



Bihar School Examination Board

Sinha Library Road, Patna-800017

NOTICE INVITING e-TENDER

(Through e-procurement mode only over <https://eproc2.bihar.gov.in>)

Tender Notice No- PR-326/ 2024

Bihar School Examination Board, Patna invites e-tenders under two bid systems from the reputed Service Providers/ Firms /Companies/ Agencies/ Societies for "**Setting up 120 Computer nodes / Workstations, Dark Fiber and Virtual Server for Bihar School Examination Board (BSEB).**" Detailed tender document containing eligibility criteria, other terms and conditions are available on the website <https://eproc2.bihar.gov.in> and <https://biharboardonline.bihar.gov.in>

Sl. No.	Date and Time for Activity	Date/Time: Duration
1.	Online Sale/ Download Date of Tender Documents	From: 17.09.2024 13:00 Hrs.) to 07.10.2024 (12:00 Hrs.) (https://eproc2.bihar.gov.in)
2.	Pre-Bid Meeting	21.09.2024 up to 13:30 Hrs. (Bihar School Examination Board, Sinha Library Road, Patna-800017)
3.	Last Date/ Time for Submission/ uploading of Online Bid	07.10.2024 up to 13:00 Hrs. (https://eproc2.bihar.gov.in)
4.	Last Date and Time for submission of EMD in Hard Copy/ Original (Only in case of BG)	08.10.2024 up to 12:00 Hrs.
5.	Date & Time for Opening of Technical Bid	08.10.2024 at 13:00 Hrs (https://eproc2.bihar.gov.in)
6.	Date & Time for Opening of Financial Bid	Date to be announced later by competent authority.
7.	Cost of the Tender Document	₹1,180/- (One Thousand One Hundred Eighty Rupees Only) (Non-Refundable)
8.	Tender Processing Fee	₹3,540/- (Three Thousand Five Hundred Forty Only) (Non-Refundable)
9.	Earnest Money	₹1,00,000/- (One Lakh Rupees only) (Refundable)

- Contact Details: Sh. Vinod Kumar Singh, Nodal Officer, Mobile No.: +91 62999 23095, E-Mail ID: eproc-bseb-bih@gov.in/ eproc.bseb@gmail.com
- Note: Bihar School Examination Board reserves the right to accept/ cancel/ reschedule tenders without assigning any reasons. Prospective bidders are advised to regularly visit <https://eproc2.bihar.gov.in> for Corrigendum/ Amendments etc., if any, it will be notified on this portal only and no separate advertisement will be made.

sd/-
Secretary,
Bihar School Examination Board,
Patna



Tender Document

For

**Setting up 120 Computer Nodes / Workstations, Dark Fiber and
Virtual Servers**

Bihar School Examination Board, Patna

Sinha Library Road, Patna- 17

(Tender Notice No.: PR - 326/2024)

Abbreviations

BSEB	: Bihar School Examination Board
CAF	: Common Application Form
CLC	: College Leaving Certificate
COTS	: Commercials Off The Shelf
CV	: Curriculum Vitae
DEO	: Data Entry Operator
EMD	: Earnest Money Deposit
GoI	: Government of India
GoB	: Government of Bihar
HPC	: High Power Committee
ICT	: Information & Communication Technology
INR	: Indian Rupee
IT	: Information Technology
LOI	: Letter of Intent
MIS	: Management Information System
MRIN	: Money Receipt-cum-Index Number
SDC	: State Data Centre
PMU	: Project Management Unit
PBG	: Performance Bank Guarantee
QMT	: Quality Monitoring Tool
RFP	: Request for Proposal
SP	: Service Provider
SIP	: Staff-in-Position
SMS	: Short Message Service
ToR	: Terms of Reference

BIHAR SCHOOL EXAMINATION BOARD, PATNA

TABLE OF CONTENTS

Sl. No.	Description	Page No.
1.	Preface / Scope of Work	5-21
2	Instructions to Bidders A. GENERAL B. INFORMATION / SUPPORT PROVIDED BY BSEB C. BIDDING DOCUMENTS D. PREPARATION OF BIDS E. DEADLINE FOR SUBMISSION OF BIDS F. BID OPENING AND EVALUATION G. AWARD OF CONTRACT H. PAYMENT I. PENALTY J. CONFIDENTIALITY K. INDEMNITY L. FORCE MAJEURE M. EXTENSION OF SERVICES N. SETTLEMENT OF DISPUTES & ARBITRATION O. RIGHTS OF THE BSEB P. OTHER TERMS AND CONDITIONS Q. JURISDICTION	22-40
3	Annexure I - Technical Proposal Submission Form	41
4	Annexure -II Technical Bid	42-43
5	Annexure III Declaration of never been Blacklisted	44
6	Annexure – IV Bidder’s Organization and Experience	45-46
7	Annexure – V Curriculum Vitae (CV)	47-48
8	Annexure – VI Financial Bid	49-50

PREFACE / SCOPE OF WORK

Scope of Work (SoW) for Setting up 120 computer nodes/Workstations to record images from a scanning device, including the installation of network infrastructure and secure connection to a Virtual Server at BSEB datacentre.

1. Project Overview

This project involves setting up 120 computer nodes/ Workstations in an office building to record images from scanning devices. The setup includes installation and configuration of network infrastructure to ensure secure and redundant connectivity to a datacenter located at about 250 meters away. The datacenter will store the recorded images for further business processing.

2. Objectives

- Install 120 computer nodes/Workstations in the designated office space as provisioned by BSEB.
- Connect each computer node/ Workstations to an industrial-level network switch.
- Install and configure the network switches.
- Establish a secure and redundant connection (at least two independent connection lines from BSEB datacentre to Office Building provisioned by BSEB) from the network switches to the datacentre using Dark Fiber - Optical Fiber Cable (OFC). The connectivity between the computer node/Workstation and datacentre should be uninterrupted.
- Ensure all data recorded is securely transmitted and stored in the datacentre with zero transition/transmission loss.

3. Scope of Work

3.1. Supply & Installation of Computer Nodes / Workstations

- **Procurement and Delivery:** Procure 120 computer nodes/workstations with specifications suitable for recording and processing images from the scanning device as deemed fit by BSEB.
- **Setup and Configuration:** Install operating systems and necessary software as per the discretion of BSEB on each computer node / Workstations.

- **Physical Installation:** Set up the computer nodes / Workstations in the designated office space as provided by BSEB, ensuring optimal placement for network connectivity and operational efficiency.
- **Testing and Verification:** Test each computer node/ Workstations to ensure it can successfully record images from the scanning devices and transfer data to the BSEB designated server.

3.2. Network Infrastructure Setup

- **Procurement of Network Switch:** Procure an industrial-level network switch capable of handling the bandwidth and security requirements of the 120 computer nodes/Workstations.
- **Installation of Network Switch:** Physically install the network switch in a central location within the office building.
- **Cabling and Connectivity:** Connect each computer node to the network switch using high-quality Ethernet cables.
- **Configuration of Network Switch:** Configure the network switch to ensure efficient data traffic management, security protocols, and redundancy.

3.3. Dark Fiber - Optical Fiber Cable (OFC) Installation

- **Survey and Planning:** Conduct a site survey to determine the optimal path for laying the OFC between the office building and the datacentre.
- **Procurement of OFC:** Procure the necessary length of OFC and related components.
- **Trenching and Laying OFC:** Perform any necessary trenching work and lay the OFC between the office building and the datacentre.
- **Termination and Testing:** Terminate the OFC connections at both ends and test to ensure signal integrity and bandwidth capabilities.

3.4. Secure and Redundant Connection Setup

- **Redundancy Planning:** Plan for a redundant connection path to ensure continuous operation in case of a primary connection failure.
- **Implementation:** Implement and configure redundant pathways using OFC and additional network equipment as needed.
- **Security Configuration:** Configure security protocols (e.g., encryption, VPN) to ensure secure data transmission between the scanning room and the datacentre.

- **Testing and Verification:** Conduct thorough testing to ensure the redundancy and security measures are functioning as expected.

3.5. Datacentre Integration

- **Virtual Server Configuration:** Set up and configure the dedicated virtual server in the datacentre to receive and store data from the scanning devices.
- **Data Storage and Management:** Implement secure data storage solutions to handle the volume of scanned images.
- **Backup and Recovery:** Establish backup and recovery protocols to ensure data integrity and availability.

4. Deliverables

- 120 fully operational computer nodes/ connected to the scanning devices.
- Industrial-level network switch installed and configured.
- OFC (Dark Fiber) laid and terminated between the office building and the datacentre.
- Secure and redundant network connection established.
- Dedicated virtual server configured in the datacentre with secure data storage.

5. Responsibilities

- **Client:** Provide access to office and datacentre premises, approve procurement lists, and facilitate site surveys.
- **Contractor:** Execute the installation and configuration tasks as outlined, ensure quality and security standards, and provide training and documentation.

6. Acceptance Criteria

- All computer nodes/Workstations are operational and recording images from scanning devices.
- Network switch and OFC are installed and configured.
- Secure and redundant connection between office and datacentre is verified.
- Data is securely stored and accessible for business processing.

