

UNIVERSITY OF NORTH BENGAL

Office of the Registrar



ENLIGHTENMENT TO PERFECTION

Notice inviting e-Tender

Following e-Tenders are invited from reputed Vendors, for details please visit

<https://wbtenders.gov.in>

SL.NO.	NIT NO.	TENDER ID
1.	92/R-2022	2022_DHE_406150_1
2.	93/R-2022	2022_DHE_405565_1

Registrar (Offg.)

University of North Bengal



P.O. Raja Rammohunpur
Dist Darjeeling
Pin 734013

Notice Inviting e-Tender- 92/R-2022

e-Tender is invited from reputed Vendors for Supply, Installation ,Testing & Commissioning of Honeywell make NVR, Honeywell make CCTV Cameras in different locations of University of North Bengal , Rajarammohunpur Campus. For details please visit <https://wbtenders.gov.in>

Sl. No.	Specification and Quantity of Items	Earnest Money	Completion Time
1.	As Per Annexure-I	1,50,000/-	90 days (from the date of receipt of work order)

TERMS AND CONDITIONS :

- 1) The base price and GST shall be shown separately
- 2) Taxes will be deducted at source as per prevailing rules of Central and State Government.
- 3) The terms and conditions of payment shall be declared clearly.
- 4) Copy of current year PT challan, Trade License, PAN card, GST registration certificate shall be accompanied with the technical bid documents. [Non Statutory Documents]
- 5) The vendor shall submit authorization certificate from OEM along with the technical bid.(Non Statutory documents).
- 6) The vendor shall provide Company details as per Annexure-II.
- 7) The vendor shall have credential of supply of similar equipments in any University / institution / Govt. Organization. Copy of credential certificate shall be submitted along with technical bid (Non Statutory documents).
- 8) Bidder should have Trade License & GST in West Bengal and Register under RoC since 2012.
- 9) The vendor shall clearly state the pre-installation requirements and take all responsibilities to arrange the same.

- 10) The equipment shall carry minimum 3 (Three) year on site OEM warranty from the date of satisfactory installation.
- 11) The service engineer shall attend the call within 24 hrs for trouble shooting to be done on no wait basis.
- 12) The successful tenderer shall complete the installation of the equipment within 10 (Ten) days from the date of issuance of the supply order.
- 13) A sum of **Rs. 1,50,000/-** shall be deposited to the under noted account of the University through RTGS as earnest money and the copy of receipt challan of RTGS with UTR number shall be accompanied with the technical bid document (Statutory Documents) failing which the tender paper will be treated as cancelled. The earnest money of the unsuccessful quotationer (s) will be refunded without interest after one month of the opening of tender paper and the same of the successful candidate will be refunded without interest after three months of the satisfactory installation of the equipment subject to redressal of complaint, if any.

Name of the A/c: N.B.U (S/B).
Account Number: 10195736768
IFSC Code: SBIN0002096

- 13) The University authority reserves the right to accept or reject any/all quotations.
- 14) The quotation should be valid for at least 90 (ninety) days.
- 15) The brochure /catalogue of the equipment shall accompany the technical bid documents (Non Statutory documents).
- 16) Selection of the agency will be made on the basis of both technical and financial bids. Technical bids and financial bids shall be submitted by online only. Offline submission of tender paper will not be accepted.
- 17) 92% of the total order value shall be released after the successful installation / commissioning of the equipment against the submission of the test report duly certified by the concerned authority. The remaining 8% of the bill value shall be deducted and kept aside as security deposit which will be paid after 3(three) months from the date of satisfactory installation, subject redress of complaints, if any.
- 18) The last date of submission of tender form is upto 11.10.2022 at 1.00 p.m. and to be opened on 13.10.2022 at 1.30 p.m.
- 19) The tenderers may remain present at the opening of tender.
- 20) All cases of disputes not covered under the terms & conditions of Tender will be referred to the Vice-Chancellor for a decision which shall be final and binding on both the parties.

