bidder will be required to provide AMC services for a period of 4 years after expiry of 3 years warranty period from the UAT/acceptance of the solution. The bidder at his own cost, including the cost of transport, shall replace defective hardware.
- aa. The **proposed** In Row solution should be compatible for mounting/shift/migrate existing servers at no additional cost to IDRBT, based on the inputs from IDRBT.
- bb. IDRBT shall promptly notify the successful bidder in writing of any claims arising under this warranty. Upon receipt of such notice, the bidder shall with all reasonable speed, repair or replace the defective products or part thereof without cost to the IDRBT.
- cc. System maintenance, Support and Preventive maintenance:
 - i. The bidder shall provide free maintenance services during the period of warranty. After warranty period, the successful bidder will do maintenance of the entire system, during the contract period by deputing qualified maintenance engineer under the AMC contract.
 - ii. The successful bidder shall ensure that faults and failures intimated by IDRBT as above are set right within 24 hours of being informed of the same.

12. Warranty and AMC of supplied solution

- a) Warranty of the Total Solution supplied by bidder will start from the date of Acceptance of Total Solution.
- b) The selected Bidder shall give warranty for a three (3) years from the date of acceptance of the systems by IDRBT. During the warranty period, the Bidder will have to undertake comprehensive maintenance of the Total Solution including hardware and software part of the solution.

- c) During the warranty period the vendor should maintain the systems and shall be responsible for all costs relating to maintenance.
- d) During the Warranty Period, the selected vendor will have to provide at no additional cost to the IDRBT all software updates, releases, version upgrades, new Versions etc. within 30 days of their availability.
- e) After expiry of the warranty period of three years, IDRBT shall have discretion to enter into comprehensive all-inclusive Annual Maintenance Contract (AMC) either in full or in part for maintenance of Total Solution for next four years.
- f) The selected Bidder shall provide preventive maintenance during the contract period as per OEM defined schedule.
- g) All necessary consumables for Total solution has to be provided during the contract period.
- h) Besides the above, the vendor will have to conform to the terms and conditions mentioned in the tender.

13. *Training*

A Comprehensive training shall be the key to successful Operations and Maintenance; hence, the successful bidder is required to provide training (for three days) to IDRBT nominated Officials at IDRBT, Hyderabad The training documents, including Operating Manuals, Category Wise Standard Operating Procedures (SOP) for the proposed solution shall be prepared and shared by the successful bidder with IDRBT. The successful Bidder is free to propose the training plan. However, at a minimum, the plan shall include the following:

Sr No	Training Description
1	Overview of the components Installed
2	Technical Architecture
3	Operating procedure Hardware and Software
4	Technical and Operational Manual of the solution
5	Handling worst case scenarios

The above plan is only indicative; the final training plan shall be finalized between the successful bidder and IDRBT.

No separate charges will be paid for training.

14. User Acceptance Test

The implementation shall be deemed as completed in all respects only after

- a. as per the intent of this RFP;
- b. Enabling all the functionalities mentioned therein, i.e., go-live; and
- c. All the related trainings are completed and post training assessment carried out by IDRBT
- d. The successful bidder is expected to state the implementation plan and methodology and IDRBT's team and the successful bidder shall jointly decide the roll out methodology.
- e. IDRBT, prior to the initiation of the Operationalization phase, shall undertake a detailed UAT process.
- f. The User acceptance test will be carried out as per mutually agreed Acceptance Test Plan (ATP) against the systems requirements.
- g. The system will be considered accepted (supplied, installed and operationalized) only after ATP is completed as per the agreed plan and is duly signed/certified by the IDRBT and the successful bidder.

15. Period of Validity

All the prices and other terms and conditions of the offer proposed by the bidder should be **Valid** for a **minimum** period of **Six months**.

16. Correction of Errors

Arithmetic errors in bids will be treated as follows:

Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.

Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate will govern unless, in the opinion of IDRBT, there is obviously a gross error such as misplacement of a decimal point, in which case the line item total will govern.

Where there is a discrepancy between the amount mentioned in the bid and the line item total present in the Bill of Material, the amount obtained on totaling the line items in the Bill of Materials will govern.

The amount stated in the tender form, adjusted in accordance with the above procedure, shall be considered as binding, unless it causes the overall tender price to rise, in which case the bid price shall govern.

17. Confidentiality

Bidder agrees that all mails, data, financial, mail architecture and personnel data relating to IDRBT's business and other information identified as confidential by the IDRBT, the same shall be kept confidential and shall not be shared with any third party without prior written approval from IDRBT

18. Right to Verification

The IDRBT reserves the right to verify any or all statements made by the bidder in the tender document and to inspect the bidder's facility, if necessary, to establish to its satisfaction about the bidder's capacity to perform the job.

19. Insurance

Insurance for all the equipment/hardware components supplied under the contract shall be arranged by the Bidder at his own risk and cost throughout the period of delivery, implementation and final acceptance process.

IDRBT will not be responsible for any loss/damage/theft of any systems/goods due to any reasons whatsoever, claims etc., if the Bidder himself will deal any. Evidence of the insurance policy shall be submitted to IDRBT.

20. Delivery & Installation Period

The following time schedule for completion of the activities from the date of placement of orders should be strictly adhered to. Delay in delivery and installation may invite penalties for the vendors.

a)	Delivery	≤ 8 weeks
b)	Installation and Operationalization	≤ 8 Weeks

21. Service Level Agreement

- a. The bidder and OEM engaged through the bidder are responsible for delivering **99.95%** of the time on a 365 x 24 x7 basis, data centre infrastructure uptime individually, viz., Smart Rack systems, cooling systems and other supplied devices.
- b. SLA reporting will be done on a monthly basis. Any penalty adjustment for SLA will be adjusted against the retained amount of 10% of order value.

c. Penalty for downtime:

Any equipment viz (Electrical, UPS, Smart Rack, Cooling etc.) that is reported to be down should be either fully repaired or replaced by temporary substitute (of equivalent configuration). In case vendor fails to meet the above standards of maintenance, there will be a penalty chargeable as per Service Level Agreement, which clearly define the levels of service, which shall be expected from the selected bidders during the implementation and its subsequent support for the project period.

- d. Equipment/Services Downtime is the time in hours that the equipment/services is not available and excludes planned downtime, which are approved by IDRBT. The downtime shall be calculated, as may be applicable. In case, downtime of any equipment/services is not available it shall be calculated from the helpdesk or available any other alternative means.

- e. Downtime will be calculated in Hours and Minutes. For penalty calculation, minutes will

be rounded off to the next hour.

f. Total time is equal to total number of hours in the given month.

g. Calculation of Penalty:

i. Smart Rack/Cabinet/Micro DC:

Any sub-system failure has to be repaired within 2hrs of reporting. Time taken to repair beyond 2hrs will be counted as down time.

Rs.10,000 (Rupees Ten thousand only) per hour of downtime of any subsystem of the rack solution.

ii. Industrial AC Systems:

Any failure has to be repaired within 6hrs of reporting. Time taken to repair beyond 6hrs will be counted as down time.

Rs. 5000 (Rupees Five thousand only) per hour for each unit of Industrial ACs

iii. Other ACs/Access Control/CCTV etc.:

Any sub-system failure has to be repaired within 24hrs of reporting. Time taken to repair beyond 24hrs will be counted as down time.

Rs.1000 (Rupees One thousand only) per day for each device.

h. Planned downtime means any time when the equipment's/ services is unavailable because of maintenance, installation/reinstallation or other services with the prior approval of IDRBT.

i. Schedule of preventive maintenance will be prepared with mutual consent and a proper record of planned downtimes on account of preventive maintenance will be maintained.

Penalty for the downtimes beyond the planned Preventive Maintenance time window will be calculated as per above 1 & 2.

- j. **Root Cause Analysis (RCA):** Bidder has to submit the first RCA within 12 hours of incident and final RCA in 48 hours of incident. RCA has to be accepted and signed off by IDRBT. Failing to do so will attract penalty at par with Critical incident mentioned in above FM services table.

22. Repeated failure

During the warranty period if any system as a whole or any subsystem has any failure on two or more occasions in a period of 3 months, it shall be replaced by equivalent new equipment or any alternative steps are to be taken which would serve the purpose to the Institute. Every quarter engineer has to visit and check the equipment performance or any corrective maintenance required for smoother operation and also as and when desired by the institute for technical help or installation help.

23. Warranty, AMC and Support of supplied solution

Three years' on-site comprehensive warranty covering all parts & labor from the date of acceptance of the systems by IDRBT. During the warranty period, the successful bidder will have to undertake comprehensive maintenance of the entire hardware, hardware components, systems software and accessories supplied by the vendor.

- a. Warranty of the Total Solution supplied by Vendor will start from the date of Acceptance of Total Solution.
- b. The selected bidder shall provide warranty for a three (3) years from the date of acceptance of the systems by IDRBT. During the warranty period, the selected bidder will have to undertake comprehensive maintenance of the Total Solution including hardware and software part of the solution.
- c. During the warranty period the selected bidder should maintain the systems and shall be responsible for all costs relating to maintenance.
- d. During the Warranty Period, the selected bidder will have to provide at no additional cost to

IDRBT all software updates, releases, version upgrades, new Versions etc. within 30 days of their availability.

- e. After expiry of the warranty period of three years, IDRBT shall have discretion to enter into **comprehensive all-inclusive** Annual Maintenance Contract (AMC) either in full or in part for maintenance of Total Solution for next four years.
- f. The selected bidder shall provide preventive maintenance during the contract period as per OEM defined schedule, submit detailed Health checkup / Preventive Maintenance schedule as per respective OEM for the proposed solution for each and every component as part of project plan and methodology.
- g. In the case of any issue, the relevant defect should be attended to immediately and rectified as per service levels defined in SLA during the contract period.
- h. Further, proportionate penalty will be levied in case of down time of the systems as per SLA. During warranty period the penalty will be deducted from quarterly AMC services cost.
- i. All necessary consumables for Total solution has to be provided during the contract period.
- j. Besides the above, the bidder will have to conform to the terms and conditions mentioned in the tender.
- k. 24x7 telephonic and online support should be made available by the OEMs for all the equipment for online troubleshooting to address any technical issues including configuration and breakdowns.
- l. IDRBT should also be able to log calls directly to the OEMs 24X7 during the warranty period. Accordingly, escalation matrix of each OEM and confirmation letter from OEM should be submitted.
- m. The selected bidder shall maintain:

- i. Period-1: After period 1 till the date of Acceptance of Total Solution at the last of the three sites,
- ii. Period-2: After period 2 for three years i.e. under warranty and
- iii. Period-3: After Period 3 up to next four years.