PART– I

Supply & Installation of Computer Nodes / Workstations

A - Desktop Configuration

Sl No	Item	Specifications
1	Form Factor	Tower/Micro Tower/Mini Tower
2	Chassis	Standard Chassis
3	Chipset	Intel® H670/Q670 Chipset or better
4	Processor	Intel Core i5-13500 2.50GHz 24MB 14 cores 65W CPU 20 threads,
5	Memory	16GB (1x16GB) DDR4 3200 DIMM Memory, Memory expandability up to 64 GB with 2 DIMM Slots
6	Storage	1 TB NVMe SSD through M.2 Slot
7	Graphics	Intel® UHD Graphics 770
	Audio	Integrated audio controller with internal speaker of at least 2W
8	Operating System	Microsoft Windows 11 Professional with OEM Recovery DVD or option of Cloud Recovery
9	Networking	Integrated 10/100/1000 Ethernet Controller Integrated 802.ac (2x2) with Bluetooth
10	Ports	Video: 1 HDMI & 1 DP USB: Minimum 10 USB Port out of which at least 6 USB should be in front with Minimum 2 USB should be 3.2 Gen 2 Types
11	Slots	1 PCI Express 4.0 x16 1 PCI Express 3.0 x1 1 PCI (Full Height) 2 M.2 slots for WIFI & SSD 3 SATA Ports, 1 Serial Port
12	Bays	2X 3.5" Internal, 1 External Bay
13	Keyboard	USB keyboard (Same OEM make/brand as system)
14	Mouse	USB Optical Scroll Mouse (Same OEM make/brand as system)
15	Power Supply	180 W with 90% efficiency or better
16	Volume	Not More than 16 L
17	Security	TPM 2.0 (Hardware) Integrated Intrusion Sensor Integrated cable lock slot for keyboard and Mouse Drive Lock for hard disk
18	Manageability	Integrated utility to enables hardware level testing outside the operating system & Drivers should be available on OEM Website for download

19	Certifications	Microsoft Windows 11 & Linux / Ubuntu FCC, CE, RoHS, UL, EPEAT Gold India, Energy Star ISO 9001, 14001, 20001, 27001 for OEM Bid Specific OEM authorization is required OEM should be in TOP 3 IDC Player in Desktop Category as per recent Quarter Technical Compliance and Warranty undertaking on OEM Letterhead OS should be OEM factory pre-loaded. An undertaking from OEM should be submitted along with ATC document MII is Mandatory
20	Display	21.5 inch or Higher (Same OEM as desktop), VGA & HDMI Port, TCO 8.0 certified
21	Warranty	3 years On-site Comprehensive OEM Warranty

B- Laptop Configuration

SI No	Item	Specifications
1	Processor	Intel® Core™ i5-1235U – 12th Gen Processor
2	Memory	Minimum 16 GB DDR4 Memory (3200 MHz or better, 2 physical DIMM slots) upgradable up to 16 GB or more.
3	Storage	1 TB NVMe PCIe SSD or Higher
4	Graphics	Integrated graphics
5	Display	Minimum 15 inch or higher with HD Resolution
6	Operating System	Microsoft Windows 11 Professional or Higher (OEM Undertaking that OS is Factory Pre-loaded)
7	Networking	Integrated Gigabit 10/100/1000 Ethernet Controller
8	Wi-Fi and Bluetooth	802.11ac (2x2) WLAN and Bluetooth® 5.0
9	Ports	Minimum 2. - USB 3.1 01 - USB Type-C, 01 - HDMI, 01 - Headphone/microphone combo jack
10	Slots	02 - M.2 for WLAN & Storage
11	Keyboard	Standard Keyboard
12	Battery Life	Minimum Up to 8 Hours or more as per MM18 Benchmark Test (OEM Data Sheet to detail the same), Declaration for Long-life battery to be provided by the OEM.
13	Weight	Less than 1.7 Kg (Same Should be mentioned in OEM Datasheet available in Public Domain)
14	Manageability	Drivers should be available on OEM Website for download
15	Certifications	Microsoft Windows 11

		FCC & CE Test Report, OEM compliance to RoHS, UL, EPEAT Gold India, Energy Star, BIS, MIL STD 810 (Minimum 12 Test passed)
		ISO 9001,14001 for OEMs manufacturing Unit and ISO 20001, 27001 for OEM Bid Specific OEM authorization is required OEM should be in TOP 3 IDC Player in Laptop Category as per recent Quarter Technical Compliance and Warranty undertaking on OEM Letterhead OS should be OEM factory pre-loaded. An undertaking from OEM should be submitted along with ATC document
16	Warranty	1 Year (On-site) for both Laptop and Battery. OEM Declaration to be provided at the time of Bid Submission
17	Country of Origin	India
18	Carry Case	OEM Standard Carry Case

C- Online UPS 25 KVA

Sr.No	Parameter	Minimum Specification
	MAKE/MODEL	Vendor to mention
1	Capacity (in kVA / kW)	25 kVA/ 25 kW 3-Phase Input / 3-Phase Output All UPS in this project shall be from same OEM
2	Technology and Capability	a) True Online configuration with double conversion UPS b) DSP based technology with reduction in electronic components. c) Fully rated power (kVA=kW) for maximum power availability. d) Possibility of enhancing UPS capacity / redundancy by operating UPS in N+X Parallel Redundant Configuration(PRS). e) Capability of Independent or Common battery bank operation of the UPS when operated in PRS. f) Dual Input design. g) UPS should have IGBT topology for both PFC (power factor correction) and inverter. h) Inbuilt casters for easy movement & maintenance. i) Energy recycle mode. j) Hot standby Redundancy function.
3	Input	
3.1	Input facility -Phases / Wires / Range	3-Phase / 4-Wire & Gnd (3Phase & Neutral + Ground) 220/380V , 230/400V , 240/415V (3Φ4W) Range (Full Load) 305~478VAC Range (Derating to 70% Load) 228~478VAC
3.2	Nominal Input Frequency / Range	50 / 60 Hz (Auto selectable) / 40 to 70 Hz
3.3	Input Power Factor / THDi	> 0.99 on Full Load. THDi <2% at 1% of THD

3.4	Generator Compatibility	Compatibility to genset supply required
4	Output	
4.1	Nominal Output voltage / Regulation	220/380V,230/400V,240/415V (3Φ4W)/±1%
4.2	Nominal Output Frequency / Slew rate	50 / 60 Hz with regulation of +/- 0.05Hz / < 1 Hz / s
4.4	Output Voltage Distortion (THDu)	< 1.5 % (linear load)
4.5	Crest Factor	3 : 1 On Full Load (Minimum)
5	Overall Efficiency (AC to AC) - Online (Double Conversion) / ECO Mode	> upto 96% (On Full R Load) / 99% (ECO Mode)
6	Inverter Overload capacity	≤105 %: continuous,106% ~ ≤110%: 60 minutes; 111% ~ ≤125%: 10 minute; 126% ~ ≤150%: 1 min; > 150%: 1 second.
7	Display Panel (In-build LC Display & LED)	
7.1	Measurements (On LCD)	Input: Voltage / Frequency,Bypass: Voltage / Frequency,Output: Voltage / frequency,Battery: Remaining time / Battery Level Indicator,Load: Percentage / Load Level Indicator,Battery Voltage Capacity/Status,PFC Fuse Open,Battery Temperature Too High,Battery Over Charge,Battery Out of Date,INV Short Circuit,Output Breaker Off,kVA,kW,output current,Battery current.
7.2	Fault Indication (On LCD)	Fault codes are available
7.3	Indications (LCD)	Color Touch Screen Display
7.	Make of UPS	Vertiv, Numeric, Delta
8	Audible Alarms	Main Input Abnormal,Main Input Voltage Abnormal,Main Input Frequency Abnormal,Main Input Phase Sequence Fault,Bypass Input Voltage Abnormal. Bypass Input Frequency Abnormal,Bypass Input Phase Sequence Fault. System General Fault,Bypass Battery Cabinet over Temperature,Battery over Charge.DC Bus Abnormal, Parallel Communication Abnormal,Parallel communication redundancy failure. Parallel Incompatible,PFC Shutdown,Power Module Inverter Output Abnormal. Emergency Power Off,On Manual Bypass,Power Module Abnormal. Inverter PLL A synchronization,PFC Over Heat Warning,PFC Over Heat Shutdown,PFC Fuse Open Shutdown,Not Calibrated,Charger Fail,General Fault. Communication Abnormal.
9	Battery Backup / Battery Bank & Charger(min 14Amp)	