21) For any clarification regarding tender please contact with the System Manager & Head, CIRM, University of North Bengal email Id- systemmanager@nbu.ac.in , University of North Bengal. Phone-0353-2776318

22) Date & Time Schedule

SI NO	Particulars	Date & Time
1	Publishing of Tender	14.09.2022
2	Documents download/sell start date (Online)	14.09.2022 at 6.00 p.m.
3	Bid submission Start Date	14.09.2022 at 6.00 p.m.
4	Bid Submission End Date	11.10.2022 upto 1.00 p.m.
5	Technical Bid Opening	13.10.2022 at 1.30 p.m.
6	Offline Submission	NO OFFLINE SUBMISSION ACCEPTED
7	Financial Bid Opening	

Sd/-

Registrar (Offg.)
University of North Bengal

BIDDERS DETAILS**(To be provided on company letter head)**

NIT NO.:

TENDER ID:

1	NAME OF THE BIDDER	
2.	ADDRESS	
3.	CONTACT NUMBER	
4.	CONTACT PERSON	
4.	EMAIL ID	
5.	BANK DETAILS A/c Name A/c Number Name of the Bank Name of the Branch IFSC	

Authorized Signatory(with seal & Stamps)

Video Recording System & Camera Specification

Specification of Video Recorder (NVR) –

Feature	Specification
Operating System	Embedded LINUX or Windows
PROCESSOR	Quad-core or Intel® Xeon® embedded processor
ONVIF Compliance	YES
Resolution	12MP(4K),08MP,6MP,4MP,D1,CIF
Video Input Recording	16, 32 & 64 channels at 1080p
POE	Internal/External 16 Port POE
Record Bit Rate	RECORD BIT RATE
Interface	2 HDMI /2 VGA
Video Standard	PAL or NTSC
Video Codec	H.265/H.264/MJPEG/MPEG4
Multi-screen layout	1/4/8/9/16/25/36/64
Audio Input	1 Channel Input/1 Channel Output, RCA
Motion Detection	Support
Alarm Event	Recording; PTZ; Tour; Alarm; Video Push; Email; FTP; Snapshot; Buzzer
Alarm/Relay Output	16/6
Internal Storage capacity	4 SATA ports; up to 32TB
Backup	USB storage device, Network download
HDD Management	Hot Swap
RAID	RAID 5
Recording Mode	Schedule(Regular/Continuous, Motion Detection, Alarm); Manual Stop
Search Mode	Time/Date; Alarm; Motion Detection (MD); Exact Search (accurate to a second); Smart Search
Playback	1/4/8/16 (maximum 4-ch @ 8MP,8-ch @ 4MP, or 16-ch @ 1080p simultaneous playback)
Protocol Support	HTTP, TCP/IP, IPv4/IPv6/KC, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS,IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, P2P
Remote Control Function	Remote configuration and firmware update via web client
Network Interface	RJ-45 port (10/100/1000 Mbps)
USB Interface	4 port USB
Operating Temperature	0°C ~ 55°C
Relative Humidity	10% to 90%

Power Supply	Single, 100~240 VAC, 50/60 Hz
Certificates	UL,FCC,CE (EN 50130-4) RoHS(EN50581)

Specification of Outdoor Rugged IR Bullet Camera –

Feature	Specification
Image Sensor	1/2.8" CMOS
Lens Type	2.7–13.4 mm, MFZ
Resolution	1920(H) x1080(V)
Minimum Illumination	0.05lux/F1.4(color,30IRE) 0Lux/F1.4(IR on)
IR Distance	Up to 60 m
Electronic Shutter Speed	1/3~1/100000s
Day/Night	BLC/HLC
Noise Reduction	3DNR
Backlight Compensation	WDR 120dB
Edge Base Storage	128 GB Micro SD
Event	No SD card, SD card error, Capacity warning, Network disconnection, IP conflict, Illegal access
Video Compression	H.264H/ H.265 / MJPEG (Sub Stream)
Audio & Alarm	Audio In/Out & Alarm
Video Streaming	Dual stream support
Supported Protocols	IPv4/IPv6, HTTP, HTTPS, SSL,TCP/IP/KC, UDP, UPnP, ICMP, IGMP,SNMP, RTSP, RTP, SMTP, NTP,DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1X
SUPPORTED WEB BROWSERS	Internet Explorer
Standards	ONVIF Profile S,Profile G
ANALYTICS	Motion Detection
Cyber SECURITY	User account and password protection HTTPS, IP Filter, Digest authentication, User access log, TLS1.2 only, AES-128/256, SSH/Telnet closed, sFTP by default, PCIDSS compliance
Operational Temperature	0°C to +60°C
Relative Humidity	0–95%, non-condensing
Ingression protection	IP66
Housing	Metal
Power Supply	12 V DC, PoE
Power Consumption	<11.4W