24. Payment Terms

- a. A payment of 25 percent (25%) of product cost (equipment + hardware + software), would be payable on successful Delivery of Equipment, Hardware and Software at IDRBT
- b. A payment of 65 percent (65%) would be payable on Successful installation, operationalization and Completion of User Acceptance Testing and sign off from IDRBT
- c. On completion of warranty period of three years, remaining 10% would be payable.
- d. Penalty amount, if any, will be deducted from the last payment of 10%.
- e. IDRBT shall pay the AMC charges for the hardware devices on quarterly basis, after deducting the penalty amount and on successful discharge of service.
- f. All payments will be released based on separate invoices submitted to Institute by the vendor.

25. Obligations of Successful Bidder

- a. The successful bidder has to supply all the components, services, licenses and liaison with regulatory authorities to make solution complete and operational.
- b. The warranty/any benefit from the OEM shall be passed on to IDRBT directly.
- c. The successful bidder shall deploy their own computing resources and trained and experienced engineers for implementing, managing and maintaining the system.

- d. The bidder shall guarantee that the equipment being supplied under this contract shall be new and of best quality, workmanship and shall have no defects in manufacture, shall meet the requirements of the specifications, and shall be in all aspects suited for the purpose intended.
- e. The bidder shall guarantee the satisfactory performance of the critical equipment i.e., Smart Rack, cooling systems and IBMS supplied for this project for period of Three (3) year from the date of issue provisional acceptance certificate of the data center. If during the said Warranty period, IDRBT finds any materials to be containing manufacturing defects or defect in workmanship or otherwise, the selected bidder would be required to promptly repair/supply/replace such defective equipment free of charge to IDRBT.
- f. The selected bidder shall bear all the expenses incurred in connection with the repair or replacement against such defective equipment inclusive of all freight and insurance, Taxes & Duties levies forwarding and clearing and demurrages and other incidental charges involved in delivering the said equipment to the IDRBT, Hyderabad. The charges for installation and supervision of such replacement shall not be paid by the IDRBT. The decision whether correction of the defects should be by the repair or replacement shall be the sole discretion of IDRBT.
- g. In the event, the selected bidder fails to undertake necessary steps to repair or replace defective materials as stipulated above after receiving notice from IDRBT of any defect in the material, or failure of any material to conform with the specifications, IDRBT may proceed to undertake the repair or replacement of such defective equipment at bidders risk and expense but without prejudice to any other rights with IDRBT may have against the bidder in respect of such defects.
- h. Arranging complete supply/manufacture of all the equipment/material/ components required for Data center including their testing, supply including packing, loading and transportation from the manufacturer's works to the sites/stores and intra-site transport with unloading, loading and stacking /storage at site as specified or required duly obtaining insurance cover for transit, storage cum installation.
- a. Whenever any new threats / vulnerabilities become public, The successful bidder shall bring this to the notice of IDRBT immediately and help/guide IDRBT in plugging the same. Once the call has been attended, successful bidder engineers shall put their maximum efforts and

deploy their best resources to resolve all calls at the earliest possible time frame at both locations and ensure appropriate uptime.

- b. The successful bidder to ensure that during implementation of complete, the critical services hosted at IDRBT, Hyderabad and Mumbai shall not face any downtime due to security breach, security incident, improper configuration of security units/ appliances/ components.

26. Order Cancellation

IDRBT reserves its right to cancel the order in the event of delay in delivery and installation beyond the stipulated time.

27. Penalty for Delay

For any delay in installation and commissioning of the equipment beyond the specific period, IDRBT will charge penalty @ 0.5% of the order per week or part thereof, subject to a maximum of 6%. In case, the amount equal to 6% of the order value is deductible as penalty and the selected bidder is still unable to complete successful Installation, the Institute reserves the right to cancel the order and no payment will be made to the vendor.

28. Resolution of Disputes

IDRBT and the bidder shall make every effort to resolve amicably, by direct informal negotiation, any disagreement or dispute arising between them under or in connection with the contract. If after thirty days from the commencement of such informal negotiations, IDRBT and the bidder have been unable to resolve amicably a contract dispute, either party may require that the dispute be referred for resolution by formal arbitration.

29. Indemnification

- a. The bidder/ successful bidder at its own cost and expenses defend and indemnify the Institute against all third-party claims including those of the infringement of Intellectual

Property Rights, including patent, trademark, copyright, trade secret or industrial design rights, arising from use of the Products or any part thereof in India.

- b. The bidder shall expeditiously meet any such claims and shall have full rights to defend itself there from. If the Institute is required to pay compensation to a third party resulting from such infringement, the bidder shall be fully responsible therefore, including all expenses and court and legal fees.
- c. The Institute will give notice to the Bidder of any such claim and shall provide reasonable assistance to the bidder disposing of the claim.
- d. The bidder shall also be liable to indemnify the Institute, at its own cost and expenses, against all losses/damages, which the Institute may suffer on account of violation by the bidder/successful bidder of any or all national/international trade laws, norms, standards, procedures, etc.

30. Liquidated Damages

The liquidated damages is an estimate of the loss or damage that the Institute may have suffered due to delay in performance or non-performance of any or all the obligations (under the terms and conditions of the purchase contract relating to supply, installation, operationalisation, implementation, training, support/services, acceptance, maintenance, etc., by the bidder/successful bidder and the bidder/successful bidder shall be liable to pay the Institute a fixed amount for each day of delay / non-performance of the obligations by way of liquidated damages, details of which will be specified in the RFP. Without any prejudice to the Institute's other rights under the law, the Institute shall recover the liquidated damages, if any, accruing to the Institute, as above, from any amount payable to the Bidder either as per the RFP, executed between the parties or under any other purchase agreement / contract, the Institute may have executed / shall be executing with the bidder/successful bidder.

31. Force Majeure

The bidder/successful bidder or the Institute shall not be responsible for delays or non-performance of any or all contractual obligations, caused by war, revolution, insurrection, civil commotion, riots,

mobilizations, strikes, blockade, acts of God, Plague or other epidemics, fire, flood, obstructions of gation by ice of Port of dispatch, acts of government or public enemy or any other event beyond the control of either party, which directly, materially and adversely affect the performance of any or all such contractual obligations.

If a Force Majeure situation arises, the bidder/successful bidder shall promptly notify the Institute in writing of such conditions and any change thereof. Unless otherwise directed by the Organization in writing, the bidder/successful bidder shall continue to perform his obligations under the contract as far as possible, and shall seek all means for performance of all other obligations, not prevented by the Force Majeure event.

32. Jurisdiction

The jurisdiction of the courts shall be Hyderabad.

For any questions/clarifications related to requirements, please contact us at eravinder@idrbt.ac.in / esrihari@idrbt.ac.in

Annexure – I

Bidder Eligibility Criteria Compliance Format

Sr.NO	Bidder Eligibility Criteria	Compliance Y/N	Documentary Evidence
1	The Bidder shall provide evidence that it is a current legal entity.		Legal document issued by regulatory authority
2	The company must have local office in Hyderabad for ensuring timely support and GST registration.		Legal document issued by regulatory authority. Last year GST return should be submitted.
3	The Bidder/System Integrator should be an authorized representative /partner of respective OEM products and should have back-to-back arrangement with OEM for Warranty and AMC, Certificate for the same to be provided along with Technical bid.		MAF document on OEM's letterhead and duly signed by OEM to be submitted.
4	The bidders who have built data centre(s) for only their own use are not eligible. However, bidders who have built data centre for commercial use are eligible.		Self-declaration letter with documentary evidence to be submitted.
5	The OEM should have their service centre in Hyderabad and should have manufacturing unit in India. Documents should be provided.		
6	<p>The bidder should have executed successfully similar projects for any Organizations like National Banks / FI / Insurance Companies / PSUs / Government / Autonomous institutions as under:</p> <p>iv. One project of value not less than Rs. 75,00,000/-</p> <p style="text-align: center;">OR</p> <p>v. Two projects of value not less than Rs. 60,00,000/-</p> <p style="text-align: center;">OR</p> <p>vi. Three work orders of value not less than Rs. 40,00,000/-</p> <p>Similar Work means "Turnkey Design and Build/Revamp of Data Center including Civil & Interior, Electrical Lighting & Distribution, Networking, Fire Alarm, Access Control, CCTV, In Row, Rodent Repellent System etc."</p>		PO and Completion Certificate and Reference details with contact numbers.
7	The Bidder must warrant and provide details of technical strength, skill set, manpower details, organization structure and shall have at least one		Profiles of Technical and Non- Technical team details involved in the

Sr.NO	Bidder Eligibility Criteria	Compliance Y/N	Documentary Evidence
	Accredited Tier Designer certified professional(s) with minimum three years' experience and OEM certified engineers or equivalent certification on supplied Bill of Material, to be employed in this project and have been sufficiently involved in similar service.		project execution with OEM Certificates and Organization Structure
9	The bidder should be profit-making company for last 3 years with minimum cumulative turnover of Rs. 10 crores or above in the last three years.		The last three (2016-17, 2017-18 & 2018-19) financial years' audited Balance Sheet and Profit and Loss reports should be provided duly signed by concerned authorities.
10	The Bidder must warrant that they are not blacklisted by any entity and or there is no legal action being taken against it for any cause in any legal jurisdiction. If such an action exists and the Bidder considers that it does not affect its ability to deliver the RFP requirements, it shall provide details of the action(s) of the previous orders for similar works for the past three years.		Self-Declaration letter to be submitted.

