



BERHAMPUR UNIVERSITY

BHANJA BIHAR, BERHAMPUR-760007, GANJAM, ODISHA

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Ref: BU/CoEBESO& BT/2023/077

Date: 08/08/2023

Quotation Call Notice

Sealed quotations (Two bid system) are invited for the purchase of Laboratory equipments, GPU and Licensed softwares from original manufacturers, distributors, authorized dealers or registered vendors for the CoEBESO, Innovation and Incubation Centre and PG Dept. of Biotechnology. **The last date for submission of sealed quotations is 28th August 2023.** The undersigned reserves the right to cancel the Open Tender Notice without assigning any reason thereof. The interested bidder/supplier/ manufacturer/ authorised dealer/ vendor should download the bid document from the Website www.buodisha.edu.in. Alternatively, bid document can also obtain by sending email request to the Coordinator, Coe-BESO, PG Dept. of Biotechnology, Berhampur University through email ID “jp.bt@buodisha.edu.in” on or before 25th August 2023.

Coordinator CoE BESO

Terms/ Conditions Details:

1. An amount (Non-refundable) of ₹2,000/- towards cost of RFP (Request for proposal) be deposited in the shape of SBI DD drawn in favour of the Comptroller of Finance, Berhampur University payable at **State Bank of India, Bhanjabihar (2107).**
2. Submit the **EMD, @2% (Refundable)** of the estimated value of the goods/software in the shape of Demand Draft drawn in favour of the **Comptroller of Finance, Berhampur University payable at State Bank of India, Bhanjabihar (2107), along with the technical bid.**
3. This is two bid system. The firm shall quote both the **Technical Bid** consisting of all technical details along with commercial terms & conditions and **Financial Bid** indicating item-wise price per unit as per our specification including all Taxes, Transportation and installation. **Technical Bid** and **Financial Bid** should place in separate sealed covers duly superscribed each and send both technical bid and financial bid packets in another sealed cover superscribed with the **‘BID for Laboratory equipments, Softwares and GPU’** through **Speed Post / Registered Post** only addressed to **‘Coordinator, CoEBESO, PG Dept. of Biotechnology’**. **Technical bid shall be opened on 28th August, 2023 at 4:00 P.M.**
4. The technical bid shall be evaluated on the basis of technical parameters, and other requirements as per advertisement. The Financial Bids of qualified firms only shall be opened after evaluation of Technical Bids submitted by the bidders.
5. Splitting of the bid (item wise) is allowed in this quotation call notice.



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6. These quotations shall remain in force for the Financial Year 2023-24. The quantity mentioned in the specification is indicative only and it may vary during the time of order.
7. Equipments, Materials and softwares in good condition should be delivered at the Central Stores, Berhampur University, Bhanjabihar, Berhampur-760007.
8. The transportation, installation and demonstration is at the cost of the Bidder. The bidder will have to provide service at their own cost for the maintenance services required at least for two years.
9. Warranty for each item is minimum for a period of Two years
10. In case of imported articles, the selected firm will take necessary steps for exemption of Custom Duty etc. at its own risk.
11. The firm should supply the articles within four to eight weeks from the date of issue of Purchase/ Supply Order.
12. Copy of IT of previous three financial years, PAN CARD, valid & up-to-date GST Registration Certificate and Audited Financial Statement of previous three financial years must be enclosed with Quotation/ Tender paper.
13. Quotation/ Tender, incomplete in any respect, is liable for rejection.
14. The University reserves all the rights to modify the contents of the RFP, extension of last date of receipt of Quotation and to accept or reject any /all Quotation in full or in part without assigning any reason thereof.
15. Legal Dispute, if any, shall be within the Jurisdiction of Civil Court, Berhampur, Dist.- Ganjam, Odisha.
16. Depending on the urgency of the situation, penalty shall be imposed in case of delay in delivery of goods and services.
17. Payment shall be made after necessary verification and successful installation of the laboratory equipments, softwares and GPU. Goods and Service providers cannot claim any penalty or interest in case of delay in Payment caused due to verification of the quality and quantity of the Goods by the competent Technical person of the University.
18. The specification compliance in a tabular format should be submitted component wise in case of laboratory equipments and GPU.
19. Any query relating to the **procurement of Laboratory equipments, Softwares and GPU**, please contact Coordinator, CoEBESO, P.G. Department of Biotechnology via email id: jp.bt@buodisha.edu.in .