9.1	Backup Required	12V SMF to provide approx 120 minutes on full load. For 25KWva - Min VAH = 60000 in each bank of UPS (Exide / Quanta /HBL/ Amar Raja only) in MS IRON Open rack
9.2	Battery Bank Voltage	384V DC or higher (Battery nos shall be settable from 32 nos to 40 nos - Important feature where UPS battery bank can be removed with few batteries i.e faulty in case required at site & UPS can continue to work with remaining batteries). UPS shall also work on 24 batteries if required at site in case of failure of some of the batteries
10	Interfaces - RS 485 Port, USB , RS 232 & Dry Contact, REPO	All shall be available. SNMP(IPv6) card also required with each UPS
11	Cold Start, Auto Start & Self Diagnosis	All desired feature shall be available
12	Operating Temp/RH	0 to 40 deg C & 5 to 95% RH for 30kW
13	Noise Level	< 56 dbA at 1 meter distance
14	Weight	Vendor to confirm
15	Dimension (w x d x h) in mm	Vendor to mention
16	Manufacturer (OEM shall have manufacturing in India from last 15 years)	QMS: As per ISO 9001 EMS: As per ISO 14001 OSHAS: As per ISO 45001 Manufacturer shall have TL 9000 certificate in India. Factory Lab of Manufacturer shall be NABL Accredited in India (All certificates for Indian Factory)
17	Product Safety Certifications (Mandatory)	ESD:IEC61000-4-2: level4 RS : IEC61000-4-3: level3 EFT: IEC61000-4-4:level4 SURGE: IEC61000-4-5:level4 CS: IEC61000-4-6: level3 IEC 61000-2-2 EN 62040-2 C2 EN 61000-3-2 IEC/EN 62040-1 IEC 62040-3 NEBS GR-63-CORE Zone4 Earthquake Level Qualification

These specifications will ensure that the laptop or desktop is capable of handling the requirements for recording and processing images from scanning devices effectively.

* Note the number of Laptops and Desktops to be specified by the BSEB Management.

PART– II

Dark Fiber - Optical Fiber Cable (OFC) Installation

Technical Specifications

1. Optical Fiber Cable

- **Type:** Single Mode
- **Core/Cladding Diameter:** 9/125 μm
- **Jacket:** Armored, UV-resistant, suitable for outdoor use
- **Distance:** 250 meters (with an allowance for slack and routing)
- **Connector Type:** LC/UPC or LC/APC

2. Network Switches

- **Type:** Industrial-grade, managed switches
- **Ports:** Minimum of 24 x 1GbE ports and 4 x 10GbE SFP+ ports (or higher)
- **Redundancy:** Support for link aggregation and failover
- **Management:** SNMP, Web-based interface, CLI

3. Transceivers

- **Type:** SFP+ (10 Gbps) or QSFP+ (40 Gbps) modules compatible with the installed switches
- **Wavelength:** 1310 nm (for single-mode fiber)
- **Distance:** Capable of covering distances up to 10 km to ensure reliable performance over 250 meters

4. Termination and Splicing Equipment

- **Fusion Splicer:** For high-quality, low-loss fiber splicing
- **Termination Kit:** Including cleaver, strippers, and cleaning tools.
- **OTDR (Optical Time-Domain Reflectometer):** For testing fiber integrity and performance

5. Redundancy Components

- **Secondary OFC Path:** A separate, redundant OFC path following a different physical route.
- **Redundant Switches:** Additional switches to ensure failover capability.

- **Power Redundancy:** UPS systems for continuous power supply to critical network components

6. Performance and Security

- **Bandwidth:** Capable of supporting aggregate throughput of at least 10 Gbps
- **Latency:** Minimal latency to support real-time data transfer
- **Security:** Implementation of encryption, firewalls, and intrusion detection systems

7. Deliverables

1. Detailed project plan and site survey report.
2. Installed and tested OFC between the Datacenter and Office Building.
3. Fully configured and operational network infrastructure.
4. Comprehensive documentation and training materials.
5. Support and maintenance plan.

Terms of Reference (TOR) for Dark Fiber - Optical Fiber Cable (OFC) Installation

1. Project Overview

The project involves the installation of Dark Fiber - Optical Fiber Cable (OFC) to establish high-speed, redundant connectivity between a Data Center and an Office Building located 250 meters apart. This connectivity will be used to transfer high-volume image data securely and efficiently.

2. Objectives

- To install high-quality OFC between the Data Center and Office Building.
- To ensure redundant and secure connections.
- To provide the required tools and devices for high-volume data transfer.

3. Scope of Work

3.1. Site Survey and Planning

- Conduct a detailed site survey to determine the optimal path for laying the OFC.
- Identify any potential obstacles or challenges in the path.
- Plan the route, taking into account existing infrastructure, security, and future scalability.

3.2. Procurement of Materials

- **OFC:** Single-mode fiber optic cable suitable for long-distance, high-speed data transfer.
- **Conduits and Ducts:** Protective conduits for the OFC, suitable for underground or overhead installation as required.
- **Connectors and Splicing Equipment:** High-quality connectors and splicing kits for terminating the OFC.
- **Network Devices:** Optical Transceivers (SFP/SFP+ modules), Media Converters (if needed), and Industrial-grade Network Switches with fiber ports.
- **Redundancy Equipment:** Additional OFC and switches for creating redundant pathways.

3.3. Installation of OFC

- **Trenching and Duct Laying:** Perform trenching and lay conduits/ducts for the OFC.
- **Cable Laying:** Install the OFC in the conduits/ducts, ensuring protection from physical damage.
- **Splicing and Termination:** Splice and terminate the OFC at both the Data Center and Office Building.
- **Testing and Verification:** Test the OFC for signal integrity, loss, and bandwidth capabilities using OTDR (Optical Time Domain Reflectometer) and other fiber testing tools.

3.4. Network Configuration

- **Switch Installation:** Install and configure network switches at both ends to handle the fiber connections.
- **Transceivers Installation:** Install SFP/SFP+ modules in the switches for fiber connectivity.
- **Redundant Pathway Setup:** Establish redundant fiber paths and configure failover mechanisms to ensure continuous operation in case of a primary link failure.
- **Security Configuration:** Implement encryption and secure protocols to protect data in transit.

4. Technical Specifications

4.1. Optical Fiber Cable (OFC)

- **Type:** Single-mode fiber (SMF)
- **Core Diameter:** 9 μm
- **Cladding Diameter:** 125 μm
- **Wavelengths:** 1310 nm and 1550 nm
- **Attenuation:** ≤ 0.35 dB/km at 1310 nm, ≤ 0.22 dB/km at 1550 nm
- **Tensile Strength:** Suitable for underground/overhead installation
- **Jacket:** UV-resistant, water-blocking, armored for protection

4.2. Connectors and Splicing

- **Connectors:** LC/SC type connectors with low insertion loss
- **Splicing:** Fusion splicing for minimal signal loss

4.3. Network Devices

- **Optical Transceivers:** SFP/SFP+ modules with support for 1 Gbps to 10 Gbps
- **Media Converters:** For converting optical signals to electrical signals if necessary
- **Network Switches:** Industrial-grade switches with multiple fiber ports, supporting VLAN, QoS, and redundancy protocols (e.g., Spanning Tree Protocol)
- **Redundancy Equipment:** Dual network switches and OFC pathways for failover

5. Required Tools and Devices

- **OTDR (Optical Time Domain Reflectometer):** For testing fiber integrity and performance
- **Fusion Splicer:** For splicing optical fibers with minimal loss
- **Fiber Cleaver:** For preparing fiber ends for splicing
- **Power Meter and Light Source:** For measuring optical power and loss
- **Fiber Tracer/Identifier:** For identifying and tracing fiber paths
- **Pulling Tools and Lubricants:** For installing fiber in conduits
- **Cable Protectors and Markers:** For protecting and identifying fiber cables

6. Timeline

- **Week 1-2:** Site survey and planning
- **Week 3-4:** Procurement of materials and tools
- **Week 5-6:** Trenching, duct laying, and cable installation
- **Week 7:** Splicing, termination, and testing
- **Week 8:** Network configuration and redundancy setup
- **Week 9:** Final testing and verification
- **Week 10:** Project completion and handover

7. Responsibilities

- **Contractor:** Conduct site survey, procure materials, perform installation, testing, and configuration.
- **Client:** Provide access to premises, approve plans, and facilitate necessary permissions.

8. Acceptance Criteria

- Successful installation and testing of OFC with minimal signal loss.
- Establishment of secure and redundant connectivity between Data Center and Office Building.
- Successful high-volume data transfer tests between the two sites.

9. Documentation and Training

- Provide detailed documentation of the installation process, configuration settings, and test results.
- Conduct training for the client's IT staff on managing and maintaining the OFC and network equipment.

This TOR ensures a comprehensive plan for establishing a reliable, secure, and high-performance optical fiber connection between the Data Center and Office Building.