Annexure II

Scope of Work and Technical Specifications for Civil Work

Sr.No	Technical Description	Compliance Y/N	Documentary Evidence /Comments
1	<p>Gypsum : Providing and fixing 120 minutes fire resistance Gypsum Dry wall partition with overall thickness of 102mm thick Gypsteel ultra stud partition which includes two layers of tapered edge 12.5mm thick Gyproc Fireline on both sides screw fixed with drywall screws of 25mm & 35mm at 300mm centres to either side of 70mm Gypsteel Ultra C stud (0.5mm thick having one flange of 34mm and another flange of 36mm made of GI steel) placed at 610mm centre to centre in 72mm Gypsteel Ultra floor and ceiling channel (0.5mm thick have equal flanges of 32mm made of GI steel), which is anchored to the floor and true ceiling using suitable anchor fasteners. The boards are to be fixed to the framework with joints staggered to avoid leakage through joints. A Gypsteel fixing channel of 99mm width (0.9mm thick having two flanges of 9.5mm each) has to be provided at the horizontal joints of the outer layer of boards screw fixed to the studs using metal to metal flat head screws.</p>		
2	<p>Toughened Glass : Supply and installation of 12 MM thick See Through toughend Glass of size 10Ft x 4Ft as shown in drawing with required supports as per the site condition</p>		
3	<p>Double Leaf Glass Doors: Supply and installation of Double Leaf Glass Door with Aluminum Frame of Size 1500MM x 2100 MM along with the fixing accessories as per site condition</p>		
4	<p>Single Leaf Glass Door: Supply and installation of Single Leaf Glass Door with Alluminum Frame of Size 1000MM x 2100 MM along with the fixing accessories as per site condition</p>		
5	<p>Fire Rated Single Leaf Metal Door: Supply and installation of Two Hours Fire Rated Single Leaf Metal Door of Size 1000MM x 2100 MM along with the fixing accessories as per site condition</p>		
6	<p>Flase Ceiling: Supply and installation of grid type ceiling suspension system of non - combustible 600X600mm tile as per site requirement with all necessary accessories</p>		
7	<p>Brick Wall: Providing and constructing at all levels 100/150/200mm thick walls with AAC (Autoclaved Aerated Cement) block of size 200mmx600mm, masonry in superstructure approved quality and with a crushing strength of not less than 30Kgs/Sqcm in CM 1:6 including all scaffolding, ladders, platforms and staging and plant required for the execution of the work. Bearing blocks of to be introduced where</p>		

Sr.No	Technical Description	Compliance Y/N	Documentary Evidence /Comments
	required.		
8	Cement Plaster: Providing and applying 12 mm thick cement plaster in cement mortar 1:6 (1 cement : 6) to masonry including hacking etc. with preparation of surfaces, scaffolding, material, plant and machinery at all heights and levels including curing of surface		
9	AC Unit Foundation: Construction of Foundation for AC outdoor unit of height 3 feet preferably cc construction and Plastering the walls on all sides as per site requirement		
10	Supply & Fabrication of MS platform with 6mm thick chequered plate, MS channels/Angles & Nuts/bolts/ Fastners complete as per site condition. The rate shall include the cost of 2 coats of Zinc primer & 2 coats of synthetic enamel paint for the structure.		
11	Wall Putty & Painting: Preparing & finishing the walls, partitions and ceiling with emulsion paint & shade by sand papering the surface, applying one coat of primer, prepare the surface with two coats of wall care putty, sand papering again, repeating a coat of primer, applying one coat of paint touching up with putty if necessary and applying two final roller coats of emulsion paint all complete with cost of materials, labour, tools and plants, and scaffolding etc.,		
12	Anti Static Vinyl Flooring: Providing & Fixing with 2 mm thick Anti Static Homogeneous Vinyl of shade as approved adhesives without any bubbling including the skirting to be seamless with the flooring with flush coving at the junction of the floor and wall including cost and conveyance, labour charges of all materials etc., for Lan Server Room & UPS room		
13	Vitrified tiles: Providing and laying vitrified floor tiles (thickness to be specified by the manufacturer), in all colours and shades, laid on 10mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm in facility areas with skirting		
14	Dismantling & Dispose: Removing and Dismantling of Existing Vinyl Flooring, False Ceiling, Partitions, Doors, Cup Boards, Lights, Air Conditioning system etc.,		

Annexure III

Scope of Work and Technical Specifications for Electrical Work

Sr.No	Technical Description	Compliance Y/N	Documentary Evidence /Comments
1	Power Distribution Board - 3 (Lighting & Socket DB) - from Ground Floor 60kVA UPS		
	INCOMING		
	63 A FP MCB - 1 set		
	OUTGOINGS :		
	10/16 A, 10KA SP MCB – 6 Nos for Distribution and 2 Nos for Spare		
2	CABLING & Conduiting		
i	Supply, Laying and termination of 4C x 10 Sq.mm Copper Flexible cable from G.Floor to DB in S.Floor		
ii	2.5 Sq.mm Cu Flexible FRLS wire coils along with required conduit for Lighting & Socket Distribution (100 Mtrs each Coil)		
iii	1.5 Sq.mm Cu Flexible FRLS wire coils along with required conduit for Lighting & Socket Distribution (100 Mtrs each Coil)		
iv	Supply and Laying of 25 MM FRLS Conduits with all accessories like Saddles etc.,		
3	LED Light Fixures: Supply, installation, testing and commissioning of false Ceiling mount 600x600mm LED light fixtures for Datacenter and UPS room.		
4	Supply, installation, testing and commissioning of 6A 1 Way switches 2 Nos In suitable back box and modular front plate for lighting control.		
5	Supply, installation, testing and commissioning of 2 Nos 6/16A modular sockets controlled by 2 Nos 16A SP switch with indicator in suitable back box (surface or concealed) along with suitable modular plate, as per the requirement for Non-linear Load in datacenter.		
6	Supply, installation, testing and commissioning of 3 Nos 6/16A modular sockets controlled by 2 Nos 16A SP switch with indicator in suitable back box (surface or concealed) along with suitable modular plate, as per the requirement for Work Station Distribution.		
7	Supply, installation, testing and commissioning of 1 Nos 6/16A modular sockets controlled by 1 Nos 16A SP switch with indicator in suitable back box (surface or concealed) along with suitable modular plate, as per the requirement for Raw Power to Printer, Workstation etc.,		

Sr.No	Technical Description	Compliance Y/N	Documentary Evidence /Comments
8	Supply, installation, testing and commissioning of 4 Nos 6/16A modular sockets controlled by 4 Nos 16A SP switch with indicator in suitable back box (surface or concealed) along with suitable modular plate, as per the requirement for IBMS distribution.		

Annexure IV

Scope of Work and Technical Specifications for Micro DC / Smart Row Solution

Sr.No	Technical Description	Compliance Y/N	Documentary Evidence /Comments
1	Supply, Installation, Testing and Commissioning of Micro DC / Cool Rack / In Row Solution includes lifting shifting, positioning, charging and initial refrigerant Gas (R407A/R410) charging and assembling of racks, PDUs and all the accessories to make fully functional Micro Data Center with out Raised Floor with the following specifications		
i	Server Rack - 600W x 42U x 1000D with 100H Plinth, Set of side Panel, Captive hardware, 1U horizontal cable manager, metal shunting rings and blanking panel - 3 Nos		
ii	30A, 1Φ, 250 VAC, Vertical Rack PDU with "C" curve 32A single pole MCB with safety guard, power indicator, 16nos of IEC-320-C13 Sockets, 6nos of IEC-320-C19 Sockets, 2nos of EMO-71-1 6/13Amp Universal Sockets, 6 sq.mm 3 core 3 meter cable with Industrial Plug & Mounting brackets hardware for vertical mount PDU - 6 Nos		
iii	Cooling Unit Module (Indoor & Outdoor Units) - 20 kW - 2 Nos (in N + N Configuration)		
iv	Cooling Unit Rack - 400W x 1200D (MM) of 42 U Height - 2 Nos		
v	Emergency Fan Kit on Rear Door - 6 Nos		
vi	Low Side Works for Air-Condition System includes required copper piping, Communication cabling and other accessories as per site condition - 1 Lot		
vii	Environmental Monitoring System with water leaks detection system, temperature & humidity sensor, Smoke Sensor, door sensor & alarm beacon - 1 Set		
viii	AUTOMATIC DOOR OPENING SYSTEMS (For Front Doors) with EM Lock Magnets, Power Supply unit, Manual Door Switch, Gas Springs with assembly kit) - 3 Sets		
ix	Rack Based Fire Detection & Extinguishing System with NOVEC 1230 Gas (1.5L) & all other accessories. (1 Rack System) - 3 Sets		
x	Biometric Access Control System for Front Rack Door with EM Locks, cabling, bkts etc. - 3 Sets		
xi	Standalone Ultrasonic Rodent Repeller_V2 Mini Series 1 Set		
xii	Raw Power Distribution Panel - 1 Set		
xiii	UPS Power Distribution Panel with NEMA Twist Lock Socket - 1 Nos		

Sr.No	Technical Description	Compliance Y/N	Documentary Evidence /Comments
xiv	Cabinet Lights with Door Limit Switch - 6 Nos		
xv	Dedicated Earthing System includes Cu. Earthpits and earth Strips to maintain < 1 Ohm Resistance		

Annexure V

Scope of Work and Technical Specifications for Cooling System

Sr.No	Technical Description	Compliance Y/N	Documentary Evidence /Comments
I	Split Air Conditioners		
1	Supply, Installation, Testing and Commissioning of based 2.0 TR 3 Star split AC, out Door Unit with required Indoor & Out Door unit stands Lan Server Room-1 Nos, UPS & Battery - 3 Nos		
2	Supply, Installation, Testing and Commissioning of based 2.5 TR 3 Star split AC, out Door Unit with required Indoor & Out Door unit stands Teleco Room - 2 Nos, Conference Room - 1		
3	Supply, Installation, Testing and Commissioning of inverter based 1 TR 3 Star split AC, out Door Unit with required Indoor & Out Door unit stands Visitor Lounge - 1 Nos, F2F Verification - 1 Nos		
4	Supply and laying of Communication cable between indoor and outdoor unit for split		
5	Supply and installation of two runs of copper piping between indoor and outdoor unit for split		
6	Supply and fixing of drain system for Air conditioners units size 25mm with tubular form insulation required essential materials		
7	Re-Installation, Testing and Commissioning of based 2.0 TR existing Split AC with required Gas topup and other accessories		
8	Supply and fixing of Switching Controller for Operating Split Acs in 1 Working 1 Stand by model		
II	Industrial Split Air Conditioners		
1	Supply, Installation, Testing and Commissioning of Uni Split Dx type Precision Air Conditioning Unit, Scoll Compressor, Evaporator Fan with direct drive AC motor with microprocessor controller with inbuilt sequential controller - 2 Tr Actual Capacity N/W Room - 2 Nos, CA Server Room - 2 Nos		
2	Supply and Installation of outdoor stands		