Certificates	UL,FCC,CE (EN 50130-4)RoHS(EN50581),BIS
Compatibility	Camera should support existing Honeywell HUS & MAXPRO VMS software

Specification of Indoor IR Dome:

Image Sensor	½.8" CMOS
Lens Type	2.8 mm
Resolution	1920×1080 (2 MP)
Minimum Illumination	Color : 0.001Lux @f/2.0, B/W : 0Lux @f/2.0(IR on)
IR Distance	Up to 30 m
Electronic Shutter Speed	1/3–1/100 000 s
Day/Night	BLC,HLC
Noise Reduction	3DNR
Backlight Compensation	WDR 120dB
Edge Base Storage	128 GB Micro SD
Event	Motion Detection, Video Tampering, Scene Changing, Tripwire Intrusion
VIDEO COMPRESSION	H.264 and MJPEG codec,
Video Streaming	triple stream support
Supported Protocols	Ipv4/Ipv6, HTTP, HTTPS, SSL,TCP/IP/KC, UDP, UpnP, ICMP, IGMP,SNMP, RTSP, RTP, SMTP, NTP,DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1X
COMPATIBILITY	ONVIF Profile S, Profile G
OPERATING TEMPERATURE	0°C to +60°C
RELATIVE HUMIDITY	0–95%, non-condensing
Cyber SECURITY	User account and password protection HTTPS, IP Filter, IEEE 802.1x, Digest authentication, User access log, TLS1.2, AES-256, SSH/Telnet closed, FTP disabled, PCI-DSS compliance, Hardware chipset for private key
Analytics	Motion Detection, Video Tampering, Scene Changing, Tripwire Intrusion
Housing	IP66, IK10

Power Supply	12 V DC, PoE
Power Consumption	Maximum 4.5W
Certificates	UL,FCC,CE (EN 50130-4)RoHS(EN50581),BIS
Compatibility	Camera should support existing Honeywell HUS & MAXPRO VMS platform

Specification of Outdoor Long Range Bullet

Feature	
Image Sensor	1/2.8" CMOS
Lens Type	5-50 mm, DC-Iris, F1.9-F2.1, MFZ
Resolution	2592(H) x 1944(V)
Minimum Illumination	0.007 Lux/F2.0 (Color,30IRE), 0 Lux/F2.0 (IR ON)
IR Distance	Min 100 Mtrs built-in
Electronic Shutter Speed	1/8 ~ 1/32,000
Day/Night	WDR, BLC, HLC
Noise Reduction	3D DNR
Backlight Compensation	WDR 120dB
Edge Base Storage	Micro SD (up to 256 GB)
Event	Video motion detection,Recording notification, Event notification using Email and MicroSD card
Audio	1 In/Out
Alarm	1 In/Out
Built-In Cyber Security	User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2 only, Stream encryption, AES128 / 256, SSH , Telnet closed
Video Compression	H.265 HEVC,H.264/MJPEG, Smart Codec
Video Streaming	Triple Stream
Bit Rates	100K ~ 12 Mbps
Supported Protocols	IPv4, IPv6, TCP / IP, HTTP, HTTPS, UPnP, RTSP / RTP / RTCP, IGMP / Multicast, SMTP, DHCP, NTP, DNS, DDNS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, TLS
SUPPORTED WEB BROWSERS	internet Explorer 11 / Chrome 79.0
Standards	ONVIF Profile G, S, T
Operational Temperature	Minus 30°C to Plus 60°C
Relative Humidity	Less than 90 %, non-condensing
Ingression Protection	IP67
Housing	Aluminum, IK10 Vandal Proof