PART– III

Technical Specifications for Server (2 Servers of same make and model required)

Component	Description
Server Type	Rack Mount
Form Factor	Minimum 2U
CPU	4 CPU sockets (with at least 2 populated), each socket supporting Intel Xeon 16-core processors (2 GHz & above).
Processor	1 X Intel Xeon 16 core CPU (2 GHz or higher clock speed)
Chipset	Server class Intel motherboard with Intel server-grade chipset.
SAS HDD	8 x 8TB , Hot Swappable
RAM	256 GB RAM, 1333MHz, expandable up to 512GB
Controller	RAID controller with support for RAID 0, 1, 5 & 6 and should have minimum 256 MB Cache
Ethernet	Min 4 X Gigabit (10X100X1000 Mbps) ports on board
Expansion slots and ports	Min 4 PCI-e slots, 1 serial or 1 parallel, 4 USB ports, 1VGA
HBA	2 x 8 Gbps Dual-Port FC (Fiber Channel) Host Bus Adapter (HBA) cards.
Power Supply	Minimum 800W power supply, server-class, and 80+ efficiency certified, supporting virtualization.
FAN	Sufficient no of redundant fans
Graphics	Server should have server grade VGA controller
Remote Management	Server should support remote access to system status , remote KVM over IP , serial over LAN , SSL support and virtual media redirection
System Monitoring	Server should have System Health indicator and corrective action including OS watchdog timer , NMI and chassis intrusion
Server Trouble Shooting	Server Continuous health monitoring , text console redirection , error log and wake on LAN
VM-OS Compatibility	Server should support Microsoft Windows, RHEL & SUSE <i>and</i> support known virtualization Platform such as Citrix and VMware
Server Maintenance	Server should have browser-based management console
Industry Standard Compliance	Server should have followed industry standard For IPMI 2.0, ACPI 4.0 USB 2.0/3.0 and PCI -E 2.0 gen.

Technical Specifications for Virtualization Software

Sl. No.	Minimum Features / Specifications
1	Virtualization software shall have small code size, smaller hypervisor is inherently better to avoid security risks (Smaller Attack Surface).
2	Virtualization software shall provide a Virtualization layer that sits directly on the bare metal server hardware with no dependence on a general purpose OS for greater reliability and security.
3	Virtualization software should be able to boot from iSCSI, FCoE, and FC SAN
4	Virtualization software shall have the capability to create Virtual systems with upto 32 processors in virtual machines for all the guest operating system supported by the hypervisor.
5	Virtualization software shall integrate with NAS, FC, FCoE and iSCSI SAN and infrastructure from leading vendors leveraging high performance shared storage to centralize virtual machine file storage for greater manageability, flexibility and availability.
6	Virtualization software shall allow heterogeneous support for guest Operating systems like Windows client, Windows Server, Linux (at least RedHat, Suse, Ubuntu, Oracle and CentOS)
7	Virtualization software shall have the capability for creating virtual machine templates to provision new servers.
8	Virtualization software shall allow taking point-in-time snapshots of the virtual machines to be able to revert back to an older state if required.
9	Virtualization software should have the ability to thin provision disks to avoid allocating all storage space upfront. Full monitoring capabilities and alerts to prevent from accidentally running out of physical storage space.
10	Virtualization software should support connecting smart card readers to multiple virtual machines, which can then be used for smart card authentication to virtual machines.
11	IPv6 support for client access: Supports for incoming connections from IPv6 clients
12	Virtualization management software should allow cloning of both powered on and powered off Virtual Machines.
13	Virtualization software should provide solution to add resources (vCPUs, vRAM, Extend Virtual disk) dynamically to the running Virtual Machine without downtime.
14	Virtualization software shall allow RAM over-commitment that allows to configure virtual machine memory in such a way that safely exceeds the physical server memory. Virtualization software should have different components like Transparent memory page sharing, Balloon driver, memory compression, Memory swap on a disk to achieve higher VM density per virtual host, increasing consolidation ratios and providing a more efficient scale up – scale out model.
15	Virtualization software should support live Virtual Machine migration with enhanced CPU compatibility and without the need for shared storage option.
16	Virtualization software should have the ability to live migrate VM files from one storage array to another without any VM downtime. Support this migration from one storage protocol to another (ex. FC, iSCSI, NFS, DAS)
17	The Virtualization software should have provision to upgrade the Guest OS tools available with the hypervisor without need for any reboots.

Sl. No.	Minimum Features / Specifications
18	Virtualization software shall be able to dynamically allocate and balance computing capacity across collections of hardware resources aggregated into one unified resource pool with optional control over movement of virtual machines like restricting VMs to run on selected physical hosts
19	Virtualization software should provide dynamic power management such that in case of during off peak hours not all servers are required to be powered on due to less load it should place few servers in G2/S5 (Soft Off) power state as per the Industry Standard Advanced Configuration and Power Interface (ACPI) specifications to save power in an automated or manual or scheduled manner
20	Virtualization software shall have High Availability capabilities for the virtual machines in the sense if in case one server fails all the Virtual machines running on that server shall be able to migrate to another physical server running same virtualization software. The feature should be independent of Operating System Clustering and should work with FC/ iSCSI SAN and NAS shared storage.
21	Virtualization software should have the provision to provide zero downtime, zero data loss and continuous availability for the applications running in virtual machines in the event of physical host failure, without the cost and complexity of traditional hardware or software clustering solutions.
22	Virtualization software should have the ability to manage virtual switches at a cluster level by creating a distributed switch that can span an entire cluster and is VM mobility aware. It should support features NetFlow and Port mirror and protocols Link Layer Discovery Protocol (LLDP) and Cisco Discovery Protocol(CDP) through a familiar, service-oriented GUI. It should also support additional capability to restrict access to services based on IP address and subnet mask.
23	The virtualization software should provide in-built Replication which will enable efficient array-agnostic replication of virtual machine data over the LAN or WAN. This replication should simplify management enabling replication at the virtual machine level and enabling RPOs as low as 15 minutes. The Virtualization software should allow to choose to revert to a previous ‘known good point’ after failover. it’s should be simple as browsing through the management software of a VM to choose a historical point to revert to. Should retain up to 24 historical points.
24	Virtualization software must support built-in storage multi-pathing and also support 3rd party vendor multi pathing software.
25	Virtualization management software should allow you to deploy and export virtual machines, virtual appliances in Open Virtual Machine Format (OVF).
26	Virtualization software should provide abilities to offload specific storage operations to compliant storage hardware thereby performing these operations faster and consuming less CPU, memory, and storage fabric bandwidth.
27	Virtualization software should allow configuring each virtual machine with one or more virtual NICs. Each of those network interfaces can have its own IP address and even its own MAC address.
28	Virtualization software must support NIC teaming for load sharing and redundancy. Virtualization software shall allow creating virtual switches that connect virtual machines
29	Virtualization software shall support configurations of 802.1q VLANs which are compatible with standard VLAN implementations from other vendors
30	Virtualization software should allow dynamic adjustment of the teaming algorithm so that the load is always balanced across a team of physical network adapters on a Virtual Switch
31	Virtualization software should allow dynamic adjustment of the teaming algorithm so that the load is always balanced across a team of physical network adapters on a Virtual Switch

Sl. No.	Minimum Features / Specifications
32	Virtualization software should provide enhanced visibility into storage throughput and latency of hosts and virtual machines that can help in troubleshooting storage performance issues.
33	Virtualization software should allow redirection of virtual machine serial ports over a standard network link thereby enabling solutions such as third-party virtual serial port concentrators for virtual machine serial console management or monitoring resource pool 802.1 tagging.
34	Virtualization software should provide QoS capabilities for storage I/O in the form of I/O shares and limits that are enforced across all virtual machines accessing a storage, regardless of which host they are running on. Use Storage I/O Control to ensure that the most important virtual machines get adequate I/O resources even in times of congestion. The feature should be available for FC, iSCSI and NFS storage
35	Virtualization software should provide support for Microsoft Cluster Services between virtual machines
36	The virtualization software should provide Simple and cost effective backup and recovery for virtual machines which should allow admins to back up virtual machine data to disk without the need of agents and this backup solution should have built-in variable length de-duplication.
37	Virtualization software should enable integration with enterprise backup software to protect system, application, and user data in virtual machines in a simple and scalable way.
38	Virtualization software should provide proactive smart alerts with self-learning performance analytics capabilities.
39	Virtualization software should allow to place critical hypervisor components into memory regions identified as ‘reliable’ on supported hardware, to provide greater resiliency and to protect against memory errors
40	Virtualization software should provide Traffic filtering ability to filter packets based on the various parameters of the packet header for port-level security with pack classification. It should support packet classification based on MAC SA and MAC DA, Management traffic, Protocol type, IP SA, IP DA, and port number

INSTRUCTION TO BIDDERS

Standing instructions for bidders for e-tendering submission on

<https://www.eproc2.bihar.gov.in>

A. GENERAL

1. Instruction To Bidders (ITB)

- (i) It has been decided by the board to select an Agency for Setting up 120 computer nodes/Workstations to record images from a scanning device, including the installation of network infrastructure and secure connection to a Virtual Server at BSEB datacentre for Bihar School Examination Board (BSEB).
- (ii) The bidder shall submit his bid/tender on e-Procurement platform at www.eproc2.bihar.gov.in
- (iii) All the required documents should be attached at the proper place as mentioned in Technical & Financial e-forms over e-proc, otherwise the tender of the bidder will be rejected.
- (iv) Tender Processing Fee (TPF) amount of Rs 3540/- to be paid through e-Payment mode (i.e., NEFT / RTGS, Credit / Debit Card) only.

2. Tender document fee & tender processing fee to be submitted only via On-Line Mode. EMD to be submitted offline only in case of Bank Guarantee.