Sr.No	Technical Description	Compliance Y/N	Documentary Evidence /Comments
3	Supply & Installation of Hard drawn Copper Piping between Indoor & Out Door for Suction & Discharge Line of Suitable Size including all fitting & accessories. Copper Piping should be suitably supported at regular intervals. The Copper pipe should be insulated with nitrile rubber insulation inside the condition area. The measurement shall be per circuit - (5/8" & 7/8").		
4	Supply & Installation of copper Armoured pvc shielded Control cable between Indoor & Outdoor Unit for each unit 5C X 4 Sq mm		
5	Supply, Installation, Testing & Commissioning of Condensate drain piping with 32mm CPVC class pipes.		
6	Supply, installation of Duct similar to shape of cowl piece so as to divert cold air into room (300mm Ht)		
7	Supply and fixing of GALVANIZED Perforated Cable Tray with internal dimensions & load bearing capacities as 300 x 50 x 1.6mm, including couplers, mounting accessories with including all fixing accessories complete as required Cable tray as required for Copper piping.		
8	Supply & initial charging of Eco friendly Refrigerant for above type ACs		

Annexure VI

Scope of Work and Technical Specifications for Data Cabling

Sr.No	Technical Description	Compliance Y/N	Documentary Evidence /Comments
1	Supply and laying of CAT 6A UTP CABLE BOX (500MTR): 4-pair, Cat6A, UTP Cable (500 mt. Roll).		
2	Supply, installation, testing and commissioning of CAT6A 24 port I/O fully loaded Jack Panel Loaded: Cat 6A, 24-port loaded, 1U Modular Jack Panel Should accomodate Cat5e, Cat6, Cat6A and Fiber Blocks with Rear Cable Management and Front removable Toolless Information outlet.		
3	CAT6A Information Outlets: CAT 6A Toolless builtin crimping mechanism Information Outlet with Dust Cover with Face Plate and Back box if required		
4	Supply, installation, testing and commissioning of CAT6A UTP Patch Cord 2 MTR - Work Sation Side		
5	Supply, installation, testing and commissioning of CAT6A UTP Patch Cord 1 MTR - Rack Side		
6	Supply, installation, testing and commissioning of 16 A Rack Based 19" Automatic Transfer Switch (ATS)		
7	Supply and Laying of 300x100 MM Wire mesh Cable tray for Data Cabling		
8	Supply and fixing of required cable tray supports and accessories for hanging from Ceiling / from Floor		
9	Supply and Installation of 100x50 MM DLP for work station cabling		

Annexure – VII

Technical Specifications for IBMS Package

A. Fire Alarm System

Sr.No	Technical Description	Compliance Y/N	Documentary Evidence /Comments
1	Supply, Installation, Testing & Commissioning of 2 Loop wall mounting Analog Addressable Fire Control Panel. The operating panel shall have LCD display, 240volts ac power supply, automatic battery charger, 24V sealed lead-acid battery suitable operating system in emergency condition		
2	Supply, Installation, Testing & Commissioning of Addressable Smoke detectors		
3	Supply, Installation, Testing & Commissioning of Manual Call Point		
4	Supply, Installation, Testing & Commissioning of Response Indicators		
5	Supply, Installation, Testing & Commissioning of Hooter		
6	Supply, Installation, Testing & Commissioning of Control Relay Module		
7	Supply, Installation, Testing & Commissioning of 2C X 1.5 sqmm Cu Armoured FRLS cable including cable cladings and other connectors for connecting detectors, panels and other accessories.		
8	Fire Extinguisher Supply, installation testing and commissioning of Clean Agent Hand held Cylinders - 2 Kgs		

B. Access Control System

Access Control System in Data Center environment should enable to provide access to authorized personnel using hardware and software devices. A detailed specification for Access Card Controller and Bio Metric Card Controller is as under:

i. Technical Specifications of Access Card Controller

Sr. No	Technical Specifications	Compliance Y/N	Documentary Evidence/ Comments
A	Hardware		

Sr. No	Technical Specifications	Compliance Y/N	Documentary Evidence/ Comments
1	An access control system should consist of door access terminals and all associated accessories to make a fully operational on line access control system.		
2	The system should provide with electromagnetic door locks, and shall operate on fail-safe principle.		
3	The bidder should supply, install and configure the access control software on a PC/Server, running Windows operating system, to integrate all the biometric systems, terminals and readers if required.		
4	The vendor should supply all the necessary accessories for commissioning of Access control System.		
5	The system shall make potential free contacts available for releasing the locks in a fire condition.		
6	The lock shall remain unlocked in the event of a fire alarm, or in the event of a power failure.		
7	Controller: 4 Doors/8 Readers		
8	CPU:8 bit microcontroller running at 42 MHz		
9	Program Memory:512 Kbytes		
10	Data Memory:2 MB flash & 256 KB non volatile RAM		
11	Database:30,000 card holdersh		
12	Transactions:55,000 time stamped events storage capacity		
13	RTC:Non volatile real time clock contrast		
14	Display:16 chars x 2 lines high contrast backlit LCD, LED indication for reader & lock activity status		
15	Keypad:12 keys membrane keypad for local programming		
16	Communication: 10 Base-T RJ45 ethernet interface (TCP/IP) with status LED indications		
17	Reader Interface: Weigand configurable from 26 bits to 40 bits/clock data, Eight reader ports		
18	Reader Control: LED control, buzzer control & reader tamper switch input		

Sr. No	Technical Specifications	Compliance Y/N	Documentary Evidence/ Comments
19	Lock Interface:4 potential free changeover relays, contact rating 3A/30V DC, support both fail safe & fail secure lock assemblies		
20	Digital Inputs: Optically isolated inputs for 4 door sensor, 4 exit switch & 8 general purpose digital inputs		
21	Digital Output:4 General purpose relay outputs		
22	Watchdog: Inbuilt watchdog supervisor		
23	Supply: 13.8V DC / 5 Amp with battery charger, provision to connect 12V/7.2 AH battery		
24	Protection: Miniature circuit breaker (MCB) for over current protection		
25	Power: 4 Watts (excluding lock & readers)		
26	Input: 180V AC ~ 230V AC/50 Hz		
27	Humidity: RH 5-95% non-condensing		
28	Weight: 5.14 Kg.		
29	Dimensions: H 362 x W 325 x D 83		
B	Firmware		
1	Time Zone:30 user defined time zones		
2	Access Groups:90 access groups		
3	Day Access:Day of the week access		
4	Week Groups:30 week ogroups		
5	Holiday Groups:10 holiday groups, 30 holiday per group		
6	Antipassback:Door wise antipassback		
7	Interlocking:Interlocking facility available		
8	Digital Inputs:Programmable general purpose digital inputs for monitoring devices and sensors		
9	Digital Outputs:Programmable general purpose digital outputs for alarms		

ii. Technical Specifications of Thumb + Card Reader

Sr.No	Technical Specifications	Compliance Y/N	Documentary Evidence/ Comments
1	Finger Print Module: 533 MHz, 32 bit, Dedicated DSP processor with 256 bit AES fingerprint data encryption		
2	CPU: 8 bit Microcontroller running at 42 MHz		

Sr.No	Technical Specifications	Compliance Y/N	Documentary Evidence/ Comments
3	Memory: 4MB Data flash, 32KB RAM		
4	Finger Print Sensor: Most rugged and accurate optical finger print sensor		
5	Resolution: Fingerprint scanner with 500dpi resolution		
6	EER:<0.1%		
7	Card Reader Support:Inbuilt EM reader** (optional Mifare , HID Prox**, HID iClass reader) for 1:1 match		
8	Verification Time:1:1 match < 0.7 sec, 1:N match < 0.7 sec for less than 1000 fingerprint templates		
9	Template Storage: 1900 fingerprint templates on fingerprint module (optional 9000 templates)		
10	Database: 15,000 User database, Support of upto 2 fingerprint templates per user		
11	Transactions: 55,000 Time stamped events storage capacity		
12	Authentication Mode: Configurable mode : Only Finger, Only card, Card + Finger		
13	RTC: Non volatile real time clock calendar, Data retention for 10 years without external power		
14	Display: 3.5" Color TFT, Resolution 480x320 pixels		
15	Touchpad: Resistive touchpad, Operating pressure 20-100g, Response <10ms, Surface hardness 3H		
16	Audio: Inbuilt piezo buzzer		
17	Ethernet: 10 Base-T RJ45 ethernet interface (TCP/IP)		
18	GSM: Optional GSM - Quad Band GSM850/900,1800/1900. GPRS Connectivity Class 10		
19	Reader Interface: Weigand configurable from 26 bits to 64 bits/Clock Data		
20	Lock Interface: One potential free changeover relay, Contact rating 3A/30VDC		
21	Aux Reader Port: One card reader port, can be used as Input or output for weigand or clock/data		
22	Digital Inputs: Optically isolated one input for exit switch & two general purpose input (GPI)		
23	Digital Outputs: One general purpose output, potential free changeover relay, Contact rating 3A/30VDC		

Sr.No	Technical Specifications	Compliance Y/N	Documentary Evidence/ Comments
24	Door Sensor: Optically isolated input for one door sensor		
25	Watchdog: Inbuilt watchdog supervisor		
26	Supply Requirement:12VDC / 1A Switch mode supply		
27	Power: Less than 5 watt		
28	Battery: Inbuilt lithium battery 3.7v/1000 mAH for 2 hrs of operational backup		
29	Enclosure: IP65 rated ABS housing with sleek aesthetics		
30	Operating Temp. :0 to 50°C		
31	Humidity: RH 5 to 95% Non-Condensing		
32	Weight: 490grams		
33	Dimensions (mm) : H 130 x W 170 x D 51		

C. CCTV Surveillance System

The primary objective of the CCTV is to monitor and record movement of personnel, ensure safety, security of critical areas of the Data Center should be under constant video surveillance.