COORDINATOR, CoE BESO



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DETAILED SPECIFICATIONS FOR LABORATORY EQUIPMENTS, SOFTWARES AND GPU ITEM WISE

Item 1: Carbon dioxide Incubator with regulator and Cylinder (Two sets)

Component	Specifications
CO2 Incubator	<p>CO₂ incubator with 100-160 Lt of internal capacity, Temperature management: 4°C above ambient to 50°C with increment of 0.1°C, Temp. accuracy: ±0.4°C at 37°C , Temp. stability: ± 0.1°C at 37°C, Temp. uniformity: ± 0.3°C at 37°C, CO₂ gas range: 0.1 – 20% with control increment of 0.1%, CO₂ gas accuracy: ± 0.3% at the specified Relative Humidity (RH) at 37°C and ambient 22°C, CO₂ gas stability: ± 0.1% at 37°C and ambient 22°C, Co2 gas uniformity: ± 0.1% at 37°C and ambient 22°C across the chamber. CO₂ recovery rate: at least of 6 min after door closing to attain 5% CO₂. CO₂ sensor: Dual Channel Infra-Red (IR), NDIR type with auto-calibration features to ensure accuracy of sensor automatically and should withstand at least 180°C during high the temperature disinfection (No need to remove). Should have six-sided direct heating elements to ensure even distribution of heat throughout the entire incubator chamber. The Inner chamber should be single stainless-steel sheet with deep-drawn and seamless design with no corners, welds or joints for ease of cleaning. Should come with a removable humidity tray for easy cleaning and refilling of distilled water. Should be “fan less” design to reduce chance of contamination, reduce noise level, minimum air turbulence and bigger usable capacity. High-Temperature Disinfection of at least 180°C for 2 hours. Shelves: standard 3-4 perforated stainless-steel shelves of 1.5 mm thickness with single inner glass door. Display: at least 5inch LCD/ LED display for control of temperature and alarms. Should come with an inline pressure regulator to ensure less gas consumption and prevent overshooting of pressure. The system should have BMS relays built in and option to incorporate onto Data monitoring and documentations modules. Should have optional building management system relays. Should have optional incubator software command which allows tracking key operational information such as time, temperature, CO₂ concentration and humidity.</p>
Gas Cylinder and Regulator	CO ₂ gas cylinder with 30kg CO ₂ gas capacity, CO ₂ gas regulator, N ₂ gas cylinder with 30kg N ₂ gas capacity & N ₂ gas regulator must be supplied.
Online UPS	2 KVA Online UPS (single Phase) with 1 hr backup must be provided



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Warranty	Three Years
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Item 2: Inverted Fluorescence Microscope with PC and Accessories (One Set)

Inverted Microscope for Brightfield, Phase Contrast & LED Epi-Fluorescence Attachment along with Camera & Image Analysis Software & Desktop Computer. The Microscope, Camera & Software should be from same manufacturer for better compatibility.

A. Microscope		
1	Optical System	Chromatic Aberration Free Infinity Optical system
	Body	Inverted Microscope Body Integrated Diascopic Illumination Pillar, built in LED Illumination, objective elevation system for focusing. ON/OFF Switch & Diascopic & Epifluorescence selector switch should be there. Epi-Fluorescence attachment should be included.
2	Illumination	High luminescence white LED diascopic illumination with preferably built in Fly-Eye Lens
3	Focus	Via nosepiece up/down movement, coarse & fine
4	Eye pieces	Pair of 10X (FOV 22mm) with diopter adjuster
5	Tube	Binocular Tube inclined at 45°, Pupillary distance 50-75mm, Siedentop type
6	Camera Port	Attachable Camera Port, Eyepiece: Port 100/0: 0/100
7	Nose piece	Quintuple Nosepiece
8	Stage	Attachable Mechanical Stage, cross travel 125(X) x 76(Y) mm
9	Condenser	ELWD condenser, N.A. 0.3 WD .75mm or better, removable
10	Holder	Universal Holder for Terasaki plate holder, glass slide, hemocytometer, Ø35-65dish
11	Slider	Precentered Phase Slider
12	Observation	Brightfield, phase contrast, fluorescence
13	Fluorescence attachment	Epi Fluorescence Filter Turret up to 3 position filter cubes, LED Fluorescence Illumination. Fluorescence Filter Cubes of DAPI, FITC & TRITC
14	Objectives	Super Plan Fluor 20X; Super Plan Fluor ELWD 40X; Super plan Fluor ELWD 60X, Plan Fluor 100X
	Dust cover should be provided for the Microscope	
B. Camera		
	Image sensor	Color CMOS sensor with size of ½ “or better
	Resolution	Actual pixels 5.5 megapixel or more
	Speed	Full resolution 15 fps; maximum 30 fps
	Exposure	Manual and continuous automatic
	Exposure time	100 μ seconds to 30 seconds
	Interface	USB 3.0
	Mount	C mount
C. Software		