- (i) For participation in this tender, prospective bidders are required to register themselves on the portal. Bidders will require valid Class-III digital signature certificates for submitting their bids. Bidders may avail training for online tendering as per instructions available on the website.
- (ii) Bids will not be accepted by any other mode (post/ by hand/ email/ fax etc) except otherwise explicitly specified. Documents uploaded on the portal will only be considered for evaluation.
- (iii) Bidders must ensure that PDF files uploaded on the portal are not corrupted. Bidders must open all PDF documents and ascertain that these are not corrupted. Corrupted documents will be treated as documents not available.
- (iv) For support related to e-tendering process, Bidders may contact at “e- Procurement HELP DESK Address: Mjunction services limited RJ Complex, 2nd Floor, Canara Bank Campus, Khajpura, Ashiana Road, P.S. - Shastri Nagar, Patna 800 014, Bihar

First” or may visit the link “Vendor Info” at (<https://eproc2.bihar.gov.in>). Bidders may also raise their concern by following means:

- ✓ Toll Free Number: 1800 572 6571 (Working Hours: 8AM to 7PM, All days in week except few selected state holidays)
- ✓ Email Id: eproc2support@bihar.gov.in

3. Scope of Bid

- (i) BSEB invites bids for the work of “Setting up 120 computer nodes/Workstations to record images from a scanning device, including the installation of network infrastructure and secure connection to a Virtual Server at BSEB datacentre for Bihar School Examination Board (BSEB).”
- (ii) Throughout these bidding documents, the terms 'bid' and 'tender' and their derivatives (bidder / tender, bid/tender, bidding/tendering, etc.) are synonymous.
- (iii) The successful bidder will be expected to complete the works in spirit of the tender document mentioned in Scope of Work.

4. Terms & Conditions

- (i) E-Tender are invited for “Setting up 120 computer nodes/Workstations to record images from a scanning device, including the installation of network infrastructure and secure connection to a Virtual Server at BSEB datacentre for Bihar School Examination Board (BSEB)”.
- (ii) On qualifying the tender Earnest Money deposited by the agency shall be converted into Security Deposit. In case of any deviation/breach of contract it shall be forfeited.
- (iii) Prospective bidders are advised to regularly visit <https://eproc2.bihar.gov.in> for Corrigendum/Amendments etc., if any, It will be notified on the said portal only and no separate advertisement will be made.
- (iv) The bidders should quote their lowest rates based upon the Terms and Conditions forming part of tender document. Order will be placed to the successful bidder (quoting lowest rate) out of the eligible bidders.
- (v) In case, the date of submission/opening of tenders happens to be holiday, the tenders shall be received / opened on the next working day.
- (vi) The security deposit (EMD) of bidders, whose bids are not accepted, will be returned within 30 days upon finalization of the tenders. No interest will be paid on the amount

of the security deposit. However, the security deposit of the bidder, whose rates are accepted, will be returned on submission of performance security.

- (vii) The right to accept a bid will rest with the Secretary, Bihar School Examination Board (BSEB) who reserves the right to reject any or all the bids without assigning any reason thereof.
- (viii) In case, the vendor fails to comply the terms & conditions, the Board may terminate the work order without assigning any reason and is free to act in such a manner as may be deemed appropriate.
- (ix) This is a project-based assignment and BSEB sanctioned statutory leaves may not be applicable for selected agency. Selected bidder' manpower may have to remain available & render services in accordance with BSEB directions.
- (v) The successful bidder will be liable to complete the job of Design and Development of Web Based Exam Centre Allocation Application for Bihar School Examination Board (BSEB).
- (x) If the successful bidder does not undertake work in time or stops the work midway or leaves the work altogether, his performance security will be forfeited, and the Board shall have the right to cancel the order and obligatory exploit intend to be taken.
- (xi) The Contractor shall arrange to execute operation and maintenance services only through qualified manpower as mentioned in Annexure.
- (xii) The Buyer reserves the right to conduct performance review at any time during the contract period, deficiencies, if any, noticed will be required to be rectified, and compliance reported. If the Service provider fails to rectify the deficiencies or fails to comply with other directions/instructions, his contract is liable to be terminated. The Buyer further reserves the right to terminate the contract at any point of time, without assigning any reasons thereof.
- (xiii) It shall be the responsibility of the service provider to make all the maintenance work satisfactorily throughout the contract period and to hand over in working condition to the Buyer after expiry of the contract.
- (xiv) Service Provider shall maintain the confidentiality of any information related to the application. Service Providers shall be required to take appropriate measures to maintain confidentiality obligations by its personnel engaged.

- (xv) The bidder shall adhere to work as mentioned in the Scope of work section of this RFP document.
- (xvi) Bidders must handover the last modified Codes before expiry of contract.
- (xvii) The bid shall remain valid and open for acceptance for a period of 180 days from the last date fixed for receiving the same. A bid valid for a shorter period shall be rejected as non-responsive.
- (xviii) No bidders will be allowed to withdraw after submission of bids/ opening of the tender; otherwise, the EMD submitted by the firm is liable to be forfeited.
- (xix) Any kind of claim/obligations/objection of Bidder would not be entertained post opening of tender. Bidders must be assured about the scope of work before participation in Tender.

5. Documents/ Certificates

The Tendering firms/ agencies are required to submit the photocopies of following documents, failing which their bids will be summarily/ out -rightly rejected and will not be considered any further:

- a. Registration certificate as per existing norms (Indicating the legal status— company/ partnership firm/ proprietorship concern, etc.)
- b. Copy of GST Registration Certificates
- c. Copy of PAN Card
- d. Company's profile, Local Office status, Bankers, Manpower, and Experience.
- e. Work completion and performance Certificates.
- f. A List to be furnished for number of qualified technical people in employment and their qualification.
- g. Last 03 years UDIN certified audited balance sheets of the company.
- h. Reports on the financial standing of bidder, such as profit and loss statements and auditors report for past five years.
- i. Latest income tax clearance certificate.
- j. IT returns of last three financial years (2019-20, 2020-21, 2021-22) (Attached self-attested copy of IT Returns).

- k. Positive net worth during last three financial year i.e 2020-21, 2021-22 & 2022-23.
- l. Certificate of Incorporation.
- m. All annexures I to V must be signed and submitted in Technical Bid.

6. Eligible Bidders

- (i) This *Invitation for Bids* is open for reputed, experienced Firm /Company/ Agency/ Society meeting the following conditions, can participate in the bid:
 - a. The bidder must be a registered Sole Proprietorship/ Partnership firm/company. Self-attested Documentary proof of registration of Sole Proprietorship/ Partnership firm/ company must be attached.
 - b. The bidders must have a valid PAN and must submit self-attested copy of the same.
 - c. The bidders must have a GST Registration Certificates and must submit self-attested copy of the same.
 - d. The bidder must have average annual turnover of ₹75 Lakhs in any of the three consecutive financial years out of four financial years (2019-20,2020-21, 2021-22 & 2022-23) along with UDIN certified Profit and Loss A/c. and IT returns for said financial years to be enclosed in the Technical Bid.
 - e. List of organizations to which such work done by the firm should be enclosed.
 - f. Qualification and experience of key site management and Technical personnel proposed for contract.
 - g. No JV/Consortium is allowed.
 - h. Qualification and experience of key site management and Technical personnel proposed for contract.
 - i. The bidder should not be blacklisted / debarred by any Board/ University/ Govt. Department, until the time of bid submission, (Attach Self certified letter).
- (ii) Bidders shall not be under a declaration of ineligibility for delay, failure, or corrupt and fraudulent practices by any of the State Govt. or Central Govt. or Public Undertaking or any Autonomous Body.

7. Qualification of the Bidder

- (i) All bidders must refer Forms of Bid and Qualification Information, a preliminary description of the proposed scope of work and schedule indicating completion of proposed work in time.
- (ii) The bidder/OEM should have experience in implementation & maintenance of project of value INR 50 Lakhs in the field of networking and optical fibre cable laying.
- (iii) List of organizations to which such work has been undertaken / completed by the firm should be enclosed.
- (iv) All the relevant documents must be signed /attested by the Bidder.
- (v) Reports on the financial standing of the Bidder, UDIN certified Profit and Loss statements and auditor's reports for the past 04 years.

8. One Bid per Bidder

One Bidder shall submit only one (01) bid against proposed work irrespective of the fact that **Person-In-Charge** may be holding the position in any capacity in other firms. Any other bid of the firm / organization wherein aforesaid **Person-In-Charge** is involved in any capacity will cause all such proposals to be disqualified.

9. Cost of Bidding

- (i) The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.
- (ii) In case of cancellation of tender, cost of bidding document will be charged each time.

10. Site Surveys and Preparation of Procurement Lists.

- (i) The Bidder will conduct an "As-Is" study of the processes, perform site surveys, and prepare detailed procurement lists. The entire process flow, including all stakeholders involved, will be thoroughly documented.
- (ii) No additional costs will be provided by the BSEB for these activities.
- (iii) The Bidder will document the entire process, including procurement lists and site plans, and submit these documents to BSEB for approval. Upon receiving approval, the Bidder will commence installation and configuration tasks as outlined, ensuring adherence to quality and security standards. Additionally, the Bidder will provide necessary training and documentation.