The CCTV should be a Network based security camera system should be able to view multiple cameras from a LAN environment and enable automatic recording through NVR and play back the recorded events on configured monitors.

i. IP Dome CCTV Cameras:

Sr.No	Technical Specifications	Compliance Y/N	Documentary Evidence/ Comments
1	Resolution: 2 MP(1920x1080P) FULL HD or better		
2	Image sensor: Progressive CMOS sensor sensitive		
3	Minimum Illumination: 0.1 Lux/ F 2.0(Color), 0 Lux with/ F 2.0 (IR on)		
4	Lens: 3.6mm Fixed Lens		
5	IR Range: Min 30 mts or Better		
6	Video Compression: H.264 , Dual Streaming		
7	S / N Ratio: Up to 50dB		
8	Multi Streaming: Dual		
9	Image Stabilizer: Shall be available		
10	ONVIF : Shall be available		

11	Frame Rate: 25 / 30 fps @1080p or better		
12	Web Browser support : Should support the following web browsers IE , Chrome , Firefox		
13	Power: PoE & though Power adaptor		
18	SD Card and Slot : Support up to 128GB		
19	Operating Temperature: -30°C ~ +60°C		
20	Network interface: RJ 45 (10/100 Base-T)		
21	Certification: UL, CE, FCC, RoHS, ONVIF certified		
22	Protection Level: IP 67, IK10 or better		

D. Rodent Repellent System:

Sr.No	Technical Specifications	Compliance Y/N	Documentary Evidence/ Comments
1	Supply, Installation, Testing & Commissioning of ultra sonic Rodent Repellent control panel with RS 485 card for BMS integration		
2	Supply, Installation, Testing & Commissioning of Transducers		
3	Supply, Installation, Testing & Commissioning of 2 Core Cable for connecting transducers		

E. Alert Generation System:

Sr.No	Technical Specifications	Compliance Y/N	Documentary Evidence/ Comments
1	GSM & LAN based SMS, CALL & E-Mail alert generation system should be a microcontroller based intelligent, modular, alert generation system.		
2	Which should integrate with the critical risk preventing and risk mitigating apparatus such as UPS, PAC, Fire Alarm System (FAS), Temperature Readers, DG Set etc.		
3	The system should be able to trigger a number of text, call & E-mail based alerts to designated mobile numbers in the event of an incident / emergency activation of any of the integrated system.		
4	The system should have the following features		
i	Network and GSM based alert system.		
ii	24/7 remote monitoring with web interface		
iii	Ability to initiate call up to 5 designated contacts in the event of any alert, simultaneously.		
iv	Should Connect to temperature sensors to check temperature and humidity		

Sr.No	Technical Specifications	Compliance Y/N	Documentary Evidence/ Comments
v	Should be Designed to connect at Raw Power supply		
vi	Built in battery for working in Emergency Condition		
vii	User friendly programmable and password protected		
viii	Timely Event log information to be downloaded in excel.		
6	Technical Specifications :-		
a	Connectivity – Both GSM & LAN / Wi-Fi		
B	Operating System - Linux		
c	Communication capacity Min. 5 Contacts		
d	RAM – Min. 1 GB		
e	ROM – Min. 16 GB		
f	No. of Channels – Min. 8 Nos		
g	Operating Temperature		
h	Power Supply		
l	Physical Specifications – Rack Mount Based		

Annexure - VIII

Revamp, Supply, Implement ,Operationalize and Maintenance of Data Centre Facility at IDRBT, Hyderabad

Commercial Bid Format

A. Supply , Installation and Operationalisation

Sr.No	Description	Supply Amount (INR) (a)	Taxes (b)	Total Amount In Rs (c=a+b)	Installation & Commissioning (I & C) Amount (INR) (d)	Taxes (e)	Total Amount In Rs (f=d+e)
1	Civil Works						
2	Electrical Works						
3	In Row System						
4	Cooling System						
5	Data Cabling						
6	IBMS Package A. Fire Alarm System B. Access Control System C. CCTV Surveillance System D. Rodent Repellent System E. Alert Generation System						
7	Total Amount in Rs	Rs.					

Sr.No	Description	Amount in Rs. (Rates for 4 th year)	Amount in Rs. (Rates for 5th year)	Amount in Rs. (Rates for 6th year)	Amount in Rs. (Rates for 7 th year)
1	Smart Rack/Cabinet/Micro DC				
2	Industrial AC				
3	CAC				
4	IBMS Package A. Fire Alarm System B. Access Control System C. CCTV Surveillance System D. Rodent Repellent System E. Alert Generation System				
5	TOTAL				

B. AMC Cost

For TCO calculation, the NPV will be calculated at a discount factor of 8% for all the AMCs.

TCO = Total of (Sr.no A7) + Discounted value of B5

Annexure – IX

The Bidder should use file “**commercial bid II to VII**” . Category wise total in **Annexure – VIII** to arrive at the total cost of the project.

entitled to ask you to establish your claim or claims under this Performance Bank Guarantee, but will pay the same forthwith on your demand without any protest or demur.

- III. This Performance Bank Guarantee shall continue and hold good till the completion of the contracted period for the 'Total Solution' i.e. (date), subject to the terms and conditions in the said Agreement.
- IV. We bind ourselves to pay the above said amount at any point of time commencing from the date of the said Purchase Agreement until the completion of the contracted period for the Total Solution as per said Agreement.
- V. We further agree that the termination of the said Agreement, for reasons solely attributable to our constituent, virtually empowers you to demand for the payment of the above said amount under this guarantee and we have an obligation to honour the same without demur.
- VI. In order to give full effect to the guarantee contained herein, we (name and address of the bank), agree that you shall be entitled to act as if we were your principal debtors in respect of your claims against our constituent. We hereby expressly waive all our rights of surety ship and other rights, if any, which are in any way inconsistent with any of the provisions of this Performance Bank Guarantee.
- VII. We confirm that this Performance Bank Guarantee will cover your claim/s against our constituent made in accordance with this Guarantee from time to time, arising out of or in relation to the said Agreement and in respect of which your claim is lodged with us on or before the date of expiry of this Performance Guarantee, irrespective of your entitlement to other claims, charges, rights and relief's, as provided in the said Agreement.
- VIII. Any notice by way of demand or otherwise hereunder may be sent by special courier, telex, fax, registered post or other electronic media to our address, as aforesaid and if sent by post, it shall be deemed to have been given to us after the expiry of 48 hours when the same has been posted.
- IX. If it is necessary to extend this guarantee on account of any reason whatsoever, we undertake to extend the period of this guarantee on the request of our constituent under intimation to you (IDRBT)
- X. This Performance Bank Guarantee shall not be affected by any change in the constitution of our constituent nor shall it be affected by any change in our constitution or by any amalgamation or absorption thereof or therewith or reconstruction or winding up, but will ensure to the benefit of you and be available to and be enforceable by you.
- XI. Notwithstanding anything contained hereinabove, our liability under this Performance Guarantee is restricted to Rs..... (in words and figures) and shall continue to exist, subject

to the terms and conditions contained herein, unless a written claim is lodged on us on or before the afore-said date of expiry of this guarantee.

XII. We hereby confirm that we have the power/s to issue this Guarantee in your favour under the Memorandum and Articles of Association/ Constitution of our bank and the undersigned is/are the recipient of authority by express delegation of power/s and has/have full power/s to execute this guarantee under the Power of Attorney issued by the bank in his/their favour.

2. We further agree that the exercise of any of your rights against our constituent to enforce or forbear to enforce or any other indulgence or facility, extended to our constituent to carry out the contractual obligations as per the said Agreement, would not release our liability under this guarantee and that your right against us shall remain in full force and effect, notwithstanding any arrangement that may be entered into between you and our constituent, during the entire currency of this guarantee.

Notwithstanding anything contained herein:

- I. Our liability under this Performance Bank Guarantee shall not exceed Rs. (in words and figure) ;
- II. this Performance Bank Guarantee shall be valid only up to (date, i.e., completion of contracted period for the Total Solution) ; and
- III. we are liable to pay the guaranteed amount or part thereof under this Performance Bank Guarantee only and only if we receive a written claim or demand on or before (date i.e. completion of the contracted period for the Total Solution).

This Performance Bank Guarantee must be returned to the bank upon its expiry. If the Performance Bank Guarantee is not received by the bank within the above-mentioned period, subject to the terms and conditions contained herein, it shall be deemed to be automatically cancelled.

Dated this day 2019.

Yours faithfully,

For and on behalf of the Bank,

(Signature)

Designation

(Address of the Bank)

Note:

- a) This guarantee will attract stamp duty as a security bond under Article 54(b) of the Mumbai Stamp Act, 1958.
- b) A duly certified copy of the requisite authority conferred on the official/s to execute the guarantee on behalf of the bank should be annexed to this guarantee for verification and retention thereof as documentary evidence in the matter.

Annexure – XII

Bank Guarantee Proforma

The Director,

Institute for Development and Research in Banking Technology,
Road No. 1, Castle Hills,
Masab Tank,
Hyderabad –500057

Dear Sirs,

PERFORMANCE BANK GUARANTEE – for Tender No IDRBT/SYS/GR/562/2019-2020 dated 4th November 2019 Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad.

WHEREAS

M/s. (name of Bidder), a company registered under the Companies Act, 1956 / a partnership firm registered under the Partnership Act 1932, having its registered and corporate office at (address of the Bidder), (hereinafter referred to as “our constituent”, which expression, unless excluded or repugnant to the context or meaning thereof, includes its successors and assigns), entered into an Contract/ Agreement dated (hereinafter referred to as “the said Agreement”) with you (Reserve Bank of India) for end to end implementation of the Board Meeting Solution, as detailed in the scope of work for the SI for the project in the RFP document, **for Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad**, as detailed in the said Agreement.

We are aware of the fact that in terms of sub-para (...), Section (...), Chapter (...) of the said Agreement, our constituent is required to furnish a Bank Guarantee for an amount ₹..... (In words and figures), being 10% of the Contract Price of ₹... (In words and figures), as per the said Agreement, as security against breach/default of the said Agreement by our Constituent.

In consideration of the fact that our constituent is our valued customer and the fact that he has entered into the said Agreement with you, we, (name and address of the bank), have agreed to issue this Bank Guarantee.