Power Supply	MAX 10.5W ,PoE,12V DC
Certificates	Emissions- FCC, Immunity-CE, Safety-UL,RoHs- CE (EN 63000),BIS

DETAIL REQUIREMENTS OF CAMERAS:

LOCATION	Outdoor Rugged IR Bullet Camera	Indoor IR Dome	Long Range Bullet Camera
Maths Building	2	2	0
Arts Building	9	14	0
Distance Education Building	1	3	0
Political Science Building	2	2	0
Hindi Bibhag Building	0	2	0
Mass Communication Building	0	2	0
Sociology Building	1	1	0
Nepali Building	1	1	0
Gate No. 3.5	3	0	0
Physics Building	2	4	0
Chemistry Building	2	3	0
Zoology Building	0	3	0
Botany Building	1	3	0
Life Science Building	0	2	0
Tea-Science Two Buildings	1	2	0
Bio Informatics Building	0	1	0
Geography Building	2	1	0
Bio-Technology Building	0	1	0
Micro Biology Building	0	1	0
High Energy and Cosmic Ray Research Center Building	0	2	0
USIC (New & Old) Buildings	1	1	0
Anthropology Building	1	1	0
Himalayan Studies Building	1	2	0

MBA Building	1	3	0
Food Tech(Two Buildings)	2	4	0
COFAM Building	2	0	0
Museum Building	1	1	0
Khelaghar Building	1	1	0
LIS Building	1	1	0
Office of the UE	1	2	0
Boy's Hostel	4	1	0
Faculty Club Building	0	1	0
Health Center Building	0	1	0
Estate Office & Vidyasagar Mancha	6	3	0
LAW College Building	3	3	0
LAW Boys Hostel	2	0	0
Near Padmaja Park Tank More (Pole)	0	0	4
Near Nepali Dept.(Pole)	0	0	2
New USIC and HECR More(Pole)	0	0	4
Near Health Centre / CPM(Pole)	0	0	4
LAW More /Arts Building (Pole)	0	0	3
UGC Guest House More (Pole)	0	0	3
Near Tea Science More (Pole)	0	0	3
Near Chemistry. Dept. Back Side Gate More(Pole)	2	0	2
CIRM Store	6	5	1
Total	62	80	26

Requirement of Video Recorder: 06 (Six)

Requirement of other associated items:

Sl.No	Item/Work	Make	Qty
1	Supply, Installation, Testing & Commissioning of 1 MTR Patch UTP Patch Cord	Standard Makes	348
2	Supply, Installation, Testing & Commissioning of Outdoor	Standard Makes	174

	Housing Box		
3	Supply, Installation, Testing & Commissioning of UTP I/O	Standard Makes	174
4	Supply, Installation, testing & Commissioning of 6TB 7200 RPM Surveillance HDDs	Seagate/WD/Toshiba	12

Registrar (Offg.)
University of North Bengal

University of North Bengal



P.O. Raja Rammohunpur
Dist Darjeeling
Pin 734013

Notice Inviting e-Tender- 93 / R-2022

e-Tenders are invited from reputed Vendors for supply and installation of equipments in the Department of Botany ,University of North Bengal, Rajarammohunpur Campus. For details please visit <https://wbtenders.gov.in>

Sl. No.	Item	Earnest Money	Completion Time
1.	As Per Annexure-I	30,000/-	10 days

TERMS AND CONDITIONS :

- 1) The base price and GST shall be shown separately
- 2) Taxes will be deducted at source as per prevailing rules of Central and State Government.
- 3) The terms and conditions of payment shall be declared clearly.
- 4) Copy of current year Trade License, PAN card, GST registration certificate shall be accompanied with the technical bid documents. [Non Statutory Documents]
- 5) The vendor shall submit authorization certificate from OEM along with the technical bid.(Non Statutory documents).
- 6) The vendor shall provide Company details as per Annexure-II.
- 7) The vendor shall have credential of supply of similar equipments in any University / institution / Govt. Organization. Copy of credential certificate shall be submitted along with technical bid (Non Statutory documents).
- 8) The vendor shall clearly state the pre-installation requirements and take all responsibilities to arrange the same.
- 9) The equipment shall carry minimum 3 (Three) year on site warranty from the date of installation.