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The software should be suitable for applications such as photo documentation. Other facilities such as: report generation, basic measurement, time lapse, z profile, movie creation, tiling, macro creation, multichannel imaging, image stitching, annotation. The make should be from same manufacturer. Note: The software should be dedicated to original licensed. No free software that comes with the camera will be acceptable. No third-party software will be accepted

D. Computer

The Firm should also quote Branded Desktop (Hp/Dell/Lenovo) Computer with the following specifications: i5processor,8GB RAM,1TB HDD, DVDRW,24” LED Monitor, Keyboard, Mouse, USB2.0 & USB3.0, WIN 10 Pro(64bit)
Warranty for Microscope, Camera, PC: Two/Three years

Item 3: GPU

Item	Specification and Description
1	<p>GPU</p> <p>NVIDIA GeForce RTX 4090 Founder Edition with following features- Video Encode: 2x 8th Generation; Video Decode: 5th Generation; Power: Graphics Card Power (W): 450, Minimum System Power (W): 850 W; Operating Temperature: Maximum GPU Temperature (in C): 90; NVIDIA CUDA Cores:16384; Boost Clock: 2.52 (GHz); Cores: Ray Tracing Cores: 3rd Generation, Tensor Cores: 4th Generation; Memory Interface Width: 384-bit; Standard Display Connectors: HDMI(2), 3x DisplayPort(3); Multi Monitor: 4; HDCP: 2.3; Display Resolution: 7680x4320Connectors: 3x PCIe 8-pin cables (adapter in box) OR 450 W or greater PCIe Gen 5 cable; Standard Mount Interface: 24 GB GDDR6X; Base Clock: 2.23 (GHz); Product Dimensions: Length: 304 mm, Width: 137 mm; Rashi Part Code: RTX4090; Expansion Slots: 3-Slot (61mm) Warranty-3 years</p>
2	<p>GPU</p> <p>NVIDIA GeForce 70W T4 accelerator with following features- GPU Architecture NVIDIA, Turing NVIDIA Turing Tensor Cores 320, NVIDIA CUDA® Cores 2,560, Single-Precision 8.1 TFLOPS, Mixed-Precision (FP16/FP32) 65 TFLOPS, INT8 130 TOPS, INT4 260 TOPS, GPU Memory 16 GB, GDDR6 300 GB/sec, ECC Yes, Interconnect Bandwidth 32 GB/sec, System Interface x16 PCIe Gen3, Form Factor Low-Profile PCIe, Thermal Solution Passive, Compute APIs; CUDA, NVIDIA TensorRT™, ONNX. Warranty- 3 years</p>

Item 4: Softwares (Licensed)

Software	Specifications/Descriptions
1 Endnote 20 (Single User)	Software Description: Wide collection of predefined reference styles, PDF reading facility, improved reference search through search engines, Share selected groups of references, manage team access and track activity and