Therefore, we (name and address of the bank) hereby unconditionally and irrevocably guarantee you as under:

I. In the event of our constituent committing any breach/default of the said Agreement, which breach/default has not been rectified within a period of thirty (30) days after receipt of written notice from you, we hereby agree to pay you forthwith on demand such sum/ not exceeding the sum of ₹..... (in words and figures) without any demur.

II. Notwithstanding anything to the contrary, as contained in the said Agreement, we agree that your decision as to whether our constituent has made any such default/s / breach/es, as aforesaid and the amount or amounts to which you are entitled by reasons thereof, subject to the terms and conditions of the said Agreement, will be binding on us and we shall not be entitled to ask you to establish your claim or claims under this Bank Guarantee, but will pay the same forthwith on your demand without any protest or demur.

III. This Bank Guarantee shall continue and hold good till the completion of the contract period i.e. Implementation and 7 years of support (date), subject to the terms and conditions in the said Agreement.

IV. We bind ourselves to pay the above said amount provided a claim or demand under this guarantee is made by IDRBT on us on or before completion of contract (date).

V. We further agree that the termination of the said Agreement, for reasons solely attributable to our constituent, virtually empowers you to demand for the payment of the above said amount under this guarantee and we have an obligation to honor the same without demur.

VI. In order to give full effect to the guarantee contained herein, we (name and address of the bank), agree that you shall be entitled to act as if we were your principal debtors in respect of your claims against our constituent. We hereby expressly waive all our rights of surety ship and other rights, if any, which are in any way inconsistent with any of the provisions of this Performance Bank Guarantee.

VII. We confirm that this Bank Guarantee will cover your claim/s against our constituent made in accordance with this Guarantee from time to time, arising out of or in relation to the said Agreement and in respect of which your claim is lodged with us on or before the date of completion of the contract. (Date).

VIII. Any notice by way of demand or otherwise hereunder may be sent by special courier, fax, hand delivery, registered post or other electronic media to our address, as aforesaid and if sent by post, it shall be deemed to have been given to us after the expiry of 48 hours when the same has been posted.

IX. If it is necessary to extend this guarantee on account of any reason whatsoever, we undertake to extend the period of this guarantee on the request of our constituent under intimation to you (Reserve Bank of India).

X. This Bank Guarantee shall not be affected by any change in the constitution of our constituent nor shall it be affected by any change in our constitution or by any amalgamation or absorption thereof or therewith or reconstruction or winding up, but will ensure to the benefit of you and be available to and be enforceable by you.

XI. Notwithstanding anything contained hereinabove, our liability under this Performance Guarantee is restricted to Rs..... (in words and figures) and shall continue to exist, subject to the terms and conditions contained herein, unless a written claim is

lodged on us on or before the date of completion of the contract. (Date).

XII. We hereby confirm that we have the power/s to issue this Guarantee in your favor under the Memorandum and Articles of Association/ Constitution of our bank and the undersigned is/are the recipient of authority by express delegation of power/s and has/have full power/s to execute this guarantee under the Power of Attorney issued by the bank in his/their favor.

2. We further agree that the exercise of any of your rights against our constituent to enforce or forbear to enforce or any other indulgence or facility, extended to our constituent to carry out the contractual obligations as per the said Agreement, would not release our liability under this guarantee and that your right against us shall remain in full force and effect, notwithstanding any arrangement that may be entered into between you and our constituent, during the entire currency of this guarantee. Notwithstanding anything contained herein:

I. Our liability under this Bank Guarantee shall not exceed ₹... (in words and figure);

II. This Bank Guarantee shall be valid only up to (Date); and

III. We are liable to pay the guaranteed amount or part thereof under this

Bank Guarantee only and only if we receive a written claim or demand on or before the date of completion of the contract. (Date).

This Bank Guarantee must be returned to the bank upon its expiry. If the Bank Guarantee is not received by the bank within the above-mentioned period, subject to the terms and conditions contained herein, it shall be deemed to be automatically cancelled.

Dated this day 2019.

Yours faithfully,

For and on behalf of the Bank,

(Signature)

Designation

(Address of the Bank)

Annexure – XIII

Technical Deviation Statement

Tender No IDRBT/SYS/GR/562/2019-2020 dated 4th November 2019. Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad.

The following are the particulars of deviations from the requirements of the tender specifications:

Sno	Clause	Annexure No	Deviation	REMARKS (Including justifications)

The technical specifications furnished in the bidding document shall prevail over those of any others document forming a part of our bid except only to the extent of deviations furnished in this statement.

Dated -----

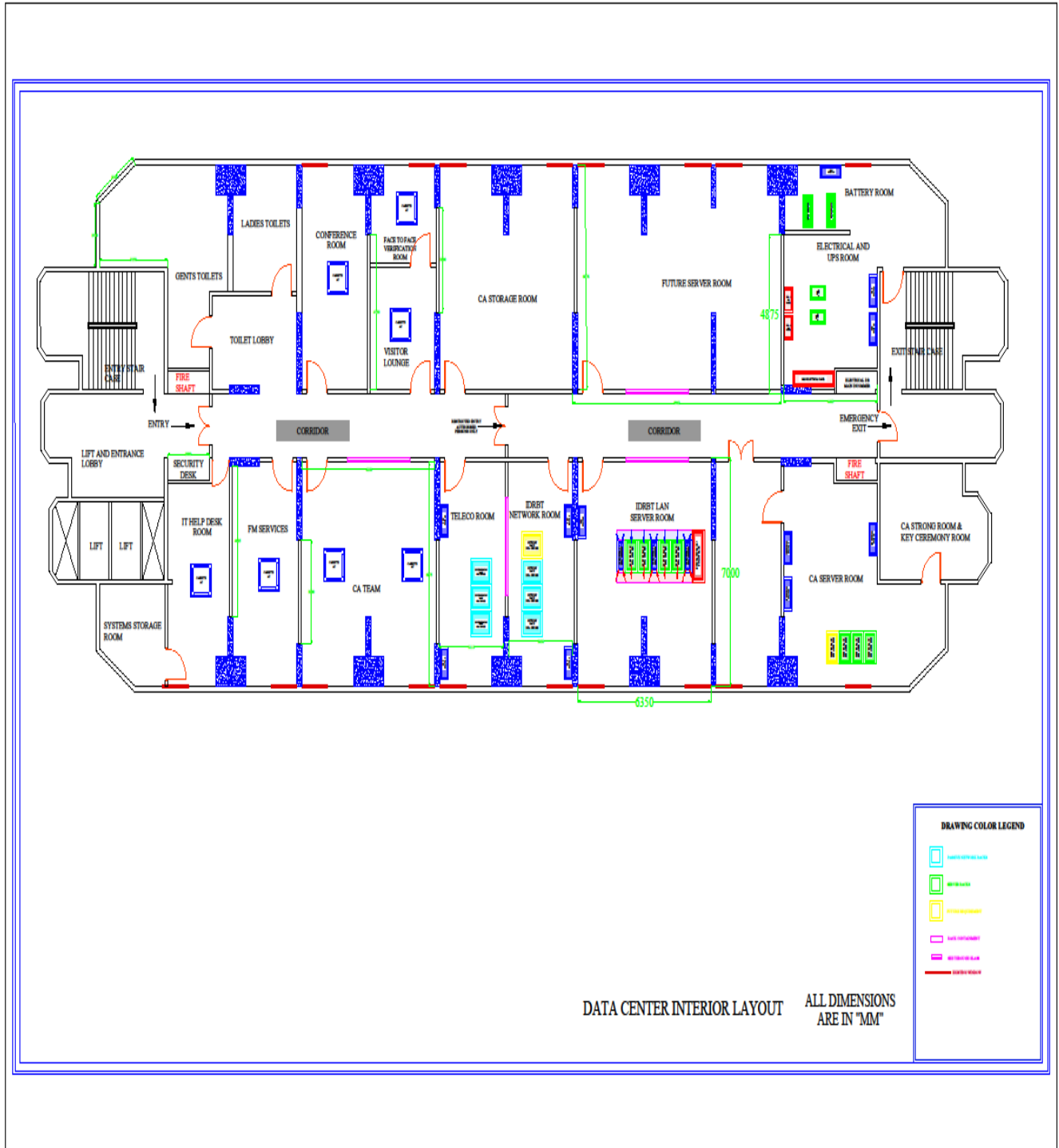
Signature and seal of the

Bidder

Note: Where there is no deviation, the statement should be returned duly signed with an endorsement indicating “No Deviations”.

Annexure - XIV

Data Center Layout



Annexure - XV

Approved Makes of Components:

The bidder has to use high quality components from reputed OEMs. The make/model number of all components has to be specified for all the components.

All the components/equipment used shall be manufactured in a facility with minimum quality certification of ISO 9001:2008.

The components/equipment shall be ISI certified wherever required/applicable.

The list of approved makes and model numbers are given in the following table. For those components, which are not listed in the table, they should be from reputed manufacturers with significant market share in India.

Any makes/brands specified in the technical specifications shall also be applicable.