BIDDING DOCUMENTS

11. Clarifications of Bidding Documents

- (i) Pre-bid meeting
- (ii) The bidder or his official representative is invited to attend a pre-bid meeting which will take place at the address, venue, time, and date as indicated in Tender Schedule.
- (iii) The purpose of the meeting will be to clarify issues and to answer the questions on any matter that may be raised at that stage.
- (iv) The bidder is requested to submit any questions in writing or by e-mail to reach the BSEB not later than one week prior to pre-bid meeting. Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all participating bidders in pre-scheduled Pre-Bid meeting presided by Nodal Officer - Tender. Any modification in the bidding documents which may become necessary as a result of the pre-bid meeting shall be made exclusively available to bidders by e-mail (eproc-bseb-bih@gov.in / eproc.bseb@gmail.com) through the issue of an Addendum / Corrigendum as per decision of Competent Authority pursuant to Tender Clauses and not through the minutes of the pre-bid meeting.
- (v) Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

12. Amendment of Bidding Documents

- (i) Before the deadline for submission of bids, BSEB may modify the bidding documents by issuing addendum(s) /corrigendum(s).
- (ii) Any addendum thus issued shall be part of the bidding document(s) and shall be uploaded over e-proc portal: <https://www.eproc2.bihar.gov.in>. Prospective bidders may check their e-mail id registered over eproc-2 portal. BSEB will assume no responsibility for any negligence on account of bidders.
- (iii) To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, BSEB may, at his discretion, extend as necessary the deadline for submission of bids, in accordance with competent authority decision.

13. Bid Validity

- (i) Bids shall remain valid for a period not less than 180 days after the deadline date for bid submission specified in Tender Schedule. A bid valid for a shorter period shall be rejected by the BSEB as non-responsive.

- (ii) In exceptional circumstances, prior to expiry of the original time limit, BSEB may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. Any bid not acceding to proposed request will be summarily rejected.

B. PREPARATION OF BIDS

14. Bid Security (Earnest Money)

- (i) The Bidder shall furnish, as part of his Bid, a Bid security in the amount as provided in published NIT for particular work. This bid security shall be in favor of Employer as mentioned in the Bihar Financial Rules, and shall be in any of the following forms:
- a. Tender document fee & tender processing fee to be submitted only via On-Line Mode
 - b. EMD to be submitted offline only in case of Bank Guarantee.
- (ii) Unconditional bank guarantees (and other instruments having fixed validity) issued as surety for the bid shall be valid for 45 days beyond the validity of the bid.
- (iii) Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Clauses 14.1 (a) & (b) above shall be rejected by the Employer as non-responsive.
- (iv) The rates should be quoted in Indian Rupees only in words as well as in figures. The rate shall be inclusive of all taxes.
- (v) The Earnest money of unsuccessful bidders will be returned within 28 days of the end of the bid validity period.
- (vi) The Earnest money of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.
- (vii) The Earnest money may be forfeited.
- a. if the Bidder withdraws the Bid after Bid opening during the period of Bid validity.
 - b. if the Bidder does not accept the correction of the Bid Price, pursuant to Clause 20;
or
 - c. in the case of a successful Bidder, if the Bidder fails within the specified time limit to
 - sign the Agreement; or

- furnish the required Performance Security.
- d. Bidders shall submit offer that fully comply with the requirements of the bidding documents, including condition of contract (time of completion).

C. DEADLINE FOR SUBMISSION OF BIDS

15. Bidders shall follow invitation of bid.

- (i) Complete Bids (including Technical and Financial) must be received by the Employer over e-proc2. Eligible bids will be opened as per published NIT.
- (ii) The BSEB may extend the deadline for submission of bids by issuing an amendment, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

D. BID OPENING AND EVALUATION

16. Bid Opening

- (i) The Employer or their authorized representative will open all the Bids received over e-proc2, in the presence of the bidders or their representatives who choose to attend at time, date and the place specified in published NIT / Corrigendum (If Applicable). Even in the case of absence of the bidder at the time of opening of bids, department will proceed ahead with the opening.
- (ii) If any of the tenderers or their agents are not present at the time of opening, the employer will open the tender in their absence and prepare a statement and that will be binding on the absent tenderers.
- (iii) "Technical Bid" shall be opened first. The amount, form and validity of the Earnest money furnished with each bid will be checked/announced. If the bid security furnished does not conform to the amount and validity period as specified in the Invitation for Bid and has not been furnished in line with conditions specified in said clause, technical and financial bid will not be entertained / opened.
- (iv) Bids either Technical or Financial not received in prescribed format will be summarily rejected.
- (v) Official Proceeding against technical bid evaluation will be subsequently uploaded on <http://biharboardonline.bihar.gov.in> .
- (vi)

- a. Subject to confirmation of the bid security by the issuing Bank, the bids accompanied with valid security will be taken up for evaluation with respect to the Qualification Information and other information furnished in bid document.
 - b. After receipt of confirmation of the bid security, the bidder will be asked in writing (usually within 10 days of opening of the Technical Bid) to clarify against raised query in his technical bid, if necessary, with respect to any rectifiable defects.
 - c. Bidders may respond to BSEB raised queries / clarifications (If applicable) and will respond in not more than 07 days of issue of the clarification e-mail. Any reasonable clarification in favor of their candidature, if not being received in stipulated time period (07 days), BSEB competent authority / Tender Committee will take decision accordingly.
 - d. Immediately (usually within 3 to 4 days), on receipt of these clarifications from bidders, the Evaluation Committee will finalize the list of responsive bidders whose technical / financial bids are eligible for consideration.
- (vii) At the time of opening of "Financial Bid", the names of the bidders found will be announced. The bids of only these bidders will be opened. The remaining bids will be disqualified. The responsive Bidders' names, the Bid prices, the total amount of each bid and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening. Any Bid price, which is not read out and recorded, will not be taken into account in Bid Evaluation and deemed cancelled.
- (viii) The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present at the time of the opening of the bid.

17 Process to be Confidential.

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

18 Clarification of Financial Bids

- (i) To assist in the examination, evaluation and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of unit rates. The request for clarification and the response shall be sought, offered, or

permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 21.

- (ii) Subjected to sub-clause 21 (i) & 21 (ii), no bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.
- (iii) Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

19 Examination of Bids and Determination of Responsiveness

- (i) During detailed evaluation of "Technical Bids", the Employer will determine whether each Bid.
 - a meets the eligibility criteria defined in Clause 1 and 2;
 - b has been properly signed;
 - c is accompanied by the required documents / securities and;
 - d is substantially responsive to the requirements of the Bidding documents. During the detailed evaluation of the "Financial Bid", the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e., bill of quantities, technical specifications etc.
- (ii) A substantially responsive "Financial Bid" is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without any deviation or reservation.
 - a. A material deviation or reservation is one which affects in any substantial way the scope, quality, or performance of the Works;
 - b. which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights, or the Bidder's obligations under the Contract; or
 - c. whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
- iii. If a "Financial Bid" is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

20 Correction of Errors

- (i) "Financial Bids" determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
 - a. where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
 - b. 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 as quoted will govern.
- (ii) The amount stated in the "Financial Bid" will be corrected by the Employer in accordance with the above procedure and the bid amount adjusted with the concurrence of the Bidder in the following manner:
 - a. If the Bid price increases as a result of these corrections, the amount as stated in the bid will be the 'bid price' and the increase will be treated as rebate;
 - b. If the bid price decreases as a result of the corrections, the decreased amount will be treated as the 'bid price'. Such adjusted bid price shall be considered as binding on the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Earnest money may be forfeited in accordance with said clause.

21 Evaluation and Comparison of Financial Bids

- (i) The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Sub-Clause 19.
- (ii) In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
 - a. making any correction for errors pursuant to said Clause; or
 - b. making an appropriate adjustment for any other acceptable variations, deviations.
- (iii) The Employer reserves the right to accept or reject any variation or deviation. Variations and deviations and other factors, which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.

E. AWARD OF CONTRACT

22 Award Criteria

- (i) Subject to said Clause, the Employer will award the Contract to the Bidder whose Bid has been determined
 - a. to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid Price (L-1); and
 - b. to be adjusted to account for his bid price which is evaluated; the lowest in any of the bid(s) opened earlier than the one under consideration.

23 Employer's Right to Accept any Bid and to Reject any or all Bids

Notwithstanding Clause 21, the Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the ground for the Employer's action.

24 Performance Security

As per Bihar Financial Rules 131 (P) Performance Security

- (i) Within 10 (ten) days of receipt of the Work Allotment, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 5% (Five) of the quoted price under the provisions of Bihar Financial Rules.
- (ii) If the performance security is provided by the successful Bidder in the form of a Bank Guarantee or fixed deposit receipts in the name of Employer, it shall be issued either at the Bidder's option, by
 - a. Nationalized/ Scheduled Indian bank within state or
 - b. Acceptable to the Employer.
- (iii) Failure of the successful Bidder to comply with the requirements of Sub-Clause 21 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.