- 10) The service engineer shall attend the call within 24 hrs for trouble shooting to be done on no wait basis.
- 11) The successful tenderer shall complete the installation of the equipment within 20 (Twenty) days from the date of issuance of the supply order.
- 12) A sum of Rs.30,000/- shall be deposited to the under noted account of the University through RTGS as earnest money and the copy of receipt challan of RTGS with UTR number shall be accompanied with the technical bid document (Statutory Documents) failing which the tender paper will be treated as cancelled. The earnest money of the unsuccessful quotationer (s) will be refunded without interest after one month of the opening of tender paper and the same of the successful candidate will be refunded without interest after three months of the satisfactory installation of the equipment subject to redressal of complaint, if any.

Name of the A/c: N.B.U (S/B).
Account Number: 10195736768
IFSC Code: SBIN0002096

- 13) The University authority reserves the right to accept or reject any/all quotations.
- 14) The quotation should be valid for at least 90 (ninety) days.
- 15) The brochure /catalogue of the equipment shall accompany the technical bid documents (Non Statutory documents).
- 16) Selection of the agency will be made on the basis of both technical and financial bids. Technical bids and financial bids shall be submitted by online only. Offline submission of tender paper will not be accepted.
- 17) 92% of the total order value shall be released after the successful installation / commissioning of the equipment against the submission of the test report duly certified by the concerned authority. The remaining 8% of the bill value shall be deducted and kept aside as security deposit which will be paid after 3(three) months from the date of satisfactory installation, subject redress of complaints, if any
- 18) The last date of submission of tender form is upto 21.09.2022 at 1.00 p.m. and to be opened on 23.09.2022 at 1.30 p.m.
- 19) The tenderers may remain present at the opening of tender.
- 20) All cases of disputes not covered under the terms & conditions of Tender will be referred to the Vice-Chancellor for a decision which shall be final and binding on both the parties.
- 21) For any clarification regarding tender please contact with the Dr. Piyush Mathur, Asstt. Prof. Department of Botany (Mobile no. 9818124708) email Id- Piyushmathur316@nbu.ac.in and

Dr. Swarnendu Roy, Asstt. Prof., Department of Botany (Mobile no. 9474514100) e-mail Id swarnendubotany@nbu.ac.in University of North Bengal.

22) Date & Time Schedule

SI NO	Particulars	Date & Time
1	Publishing of Tender	13.09.2022
2	Documents download/sell start date (Online)	13.09.2022 AT 6.00 P.M.
3	Bid submission Start Date	13.09.2022 FROM 6.00 P.M.
4	Bid Submission End Date	21.09.2022 UPTO 1.00 P.M.
5	Technical Bid Opening	23.09.2022 AT 1.30 P.M.
6	Offline Submission	NO OFFLINE SUBMISSION ACCEPTED
7	Financial Bid Opening	To be notified

Registrar (Offg.)
University of North Bengal

BIDDERS DETAILS**(To be provided on company letter head)**

NIT NO.:

TENDER ID:

1	NAME OF THE BIDDER	
2.	ADDRESS	
3.	CONTACT NUMBER	
4.	CONTACT PERSON	
4.	EMAIL ID	
5.	BANK DETAILS A/c Name A/c Number Name of the Bank Name of the Branch IFSC	

Authorized Signatory(with seal & Stamps)