S. No.	Components/Equipment	Makes Preferred
1	Fire Rated Doors	Shakti Hormann / Godrej
2	False Ceiling	Armstrong / Aero light
3	Paints	Asian Paints / Berger
4	Floor Vitrified Tiles	Johnson/Kajaria/Asian/Nitco
5	Electrical Cables	Polycab / Havells
6	Lighting	Wipro/Philips/ Havells /Elenserve
7	Electrical Switches and Sockets	Legrand/ Schneider
8	Earthing Electrode and Electrode Backfill	Ashlok / Earth plus
9	Industrial Split AC	Stulz / Schneider / Vertiv
10	Comfort Split AC	Bluestar / Hitachi/Daikin
11	Power DBs	Schneider / Legrand
12	CCTV	CP Plus / Panasonic / Siemens
13	Access Control System	Honeywell/ HID / Spectra/Siemens
14	Biometric Readers	HID / Spectra
15	Rodent Repellent System	Maser / Star Electronics / C Systems
16	Addressable Fire Alarm System	Notifier / Siemens / Cerberus
17	Data cabling	Comscope (SYSTIMAX) /Belden / Legrand / R&M
18	Micro DC / Cool Rack / In Row Solution	Stulz / Schneider/ Vertiv
19	Toughened Glass	Sain Gobian / Equivalent

Annexure - XVI

Non - Disclosure Agreement (On ₹ 100 stamp paper)

The Director,

Institute for Development and Research in Banking Technology,
Road No. 1, Castle Hills,
Masab Tank,
Hyderabad –500057

Dear Sir,

Confidentiality Undertaking

We acknowledge that during the course of bidding for Request for Proposal (RFP) floated for **Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad**, we may have access to and be entrusted with Confidential Information. In this letter, the phrase "Confidential Information" shall mean information (whether of a commercial, technical, scientific, operational, administrative, financial, marketing, business, or intellectual property nature or otherwise), whether oral or written, relating to IDRBT and its business that is provided to us pursuant this Agreement. In consideration of you making Confidential Information available to us, we agree to the terms set out below:

1. We shall treat all Confidential Information as strictly private and confidential and take all steps necessary (including but not limited to those required by this Agreement) to preserve such confidentiality.
2. We shall use the Confidential Information solely for the preparation of our response to the RFP and not for any other purpose.
3. We shall not disclose any Confidential Information to any other person or firm, other than as permitted by item 5 below.
4. We shall not disclose or divulge any of the Confidential Information to any other client of [name of product vendor / implementation partner]
5. This Agreement shall not prohibit disclosure of Confidential Information:
 - To our partners/directors and employees who need to know such Confidential Information to assist with the bidding for RFP floated for **Revamp, Supply, Implementation and Maintenance of Data Centre Facility at IDRBT, Hyderabad**.
 - With your prior written consent, such consent not to be unreasonably withheld;
 - To the extent that such disclosure is required by law;
 - To the extent that such disclosure is required by any rule or requirement of any regulatory authority with which we are bound to comply; and
 - To our professional advisers for the purposes of our seeking advice. Such professional advisers will be informed of the need to keep the information confidential.
6. Upon your request we shall arrange delivery to you of all Confidential Information, and copies thereof, that is in documentary or other tangible form, except:

- For the purpose of a disclosure permitted by item 5 above; and
 - To the extent that we reasonably require to retain sufficient documentation that is necessary to support any advice, reports, or opinions that we may provide.
7. This Agreement shall not apply to Confidential Information that:
 - Is in the public domain at the time it is acquired by us;
 - Enters the public domain after that, otherwise than as a result of unauthorized disclosure by us;
 - Is already in our possession prior to its disclosure to us; and
 - Is independently developed by us.
 8. This Agreement shall continue perpetually unless and to the extent that you may release it in writing.
 9. We acknowledge that the Confidential Information will not form the basis of any contract between you and us
 10. We warrant that we are acting as principal in this matter and not as agent or broker for any person, company, or firm.
 11. We acknowledge that no failure or delay by you in exercising any right, power or privilege under this Agreement shall operate as a waiver thereof nor shall any single or partial exercise thereof or the exercise of any other right, power, or privilege.
 12. This Agreement shall be governed by and construed in accordance with Indian law and any dispute arising from it shall be subject to the exclusive jurisdiction of the Mumbai courts.

We have read this Agreement fully and confirm our agreement with its terms

Yours sincerely

Signature and Stamp of Company

[Authorized Signatory (same as signing the proposal) – Implementation
Partner]

Name:

Position:

Date:

Commercial Bid Format for II to VII

Annexure - II

Bill of Quantities for Civil Work

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	GST Amount (in Rs.) (I=GxH)	I & C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
1	Gypsum Partitions: Providing and fixing 120 minutes fire resistance Gypsum Dry wall partition with overall thickness of 102mm thick Gypsteel ultra stud partition which includes two layers of tapered edge 12.5mm thick Gyproc Fireline on both sides screw fixed with drywall screws of 25mm & 35mm at 300mm centres to either side of 70mm Gypsteel Ultra C stud (0.5mm thick having one flange of 34mm and another flange of 36mm made of GI steel) placed at 610mm centre to centre in 72mm Gypsteel Ultra floor and ceiling channel (0.5mm thick have equal flanges of 32mm made of GI steel), which is anchored to the floor and true ceiling using suitable anchor fasteners. The boards are to be fixed to the framework with joints staggered to avoid leakage through joints. A Gypsteel fixing channel of 99mm width (0.9mm thick having two flanges of 9.5mm each) has to be provided at the horizontal joints of the outer layer of boards screw fixed to the studs using metal to metal flat head screws.	SFT	2500											
2	Toughend Glass : Supply and installation of 12 MM thick See Through toughend Glass of size 10Ft x 4Ft as shown in drawing with required supports as per the site condition	Nos	4											
3	Double Leaf Glass Doors: Supply and installation of Double Leaf Glass Door with Aluminum Frame of Size 1500MM x 2100 MM along with the fixing accessories as per site condition	Nos	3											
4	Single Leaf Glass Door: Supply and installation of Single Leaf Glass Door with Alluminum Frame of Size 1000MM x 2100 MM along with the fixing accessories as per site condition	Nos	12											
5	Fire Rated Single Leaf Metal Door: Supply and installation of Two Hours Fire Rated Single Leaf Metal Door of Size 1000MM x 2100 MM along with the fixing accessories as per site condition	Nos	1											
6	Flase Ceiling: Supply and installation of grid type ceiling suspension system of non - combustible 600X600mm tile as per site requirement with all necessary accessories	SFT	4500											
7	Brick Wall: Providing and constructing at all levels 100/150/200mm thick walls with AAC (Autoclaved Aerated Cement) block of size 200mmx600mm, masonry in superstructure approved quality and with a crushing strength of not less than 30Kgs/Sqcm in CM 1:6 including all scaffolding, ladders, platforms and staging and plant required for the execution of the work. Bearing blocks of to be introduced where required.	SFT	1000											

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	GST Amount (in Rs.) (I=GxH)	I & C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
8	Cement Plaster: Providing and applying 12 mm thick cement plaster in cement mortar 1:6 (1 cement : 6) to masonry including hacking etc. with preparation of surfaces, scaffolding, material, plant and machinery at all heights and levels including curing of surface	SFT	1000											
9	AC Unit Foundation: Construction of Foundation for AC outdoor unit of height 3 feet preferably cc construction and Plastering the walls on all sides as per site requirement	Ls	1											
10	Supply & Fabrication of MS platform with 6mm thick chequered plate, MS channels/Angles & Nuts/bolts/ Fastners complete as per site condition. The rate shall include the cost of 2 coats of Zinc primer & 2 coats of synthetic enamel paint for the structure.	Kgs	500											
11	Wall Putty & Painting: Preparing & finishing the walls, partitions and ceiling with emulsion paint & shade by sand papering the surface, applying one coat of primer, prepare the surface with two coats of wall care putty, sand papering again, repeating a coat of primer, applying one coat of paint touching up with putty if necessary and applying two final roller coats of emulsion paint all complete with cost of materials, labour, tools and plants, and scaffolding etc.,	SFT	6800											
12	Anti Static Vinyl Flooring: Providing & Fixing with 2 mm thick Anti Static Homogeneous Vinyl of shade as approved adhesives without any bubbling including the skirting to be seamless with the flooring with flush coving at the junction of the floor and wall including cost and conveyance, labour charges of all materials etc., for Lan Server Room & UPS room	SFT	800											
13	Vitrified tiles: Providing and laying vitrified floor tiles (thickness to be specified by the manufacturer), in all colours and shades, laid on 10mm thick cement mortar 1:4 (1 cement : 4 coarse sand), jointing with grey cement slurry including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm in facility areas with skirting	SFT	2400											
14	Dismantling & Dispose: Removing and Dismantling of Existing Vinyl Flooring, False Ceiling, Partitions, Doors, Cup Boards, Lights, Air Conditioning system etc.,	Lot	1											
	Total Amount (in Rs.) - 1													

Annexure - III

Bill of Quantities for Electrical Work

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	GST Amount (in Rs.) (I=GxH)	I & C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
1	Power Distribution Board - 3 (Lighting & Socket DB) - from Ground Floor 60kVA UPS	Set	1											
	INCOMING													
	63 A FP MCB - 1 set													
	OUTGOINGS :													
	10/16 A, 10KA SP MCB – 6 Nos for Distribution and 2 Nos for Spare													
2	CABLING & Conduiting													
	Supply, Laying and termination of 4C x 10 Sq.mm Copper Flexible cable from G.Floor to DB in S.Floor	RMT	15											
	2.5 Sq.mm Cu Flexible FRLS wire coils along with required conduit for Lighting & Socket Distribution (100 Mtrs each Coil)	Nos	6											
	1.5 Sq.mm Cu Flexible FRLS wire coils along with required conduit for Lighting & Socket Distribution (100 Mtrs each Coil)	Nos	15											
	Supply and Laying of 25 MM FRLS Conduits with all accessories like Saddles etc.,	RMT	300											
3	LED Light Fixures: Supply, installation, testing and commissioning of false Ceiling mount 600x600mm LED light fixtures for Datacenter and UPS room.	Nos	45											
4	Supply, installation, testing and commissioning of 6A 1 Way switches 2 Nos In suitable back box and modular front plate for lighting control.	Set	25											
5	Supply, installation, testing and commissioning of 2 Nos 6/16A modular sockets controlled by 2 Nos 16A SP switch with indicator in suitable back box (surface or concealed) along with suitable modular plate, as per the requirement for Non- linear Load in datacenter.	Set	15											
6	Supply, installation, testing and commissioning of 3 Nos 6/16A modular sockets controlled by 2 Nos 16A SP switch with indicator in suitable back box (surface or concealed) along with suitable modular plate, as per the requirement for Work Station Distribution.	Set	25											

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	GST Amount (in Rs.) (I=GxH)	I & C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
7	Supply, installation, testing and commissioning of 1 Nos 6/16A modular sockets controlled by 1 Nos 16A SP switch with indicator in suitable back box (surface or concealed) along with suitable modular plate, as per the requirement for Raw Power to Printer, Workstation etc.,	Set	10											
8	Supply, installation, testing and commissioning of 4 Nos 6/16A modular sockets controlled by 4 Nos 16A SP switch with indicator in suitable back box (surface or concealed) along with suitable modular plate, as per the requirement for IBMS distribution.	Set	3											
	Total Amount (in Rs.) - 2													