F. PAYMENT

25 Payment terms are further governed by following terms and conditions.

- a. The payment for AMC shall be paid on quarterly basis and shall be based on quarterly status report.

b. The AMC will be start after expiration of warranty (three years post successful handover)

c. No advance payment shall be made under any circumstances. Following are the payment terms: -

Note: "T" stands for date of issue of work order.

Sl. No.	Consolidated payment terms for Center Allocation Application (As per Tender Document)	Payment terms (of TFA as per the annexure VI)	Timeline
i.	Delivery of Equipment and inspection.	30%	T1=T+2 Weeks
ii.	Successful installation, configuration of the computer nodes/workstations, Installation, configuration & Virtualization Software, 2 physical Server with virtualization configuration at datacenter, and establishment of a secure connection to the virtual servers at datacenter. This OFC installation, secure connection and network infrastructure setup.	25 %	T2=T1+4 Weeks
iii.	Completion of UAT and approval from BSEB, ensuring that all nodes/workstations, network infrastructure, servers, datacenter integration, and final testing are done and fully functional, meeting the required specifications.	15%	T3=T2+2 Weeks
iv.	Final handover of the project, including all necessary documentation and completion of training for BSEB personnel on the operation and maintenance of the system.	20%	T4=T3+2 Weeks

V.	Retained by BSEB for a period of 36 months from the date of final handover. This amount will be released after the successful completion of the warranty period, subject to satisfactory performance and resolution of any issues arising during this period.	10%	Post successful completion of warranty period.
----	---	-----	--

- d. Payment would be made on submission of invoice to the Bihar School Examination Board, Patna.
- e. Payment shall be released within (01) one month of the submission of the valid invoice. Any deductions / penalties if any shall be deducted from the bill. However, bill should accompany sufficient approval / attestation from BSEB competent authority.
- f. The payment will be subject to TDS as per Income Tax Rules /GST Act (if applicable) and other statutory deductions as per applicable laws.

G. PENALTY

- 26 In respect of Tender terms and conditions, prospective bidder is under obligation to perform / execute the work within stipulated time-interval and tender terms and conditions. Failure to meet the deadline will attract penalty charges governed by following sub-clauses of the tender document.
- (i) It will be the responsibility of the Bidder to execute the work in accordance with stipulated time frame, otherwise, the BIHAR SCHOOL EXAMINATION BOARD may impose penalty and may get the work completed from another firm and the bidder will have to reimburse the expenditure incurred.
- (ii) Non-delivery of service in time, violation of extant laws and statutory requirements, committing fraud, etc. will be considered as a major default and the contract will be liable to be terminated immediately without giving any further notice.
- (iii) In case of absence of any staff, penalty will be imposed at double the rate of wages or salary for the day he remains absent.
- (iv) In the event of failure of compliance of awarded work in stipulated time, penalty amounting to double of actual expenditure incurred in attending to the same by another Agency will be imposed.

- (v) Bidder will be summarily responsible for any incidents which may lead to Non-availability of iterated software solution as per SOW and subsequently its availability. Down-Time / Inaccessibility of application barring BSEB proposed down-time / maintenance which may result due to unavailability of application will be subjected to penalty.

H. CONFIDENTIALITY

- 27 Bidder and its agents shall exercise professionally reasonable care to maintain the required confidentiality and privacy with regard to tendering authority / user data, wherever applicable.
- 28 BSEB shall retain exclusive Intellectual Property Rights to all artefacts to which BSEB has sovereign rights or right to use on a formalized agreement with another party if any cots software has been used in the application.

I. INDEMNITY

- 29 The bidder shall indemnify, defend, and hold BSEB and their officers, employees, successors and assigns harmless from and against any and all losses arising from personal injury or claims by third parties pursuant to this agreement, including but not limited to any equipment, software, information, methods of operation or other intellectual property (or the access, use or other rights thereto) provided.

J. FORCE MAJEURE

- 30 Neither party to this agreement shall be liable to the other for delay or default in performance of its obligations or any loss or damage which may be suffered by the other directly due to a Force Majeure event provided that the affected Party notifies the other Party of such event and its likely effects and duration as soon as possible and takes all reasonable steps to mitigate the losses/disruption.

K. EXTENSION OF SERVICES

- 31 The rates/ contract shall be valid for contract period, but can be extended on year-to-year basis with the consent of both the parties.

L. SETTLEMENT OF DISPUTES & ARBITRATION

- 32 Except where otherwise provided in the tender, all questions and disputes relating to the meaning of the Scope of the Work and instructions here-in-before mentioned and as to the performance / quality of offered service / work related to published work or as to any other question, claim right matter or thing whatsoever in any way arising out of or relating to contract, instructions, orders or these conditions or otherwise

concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter.

- a. If the contractor considered any work demanded of him to be outside the requirements of the contract, or dispute on any matter in connection with or arising out of the contract or carrying out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 07 days request BSEB in writing for written instruction or decision. Thereupon, the BSEB shall give his written instructions or decision within a period of fifteen days from the receipt of the contractor's letter.
- b. If BSEB fails to give his instructions or decision in writing within the aforesaid period or if the contractor is dissatisfied with the instructions or decision, the contractor may, within 15 days of the receipt of BSEB decision, appeal to BSEB who shall afford an opportunity to the contractor to be heard, if the latter so desires, and to offer evidence in support of his appeal. If the contractor is dissatisfied with this decision, the contractor shall within a period of 30 days from receipt of the decision, give notice for appointment of arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.
- c. Except where the decision has become final, binding, and conclusive in terms of Sub Para (b), above disputes or difference shall be referred for adjudication through arbitrator appointed by BSEB. If the arbitrator so appointed is unable or unwilling to act or resign his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.
- d. It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the BSEB of the appeal.
- e. It is also a term of this contract that no person other than a person appointed by BSEB or the administrative head of the department as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitrator at all.
- f. It is also a term of this contract that if the contractor does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 45 days of receiving the intimation from the BSEB that the final bill is ready for payment, the claim of the contractor shall be deemed to have been waived and absolutely barred and

the BSEB shall be discharged and released of all liabilities under the contract in respect of these claims.

- g. The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.
- h. It is also a term of the contract that if any fees are payable to the arbitrator these shall be paid equally by both the parties.
- i. It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.
- j. **All arbitration shall be held at PATNA and at no other place.**

M. EXIT MANAGEMENT OR TRANSITION

- 33 Upon the termination of contract, Bidder shall execute the following responsibilities:
- (i) The Bidder shall start executing the knowledge transfer process to Department or any agency nominated by Department before day of exit. In case the knowledge transfer is not complete before the date of exit of Service provider, Department shall extend the date of exit and shall exit only after the complete knowledge transfer is done. Completion of this process shall be approved by the Department.
 - (ii) The Bidder shall document technical and non-technical areas and handover the same to Department before the exit.
 - (iii) All documents, source codes, data dump or any other deliverables / material created as a part of the project shall be handed over by the Bidder to Department before the exit.
- 34 Any other knowledge transfer that is required by Department shall be completed by the agency before exit. The department shall ask the agency to provide the handover to any of the newly appointed agencies or any other department representatives. Failure to

comply with the BSEB directions regarding any knowledge transfer will be treated as an act of breach which may invite severe actions by BSEB leading to forfeiture of security deposit and any outstanding payment, if any or blacklisting of the Bidder.

N. RIGHTS OF THE BSEB

- 35 BSEB reserves the right to accept/reject any or all the bids in whole or in part and annul the bidding process without assigning any reason whatsoever and is not bound to accept the highest tender.
- 36 BSEB reserves the right to award the tender to more than one Bidder.
- 37 BSEB reserves the right to relax/ withdraw any of the terms and conditions mentioned in the Tender Document so as to overcome any problem encountered during the selection of the bidders and also during the course of the execution of the contract.
- 38 If a firm after award of the contract violates any of the terms & conditions, it shall be liable to be blacklisted and its EMD shall be forfeited.

O. OTHER TERMS & CONDITIONS

- 39 The bidders will be bound by the details furnished by him / her to the Board while submitting the tender or at subsequent stage. In case, any of such documents furnished by him / her is found to be fictitious at any stage, it would be deemed to be a breach of terms of contract making him / her liable for legal action besides termination of contract.
- 40 In no circumstances, the firm shall appoint any sub-contractor or sub-lease the contract. If it is found that the contractor has violated these conditions, the contract will be terminated forthwith without any notice and EMD will be forfeited.

P. JURISDICTION

- 41 Any legal action pertaining to this Tender shall be subject to the jurisdiction of Courts of Patna.

I/We have carefully read the above terms & conditions and undertake to abide by the same.

Place: _____

(Signature of the party with stamp)

Date: _____

Name: _____

Mobile No. _____

Address _____

TECHNICAL PROPOSAL SUBMISSION FORM

To:

<Location, Date>

<Name>

<Designation>

<Address>

Subject: Submission of the Technical bid for <Name of the assignment>

Dear Sir/Madam,

We, the undersigned, offer to provide the services for *[Insert title of assignment]* in accordance with your Request for Proposals dated *[Insert Date]* and our Proposal. We are hereby submitting our Proposal, which includes this Pre-Qualification, Technical Proposal, and a Financial Proposal.