List of instruments with specifications

S. No.	Item	Specifications
<u>Specifications of the equipments for Dr. Piyush Mathur</u>		
1.	Autoclave (98ltr) Qty-01	<ul style="list-style-type: none">• Automatic purging for efficient sterilization.• Preset (at 121°C) Digital temperature indicator cum Controller linked to a preset (20 min) timer.• Equipped with float switch & electronic circuit for low water level cut off with alarm.• Fitted with a Safely Valve / Fusible Safety Plug for added safety.• End of cycle buzzer.• Hydraulically die pressed lid from Stainless Steel plate.• All internal joints argon welded, ground and polished to give crevice free internals.• Industrial grade energy efficient ring type heater, custom made for Autoclaves, thus reducing power bills by 16 to 40%.• Pt100 sensor, enabling precise monitoring.• Supplied with traceable certificate for Pressure Gauge and temperature Indicator.• Working Chamber Size (Ø x D) - 450 x 710 mm (18x28'')• Carrier (Ø x D)- 2 of 400 x 330 mm• HEATER- 3.50kW• Gross Dimension / Weight- 1020 x 770 x 1350 mm / 88 kg
2.	Refrigerator (4° C) (250 ltr) Qty-01	<ul style="list-style-type: none">• Double Door, Freezer at top with ice tray, Vegetable basket and bottle shelves, Frost Free, 3 star, 3 Year Warranty, 10 year compressor warranty
3.	Bod Incubator with shaker Qty-01	<ul style="list-style-type: none">• Dimension size- 660w x 5330 x 533h mm.• Product Description -Triple walled inside chamber is made of Stainless Steel 304 Qty. -Insulation by mineral wool. Outside of Mild Steel Sheet furnished in Epoxy Powder Coating. With acrylic glass door.• TEMPERATURE -Electronic Digital Temperature Controller Cum Indicator from 5 Deg. C. to 50 Deg.C. with powerful geared motor. -The Evaporator coil, &

		<p>F.H. Motor with fan.</p> <ul style="list-style-type: none"> • A sealed compressor with all its protective devices . shaking platform accommodate 16 flasks of 500ml capacity. • Lighting system by 4 nos. 60 cms. Fluorescent tubes from top. -Shaking Speed controller from 10 R.P.M. to 160 R.P.M. Electronic R.P.M. Meter. with 7 days/24 hours programme Timer. with 3 step Automatic Voltage Stabilizer. -work on 200/220 Volt A.C. 50 cycles. • SIZE OF SHAKING INCUBATOR INSIDE :660W X 533 DX 533H (MM) • Features of B.O.D. shaking incubator: -Temperature level ranging from 5°c to 65°c Stainless made inner chambers and outer surface made of mild steel with coating of epoxy powder paint -An electronic-digital temperature indicator cum controller for controlling the temperature level of the machine -A standard shaker platform to accomodate 16 flasks ,each having 500 ml capacity and an electronic rpm meter having 7 days programme timer.
4.	<p>Trinocular Biological microscope Olympus CX23 with attached camera</p> <p>Qty-01</p>	<ul style="list-style-type: none"> • Standard complete microscope set with Siedentopf Trinocular head, integrated LED light illuminator, Anti- • Fungal coated Plan Achromatic Objectives 4x,10x, 40x (spring) & 100x (oil, spring), paired wide field eyepieces 10x (F.N.20). • Features : UIS2 Infinity Plan Optics for excellent image flatness, Siedentopf binocular head with IPD adjustment, Anti-fungus treatment for tropical durability, Highpoint paired eyepieces (F.N.20), Abbe condenser with high performance aspheric lenses for bright & uniform illumination throughout the field of view, Window in arm for convenient carrying & Ergonomic design for user convenience, SMPS power supply for flicker free illumination , Rackless specimen stage for user safety and comfort, specimen stage focus-lock prevents any accidental damage to objectives. • Camera specifications: <ul style="list-style-type: none"> • Resolution: 3840 x 2160 (8,294,400 Pixels) • Sensor size: 1/1.8" • Piel size: 2.0 um x 2.0 um • Dynamic range: 72db (Non-HDR Mode) • Exposure: 3.9ms - 320ms, Automatic &