Annexure - IV

Bill of Quantities for Micro DC / In Row Solution

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	GST Amount (in Rs.) (I=GxH)	I & C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
1	Supply, Installation, Testing and Commissioning of Micro DC / Cool Rack / In Row Solution includes lifting shifting, positioning, charging and initial refrigerent Gas (R407A/R410) charging and assembling of racks, PDUs and all the accessoreis to make fully functional Micro Data Center with out Raised Floor with the following specifications	Set	1											
i	Server Rack - 600W x 42U x 1000D with 100H Plinth, Set of side Panel, Captive hardware, 1U horizontal cable manager, metal shunting rings and blanking panel - 3 Nos													
ii	30A, 1Φ, 250 VAC, Vertical Rack PDU with "C" curve 32A single pole MCB with safety guard, power indicator, 16nos of IEC-320-C13 Sockets, 6nos of IEC-320-C19 Sockets, 2nos of EMO-71-1 6/13Amp Universal Sockets, 6 sq.mm 3 core 3 meter cable with Industrial Plug & Mounting brackets hardware for vertical mount PDU - 6 Nos													
iii	Cooling Unit Module (Indoor & Outdoor Units) - 20 kW - 2 Nos (in N + N Configuration)													
iv	Cooling Unit Rack - 400W x 1200D (MM) of 42 U Height 2 Nos													
v	Emergency Fan Kit on Rear Door - 6 Nos													
vi	Low Side Works for Air-Condition System includes required copper piping, Communication cabling and other accessories as per site condition - 1 Lot													
vii	Environmental Monitoring System with water leaks detection system, temperature & humidity sensor, Smoke Sensor, door sensor & alarm beacon - 1 Set													
viii	AUTOMATIC DOOR OPENING SYSTEMS (For Front Doors) with EM Lock Magnets, Power Supply unit, Manual Door Switch, Gas Springs with assembly kit) - 3 Sets													
ix	Rack Based Fire Detection & Extinguishing System with NOVEC 1230 Gas (1.5L) & all other accessories. (1 Rack System) - 3 Sets													
x	Biometric Access Control System for Front Rack Door with EM Locks, cabling, bkts etc. - 3 Sets													
xi	Standalone Ultrasonic Rodent Repeller_V2 Mini Series 1 Set													

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	GST Amount (in Rs.) (I=GxH)	I & C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
xii	Raw Power Distribution Panel - 1 Set													
xiii	UPS Power Distribution Panel with NEMA Twist Lock Socket - 1 Nos													
xiv	Cabinet Lights with Door Limit Switch - 6 Nos													
xv	Dedicated Earthing System includes Cu. Earthpits and earth Strips to maintain < 1 Ohm Resistance													
	Total Amount (in Rs.) - 3													

Annexure - V B

Bill of Quantities for Cooling System

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	ST Amount (in Rs.) (I=GxH)	& C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
I	SPLIT AIR CONDITIONERS													
1	Supply, Installation, Testing and Commissioning of based 2.0 TR 3 Star split AC, out Door Unit with required Indoor & Out Door unit stands (Lan Server Room-1 Nos, UPS & Battery - 3 Nos)	Nos	4											
2	Supply, Installation, Testing and Commissioning of based 2.5 TR 3 Star split AC, out Door Unit with required Indoor & Out Door unit stands (Teleco Room - 2 Nos, Conference Room - 1)	Nos	3											
3	Supply, Installation, Testing and Commissioning of inverter based 1 TR 3 Star split AC, out Door Unit with required Indoor & Out Door unit stands (Visitor Lounge - 1 Nos, F2F Verification - 1 Nos)	Nos	2											
4	Supply and laying of Communication cable between indoor and outdoor unit for split	RMT	75											
5	Supply and installation of two runs of copper piping between indoor and outdoor unit for split	RMT	50											
6	Supply and fixing of drain system for Air conditioners units size 25mm with tubular form insulation required essential materials	RMT	50											
7	Re-Installation, Testing and Commissioning of based 2.0 TR existing Split AC with required Gas topup and other accessories	Nos	4											
8	Supply and fixing of Switching Controller for Operating Split Acs in 1 Working 1 Stand by model	Nos	3											
II	INDUSTRIAL SPLIT AIR CONDITIONERS													
1	Supply, Installation, Testing and Commissioning of Uni Split Dx type Precision Air Conditioning Unit, Scoll Compressor, Evaporator Fan with direct drive AC motor with microprocessor controller with inbuilt sequential controller - 2 Tr Actual Capacity (N/W Room - 2 Nos, CA Server Room - 2 Nos)	Nos	4											
2	Supply and Installation of outdoor stands	Nos	4											
3	Supply & Installation of Hard drawn Copper Piping between Indoor & Out Door for Suction & Discharge Line of Suitable Size including all fitting & accessories. Copper Piping should be suitably supported at regular intervals. The Copper pipe should be	RMT	80											

	insulated with nitrile rubber insulation inside the condition area. The measurement shall be per circuit - (5/8" & 7/8").													
4	Supply & Installation of copper Armoured pvc shielded Control cable between Indoor & Outdoor Unit for each unit 5C X 4 Sq mm	RMT	80											
5	Supply, Installation, Testing & Commissioning of Condensate drain piping with 32mm CPVC class pipes.	RMT	50											
6	Supply, installation of Duct similar to shape of cowl piece so as to divert cold air into room (300mm Ht)	Nos	4											
7	Supply and fixing of GALVANIZED Perforated Cable Tray with internal dimensions & load bearing capacities as 300 x 50 x 1.6mm, including couplers, mounting accessories with including all fixing accessories complete as required Cable tray as required for Copper piping.	RMT	25											
8	Supply & initial charging of Eco friendly Refrigerant for above type ACs	Ls	1											
Total Amount (in Rs.) - 4														

Annexure - VII

Bill of Quantities for IBMS Package

A. Fire Alarm System

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	ST Amount (in Rs.) (I=GxH)	& C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
1	Supply, Installation, Testing & Commissioning of 2 Loop wall mounting Analog Addressable Fire Control Panel. The operating panel shall have LCD display, 240volts ac power supply, automatic battery charger, 24V sealed lead-acid battery suitable operating system in emergency condition	Nos	1											
2	Supply, Installation, Testing & Commissioning of Addressable Smoke detectors	Nos	50											
3	Supply, Installation, Testing & Commissioning of Manual Call Point	Nos	6											
4	Supply, Installation, Testing & Commissioning of Response Indicators	Nos	25											
5	Supply, Installation, Testing & Commissioning of Hooter	Nos	2											
6	Supply, Installation, Testing & Commissioning of Control Relay Module	Nos	6											
7	Supply, Installation, Testing & Commissioning of 2C X 1.5 sqmm Cu Armoured FRLS cable including cable cladings and other connectors for connecting detectors, panels and other accessories.	RMT	750											
8	Fire Extinguisher Supply, installation testing and commissioning of Clean Agent Hand held Cylinders - 2 Kgs	Nos	2											
	Total Amount (in Rs.) - A													

Bill of Quantities for IBMS Package

B. Access Control System

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	ST Amount (in Rs.) (I=GxH)	& C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
1	Supply, Installation, Testing & Commissioning of 4 Door / 8 Reader control panel.	Nos	4											
2	Supply, Installation, Testing & Commissioning biometric Thumb + Card reader based reader for the LAN DC, CA server room & UPS room.	Nos	6											
3	Supply, Installation, Testing & Commissioning Proximity Card Readers	Nos	22											
4	Supply, Installation, Testing & Commissioning Access & Time Management software	Nos	1											
5	Supply Proximity Access Cards	Nos	50											
6	Supply, Installation, Testing & Commissioning of Electro Mangetic Lock - 600 Lbs	Nos	17											
7	Supply and laying of 6 Core Cable for Connecting Reader, EM Lock and Controllers	RMT	500											
	Total Amount (in Rs.) - B													

Bill of Quantities for IBMS Package

C. CCTV Surveillance System

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	ST Amount (in Rs.) (I=GxH)	& C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
1	Supply, Installation, Testing & Commissioning of IP based 2 MP, IR 30 Mtrs CCTV Cameras.	Nos	15											
2	Supply, Installation, Testing & Commissioning of 32 Channel Network Video Recorder.	Nos	1											
3	Supply, Installation, Testing & Commissioning of 6 TB Surveillance HDD.	Nos	1											
4	Supply, Installation, Testing & Commissioning of 24 Port POE Switch.	Nos	1											
5	Supply, Laying and Termination of CAT 6 Cable for CCTVs (305 Coil)	Nos	1											
	Total Amount (in Rs.) - C													

Bill of Quantities for IBMS Package

D. Rodent Repellent System

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	GST Amount (in Rs.) (I=GxH)	I & C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
1	Supply, Installation, Testing & Commissioning of ultra sonic Rodent Repellent control panel with RS 485 card for BMS integration	Nos	5											
2	Supply, Installation, Testing & Commissioning of Transducers	Nos	60											
3	Supply, Installation, Testing & Commissioning of 2 Core Cable for connecting transducers	Set	5											
	Total Amount (in Rs.) - D													

E. Alert Generation System

Sl. No.	Description	UOM	Qty (A)	HSN / SAC Code	Supply Unit Rate (in Rs.) (B)	GST % (C)	GST Amount (in Rs.) (D=BxC)	Supply Unit Rate With GST (in Rs.) (E=B+D)	Supply Amount with GST (in Rs.) (F=AxE)	I & C Unit Rate (in Rs.) (G)	GST % (H)	GST Amount (in Rs.) (I=GxH)	I & C Unit Rate With GST (in Rs.) (J=G+I)	I & C Amount with GST (in Rs.) (K=AxJ)
1	Supply, installation, testing and commissioning of GSM and Network based Monitoring and SMS, Call & E mail alert generation system for Critical Equipments in emergency Conditions.	Nos	1											
2	Supply, installation, testing and commissioning of temperature & Humidity sensors	Nos	4											
	Total Amount (in Rs.) - E													
	Total Amount (in Rs.) - 6 (A+B+C+D+E)													
	Total Amount from Annexure - II to VII (in Rs.) (1+2+3+4+5+6)													