We hereby declare that all the information and statements made in this technical bid are true and accept that any misinterpretation contained in it may lead to our disqualification.

We undertake, if our Proposal is accepted, to initiate the Implementation services related to the assignment not later than the date negotiated between the client and our company.

We agree to abide by all the terms and conditions of the RFP document. We would hold the terms of our bid valid for <180> days as stipulated in the RFP document.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Authorized Signature *[In full and initials]:*

Name and Title of Signatory:

Name of Firm:

Address:

Location: _____ **Date:** _____

TECHNICAL BID**Tender Notice No- PR- 326 / 2024**

Name of company/Firm. About company premises (Owned/ rented Area)	
Year of Establishment	
Address	
Phone with STD code	
Mobile	
Email id	
PAN No	
GST IN	
The bidder should be a proprietary/partnership firm, a trust/society, software development/IT services/ ITeS company registered under the Indian Companies Act and must be in operation since last 05 years as on date of submission of Bid.	Attachment Certificate of Incorporation GST Registration Certificate Copy of PAN Work orders confirming 05 years of operation
Registration Certificate of the firm / organisation	Attachment
The bidder must have ESI/EPFO Licence	Attachment Copy of the latest EPF deposit challan showing the number of employees
The bidder/OEM should have experience in implementation & maintenance of project of value INR 50 Lakhs in the field of networking and optical fibre cable laying.	Copy of Work Order + Completion/ Ongoing certificate
The bidder must have average annual turnover of Rs. 75 lakhs in any of the three financial years out of four financial years (2020-21, 2021-22, 2022-23 & 2023-24) along with UDIN certified Profit and Loss A/c. and IT returns for said financial years to be enclosed in the Technical Bid.	Attachment Agency shall submit UDIN certified Audited Financial Reports for ALL FYs with copy of ITR's attached with ITR Computation Sheets
2019-20	
2020-21	
2021-22	
2022-23	
Should not be Blacklisted / debarred as on date of bidding	(Self-certified letter) Attachment

a) ISO 27001:2013 b) ISO 9001:2015	Attachment Copy of ISO Certificate
Declaration about relationship with BSEB Employee	Attachment
The bidder should not be blacklisted by any Department / Agency / PSU in any State or Central Government of India as on date of submission of bid	Self-declaration duly signed by authorized bid signatory
Bidder should have Positive Net worth during last 03 financial year	Attachment
Furnish number of qualified technical people in employment and their qualification. The bidder must have at least 07 full time employees in its payroll as on date of submission of bid. a. Total No of Project Manager b. Total No of Systems Architect c. Total No of Network Engineer d. Total No of IT Security Specialist e. Total No of Systems Administrator f. Total No of Hardware Technician g. Total No of Software Developer/Integrator	Attached the Declaration on Company's Letter head

I/We certify that the information furnished above is true and correct. The terms and conditions are acceptable to me/us.

Place: _____

Date: _____

(Signature of the party with stamp)

DECLARATION OF NEVER BEEN BLACKLISTED

UNDERTAKING (To be submitted with Technical Bid) It is certified that my firm/ agency/ company has never been blacklisted by any of the Departments/ Autonomous Institutions/ Boards/ Universities/ Public Sector Undertakings of the Government of India or any other State Government or reputed educational institutions and no criminal case is pending against the said firm/ agency as on tender publish date.

(Authorized Signature)

Name of the Authorized person: _____

Name of the Company: _____

Address of the company: _____

Contact No.: _____

Email Id: _____

Seal of the company: _____

Place: _____

Date: _____

Bidder's Organization and Experience

A brief description of the Bidder's organization and an outline of the recent experience of the Bidder that is most relevant to the assignment. For each assignment, the outline should indicate the names of the Bidder's Key Experts who participated, the duration of the assignment, the contract amount (total and, if it was done in a form of a joint venture or a sub-consultancy, the amount paid to the Consultant), and the Bidder's role/involvement.

A - Bidder's Organization

1. Provide here a brief description of the background and organization of your company, along with

Sl. No.	Information Sought	Details to be Furnished
A	Name and address of the bidding Company	
B	Incorporation status of the firm (Public limited / private limited, etc.)	
C	Year of Establishment	
D	Date of registration	
E	ROC Reference No.	
F	Details of company registration	
H	Name, Address, email, Phone nos. and Mobile Number of Contact Person	

B – Bidder's Experience

1. List only previous similar assignments.
2. List only those assignments for which the Bidder was legally contracted by the Client as a company or was one of the joint venture partners. Assignments completed by the Bidder's individual experts working privately or through other consulting firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so, requested by the Client.

Assignment Name:	Approx. value of the contract:
Country: Location within Country:	Duration of assignment (months):

Name of Client:	Total number of staff-months:
Address of Client:	Approx. value of the services provided by your firm:
Telephone number:	E-mail address:
Start Date (Month/Year):	Completion Date (Month/Year):
Name of Associated Consultants, If Any:	No. of professional staff-months provided by associated Consultants:
Narrative description of Project:	
Description of actual services provided by your staff within the assignment:	

CURRICULUM VITAE (CV)

Position Title and No.	{e.g., K-1, TEAM LEADER }
Name of Expert:	{Insert full name }
Date of Birth:	{day/month/year }
Country of Citizenship/Residence	

Education: {List college/university or other specialized education, giving names of educational institutions, dates attended, degree(s)/diploma(s) obtained }

Employment record relevant to the assignment: {Starting with present position, list in reverse order. Please provide dates, name of employing organization, titles of positions held, types of activities performed and location of the assignment, and contact information of previous clients and employing organization(s) who can be contacted for references. Past employment that is not relevant to the assignment does not need to be included. }

Period	Employing organization and your title/position. Contact information for references	Country	Summary of activities performed relevant to the Assignment
[e.g., May 2005-present]	[e.g., Ministry of, advisor/consultant to... For references: Tel...../e-mail.....; Mr.deputy minister]		

Membership in Professional Associations and Publications:

Language Skills (indicate only languages in which you can work):

Adequacy for the Assignment:

Detailed Tasks Assigned on Consultant’s Team of Experts:	Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks

Expert’s contact information: (e-mail....., phone.....)

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client, and/or sanctions by the Bank.

{ day/month/year }

Name of Expert	Signature	Date
----------------	-----------	------

{ day/month/year }

Name of authorized	Signature	Date
--------------------	-----------	------

Representative of the Bidder

(Who signs the Proposal)

All Manpower as specified in Financial Bid document shall submit their CV in above prescribed format.

FINANCIAL BID

Tender Notice No- PR- 326/2024

Name of Work : **Setting up 120 Computer nodes / Workstations, Dark Fiber and Virtual Server for Bihar School Examination Board (BSEB).**

Name of Bidder	
Address	

PART - A

Sl. No.	Description (As per Tender Document)	Fi	Rate in Rs. (Inclusive of All Taxes)
i	Supply & Installation of 120 Computer Nodes / Workstations	F1	
ii	Desktop Unit Price	F2	
iii	Laptop Unit Price	F3	
iv	Online UPS 25 KVA with 2 Hours Backup	F4	
v	Dark Fiber - Optical Fiber Cable (OFC) Installation	F5	
vi	2 Physical Server & Virtualization software licenses	F6	
vii	Installation, configuration & virtualization	F7	
TOTAL (TFA)= (F1 +F2+F3+F4+F5+F6+F7)			

PART - B

[Annual Rate for Operation, Maintenance & Customization for five years]

Sl. No.	1st Year (INR)	2nd Year (INR)	3rd Year (INR)	4th Year (INR)	5th Year (INR)	Fi	Total Amount (for Five Years) (Inclusive of All Taxes)
i						F8	
TOTAL (TFB)= F8							

*List of what needs to be covered during AMC period:

1. **Zero Downtime Maintenance:** Ensure that all supplied and installed items remain operational with zero downtime.
2. **System Efficiency Testing:** Conduct pre-testing of the installed system to verify its efficiency and performance.
3. **Operational Computer Nodes/Workstations:** Ensure all computer nodes/workstations are operational and successfully recording images from scanning devices.
4. **Network and OFC Maintenance:** Maintain and ensure the operational status of network switches and optical fiber cables (OFC).
5. **Secure and Redundant Connection:** Guarantee a secure and redundant connection between the office and the datacenter, with 100% uptime.

6. **Data Security and Accessibility:** Ensure that data is securely stored and remains accessible for business processing at all times.
7. **On-site Resources:** Deploy a minimum of two resources at the BSEB designated workplace throughout the AMC period for on-site support.
8. **Status Reporting:** Provide status reports in writing as and when required by BSEB.

TOTAL FINANCIAL VALUE (TFV) [(TFA+TFB)] =	
In Words	

Date & Place:

Name and Signature of Bidder
(Office Seal)

Note: **Bidder with Lowest Quoted Total Financial Value (TFV) will be declared L1 shall be selected for award of the contract.**