		<p>Manual</p> <ul style="list-style-type: none"> • White balance: Real-time auto, single auto, manual • Preview modes: 30FPS@3840x2160, 2592x1944, 1920x1080, 1024x768, 640x840 • Record format: <ul style="list-style-type: none"> • Image: JPG, BMP, PNG, TIFF, PDF • Resolution: 3840x2160, 2592x1944, 1920x1080, 1024x768, 640x480 • Video: MJPG Format AVI File • Resolution: 1920x1080, 1024x768, 640x480 • Microsoft Windows XP, 7, 8, 8.1, 10 (32 & 64 Bit) • CPU: Dual-core 3.0 GHz or more CPU • 4G Memory or More • 10 GB Avil Hard Disk Space Min • Wireless Network Card
5.	<p>Laboratory work table with granite top mounted with shelves and drawers</p> <p>Qty-02</p>	<ul style="list-style-type: none"> • Laboratory Work Stations of 8 ft x 3ft and height 750 mm with completely flexible modular system. Each module should have independent base frame. Necessary leg space should be provided between two modules wherever required. Rear portion of the leg space should be covered with the enclosure panel. • Work table should consist of: <ul style="list-style-type: none"> • Heavy duty under cabinets & drawers • Worktops: Work top in 19 mm thick Jet Black Granite construction with half moulded. • Reagent Rack: Worktop mounted reagent rack of 3 ft height mounted on table top in double tier design. Corrosion resistance material • Electrical Fittings: Electrical socket cum switch should be provided. Sockets and switches complete with internal wiring. Fittings should be mounted on electrical trunk.
6.	<p>Chemical racks</p> <p>Qty-02</p>	<ul style="list-style-type: none"> • Chemical storage cabinets (6 ft x 3ft) metallic body with glass upfront doors
7.	<p>Desktop computers</p> <p>Qty-01</p>	<ul style="list-style-type: none"> • i3 10th Gen processor, 8 GB RAM, 256 GB SSD, 19.5” Full HD IPS Monitor, All-in-One PC, with Registered Windows 11 and MS Office 2019, with wireless

		keyboard and wireless mouse
8.	UPS for computer Qty-01	<ul style="list-style-type: none"> UPS with Load Capacity of 360Watts / 600VA, Three Battery Backed up and Surge Protected 6A, 2/3 Pin Output Indian Power Socket, Automatic Voltage Regulation (AVR), Compatible with Desktop PC
9.	Laserjet Color Printer Qty-01	<ul style="list-style-type: none"> Speed 27 to 30 PPM (Color), Print, Scan, Copy Print Technology Laser Color Scan Speed ADF Printing wi-fi, USB, LAN, Memory 512 MB flash or above, 512 MB DRAM, Duplex Printing, Internal Built-in Power Supply, Print Resolution 600*600 or above
<u>Specifications of the equipments for Dr. Swarnendu Roy</u>		
10.	Flame photometer	Flame photometer with all accessories, Auto Gas Cutoff Facility, Auto Flame Failure Detection Facility, Inbuilt Thermal Printer (In Model 672), μ P Based With Printer Interface, Five Element Measurement In Single Aspiration of the Sample, Curve Calibration Programmability using Maximum of 25 Standards, Data Processing Through Curve Fitting Techniques - Least Squares, Quadratic, Multiple Calibration Curves Saving Facility, Samples Data Storage Facility, Online Help Key, Printer Attachment Facility, Measurement in ppm & meq, with Na ⁺ , K ⁺ and Ca ⁺² filters
11.	pH meter	<p>pH meter 3 point, Microprocessor controlled, Range - 2.00 to 14.00 pH, pH Resolution - 0.01 pH, Accuracy \pm 0.01 pH, Calibration Points up to 3 points, pH Buffer options USA (pH 4.01, 7.00, 10.01) or NIST (pH 4.01, 6.86, 9.18), Temperature Compensation - 0-100°C Manual /Automatic, Hold Function, Auto Off Function Available, Connector BNC</p> <p>Display LCD, Power Requirements DC9V using AC adapters, 220V AC/ 50Hz, Accessories including pH Electrode, Calibratron pH Buffers, Temperature probe, Electrode stand</p>
12.	Conductivity meter	Conductivity/ TDS meter with 3 point calibration, Microprocessor controlled, Range -0-20.00, 200.0, 2000 μ S/cm, 20.00, 200.0 mS/cm (5 auto ranges), Accuracy - 1%

		F.S, Resolution 0.01,0.1, 1, Conductivity Buffer Option 10 pS/cm, 84 pS/cm, 1413 pS/cm, 12.88 mS/cm, 111.8 mS/cm (any three), Temperature compensation 0-100 °C, 32-212 F, Manual or Automatic, Cell Constant K=0.1,1,10, Normalization Temperature 25 °C, Hold Function Available, Auto Off Function Available, Connector 6-pin Mini Plug, Display LCD, Power Requirements DC 9V using AC adapters, 220 V AC/50 Hz
13.	-20 °C Freezer 200 Litres	UV grade plastic material, Door lock for restricted accessibility, Castor wheels for easy mobility, Energy efficient compressor, Stucco aluminium inner liner for improved hygiene, Anti-corrosive pre-coated body, Spring loaded hinges for effortless usage, Sunken handle for safer operation, Dual temperature freezing cooling, Gross Volume (In Ltr.) 205 / 210, Product Dimension (WxHxD) [mm] 834x665x830 / 925×575×826, No of Doors – 1, Refrigerant Type - R-134a /R600a, Basket/Shelves – 1, Temperature Range <- 18°C(Freezer), 0° to 7°C(Cooler), PUF Thickness 60mm / 65mm
14.	UV Visible Spectrophotometer	Single beam scanning UV-VIS spectrophotometer, Wavelength Range - 190-1100 nm, auto setting wavelength, Full length scanning, Bandwidth – 2 nm, Optical System – Single Beam, Grating 1200 lines / mm, Wavelength Accuracy - ±0.8 nm, Wavelength Repeatability - ±0.2 nm, Wavelength Setting – Auto, Stability - ±0.002 A/h @ 500nm, Data Output USB, Printer Port Parallel Port, Display LCD, Cell Holder - 10 mm 4 position cuvette holder, Lamps - D2 Lamp & Tungsten Halogen Lamp (W Lamp), Detector -Silicon Photodiode, Power Supply - AC 220 V/ 50 Hz, Accessories including Software, 10 mm Glass Cuvette – 4 pcs, 10 mm Quartz Cuvette – 2 pcs, power cord
15.	Weighing Balance	Maximum capacity – 220 g, Readability - 0.0001 g, Repeatability - ± 0.2 mg, Internal Calibration, Display – Touch Screen, Response Time - 3-5 sec, Pan Size – 80 mm, Tare Range – Full, Operating Temperature +15 °C to +25 °C,

		Weighing Chamber – Glass/ Fiber, Interface RS232C, Power Supply AC 220V / 50-60 Hz
16.	Cryocan IBP 7 Litres	IBP or equivalent grade container for liquid nitrogen, Tank Material - Aluminium Alloy, Capacity - 7.9 Litre, Container Type - Open Top Container, Usage/Application - Preservation & Storage of Samples, Color – white
17.	Laboratory working Table	<ul style="list-style-type: none"> • Laboratory Work Stations of 8 ft x 3ft and height 750 mm with completely flexible modular system. Each module should have independent base frame. Necessary leg space should be provided between two modules wherever required. Rear portion of the leg space should be covered with the enclosure panel. • Work table should consist of: <ul style="list-style-type: none"> • Heavy duty under cabinets & drawers • Worktops: Work top in 19 mm thick Jet Black Granite construction with half moulded. • Reagent Rack: Worktop mounted reagent rack of 3 ft height mounted on table top in double tier design. Corrosion resistance material <p>Electrical Fittings: Electrical socket cum switch should be provided. Sockets and switches complete with internal wiring. Fittings should be mounted on electrical trunk.</p>
18.	Desktop Computer	i3 10 th Gen processor, 8 GB RAM, 256 GB SSD, 19.5” Full HD IPS Monitor, All-in-One PC, with Registered Windows 11 and MS Office 2019, with wireless keyboard and wireless mouse
19.	UPS for Computer	UPS with Load Capacity of 360Watts / 600VA, Three Battery Backed up and Surge Protected 6A, 2/3 Pin Output Indian Power Socket, Automatic Voltage Regulation (AVR), Compatible with Desktop PC

20.	Laserjet Colour Printer	Speed 27 to 30 PPM (Color), Print, Scan, Copy Print Technology Laser Color Scan Speed ADF Printing wi-fi, USB, LAN, Memory 512 MB flash or above, 512 MB DRAM, Duplex Printing, Internal Built-in Power Supply, Print Resolution 600*600 or above
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Registrar (offg.)
University of North Bengal