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		<p>changes. Must have tutorial for statistical analysis.</p> <p>Software Version/ Date of launch of the version: version 20</p> <p>Type of License: Full license</p> <p>Duration of subscription: life time</p> <p>Number of licenses: 01</p> <p>License delivery mode: Dongle or Paper or Electronic Licence</p> <p>Type of installation: Installation/Integration/ Configuration</p> <p>Updates and fixes: Unlimited updation for Patches and Bug fixes within maintenance & support period.Supported operating system: Windows</p>
2	Graphpad Prism (single user)	<p>Software Description: Basic statistical analysis, descriptive statistics, correlation, generation of heatmap, preparation of coustomizable plots, facility of data exportation from excel sheet, Probability Distributions, Normality test, Linear Regression, Logistic Regression, Hypothesis Testing, ANOVA, Nonparametric Tests, MANOVA, Survival Analysis, violin plot, forest plot generation.</p> <p>Software Version/ Date of launch of the version: Prism 9</p> <p>Type of License: Perpetual Academic license</p> <p>Duration of subscription: Life time</p> <p>Number of licenses: 01</p> <p>License delivery mode: Dongle or Paper or Electronic Licence</p> <p>Type of installation: Installation/Integration/ Configuration</p> <p>Updates and fixes: Unlimited updation for Patches and Bug fixes within maintenance & support period.</p> <p>Supported operating system: Windows</p>
3	IBM SPSS Base MODULE, IBM SPSS regression and IBM SPSS Data preparation (Single User)	<p>Software Description: Descriptive statistics, bivariate statistics, dta editor, transformation, reporting, geospatial analysis, wide range of graphs, reliability analysis, ROC, meta-analysis, power analysis, Multinomial logistics regression, binary logistic regression, constrained nonlinear regression, nonlinear regression,Quantile regression, probit analysis. Automated data preparation, validate data, identify unusual cases, optimal binning</p> <p>Software Version/ Date of launch of the version: version 28</p> <p>Type of License: Perpetual Academic license</p> <p>Duration of subscription: Life time</p> <p>Number of licenses: 01</p> <p>License delivery mode: Dongle or Paper or Electronic Licence</p> <p>Type of installation: Installation/Integration/ Configuration</p> <p>Updates and fixes: Unlimited updation for Patches and Bug fixes within maintenance & support period.</p> <p>Supported operating system: Windows</p>
4	Comprehensive Meta Analysis (CMA)-single	<p>Software Description: Data entry more than 100 formats, analysis from continuous and dichotomous data, funnel plot preparation, egggers regression analysis, forst plot, generation of high definition forest plots, sensitivity</p>



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	user	<p>analysis, computational option both in random and fixed models, Import data from other programs (STATA, Revman, Excel, and SPSS), measurement of effect size.</p> <p>Software Version/ Date of launch of the version: Version 4 Type of License: Profesional version Academic pricing Duration of subscription: two years Number of licenses: 01 License delivery mode: Dongle or Paper or Electronic Licence Type of installation: Installation/Integration/ Configuration Updates and fixes: Unlimited upadation for Patches and Bug fixes within maintenance & support period. Supported operating system: Windows</p>
5	PyMOL (Single User)	<p>Software Description: MAE import: more ribbon styles and label improvements, MAE import dialog: discrete states support, Builder: Nucleotides from the PDB can now be extended, APBS plugin: PDB2PQR 3 compatibility, STL export: average normals when exporting, `sphere_mode` s 10/11 scaled, Builder: "Remove Residue" button added, Load collada as CGO, DX binary map import support (*dxbin), PDB/MMTF export: symmetry information now added, Improved FASTA import, Support for map.gz and mrc.gz extensions, Builder: Improved fuse command (disallows hypervalent bonds, substitute monovalent atoms instead of attaching to them), Panel: Customizable Keyboard Shortcut Menu, Panel: Properties inspector now supports unsetting settings with "Delete" key, Ray interior colors now match primitives with `set ray_interior_color, atomic` 120, Isomesh transparency support, `sphere_mode` 5 removed (9 as replacement), Curved cartoon cylindrical helices `cartoon_cylindrical_helices=1`, Isosurface generation via marching cubes with setting `isosurface_algorithm, (0, 1)` (0 requires VTKm)</p> <p>Software Version/ Date of launch of the version: Version 2.5 Type of License: Laboratory and Classroom license Duration of subscription: 03 years Number of licenses: 01 License delivery mode: Dongle or Paper or Electronic Licence Type of installation: Installation/Integration/ Configuration Updates and fixes: Unlimited upadation for Patches and Bug fixes within maintenance & support period. Supported operating system: Windows</p>

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Format for the submission of Technical specification compliance while submitting the Technical bid (This should be submitted item wise in the bidders letter head Only)

Name of the Item:

Component: _____					
Sl.	Specification desired	Make and Model	Specification compliance		Remarks
			Yes	No	
1					
2					
3					
.					
.					
.					

Signature and seal of the Bidder

Date:

Address: