

# CENTRE OF EXCELLENCE IN INTEGRATED OMICS AND COMPUTATIONAL BIOLOGY

(Supported by the Govt. of Odisha and WB-OHEPEE)

### UTKAL UNIVERSITY, VANI VIHAR

BHUBANESWAR-751 004, ODISHA

### **Tender Paper**

For Procurement of Equipment/Consumables/ AMC of
Existing Equipment
Financial year 2023-2024

Last date for submission of sealed Tender: Dt.27/03/2024 at 1.00 PM Date and Time for opening of sealed Tender: Dt.27/03/2024 at 4.00 PM

Tender paper can be downloaded from

www.utkaluniversity.ac.in



## CENTRE OF EXCELLENCE IN INTEGRATED OMICS AND COMPUTATIONAL BIOLOGY

(Supported by the Govt. of Odisha and WB-OHEPEE)
UTKAL UNIVERSITY, VANI VIHAR, BHUBANESWAR-751 004, ODISHA

#### TENDER PAPER

Sealed tenders are invited from authorized dealers/stockiest/manufacturers for supply of equipment, consumable items (i.e., chemicals, kits, glass wares, plastic wares, lab wares, custom services for Molecular Biology/Immunology/ Transcriptome Analysis/Proteomics/Sequencing/Primer/Peptide Synthesis and Annual Maintenance of existing equipment (i.e., Millipore Water Purifier (Make-Merck-Millipore), RT-PCR (Make-Applied Bio-system), Deep Freezer (-80°C Make-Thermo), CO2 Incubator (Make-Eppendorf), for the financial year, 2023-2024. Details information and tender documents of the above items will be available at the website www.utkaluniversity.ac.in .The tender paper, complete in all respects, will be received by the undersigned within 14 (fourteen) days of publication of this advertisement (i.e., 27.3.2024 (Wednesday) by 1.00 PM). The cost of the tender paper is Rs.300.00 (Rupees three hundred) only nonrefundable through Demand Draft in favour of Coordinator and Cocoordinator, COE in IOCB and payable at SBI, Utkal University campus Branch, Bhubaneswar. The sealed tender will be opened on 27.03.2024 (Wednesday) at 4.00 P.M. The Authority reserves the accept/reject/cancel/change/modify any part or all tenders without assigning any reason thereof. The Authority will not be held responsible for any postal delay.

- EMD value for each category of item mentioned against each item in the respective pages.
- Validity of the Tender & period of supply during the financial year
   2023-2024 or/ as decided by the competent authority/ funding agency.

#### **Eligibility Criteria:**

- 1. Tender paper is to be downloaded and submitted in the prescribed format. Tender fee and EMD are to be accompanied with the tender paper as mentioned against each item in the respective pages. EMD and tender fee are to be submitted in favour of the "COORDINATOR AND CO COORDINATOR, COE IN IOCB" in shape of a Bank Draft drawn on any Nationalized Bank payable at SBI, Utkal University campus Branch, Bhubaneswar. No cash payment shall be received in this regard.
- 2. Tender forms are not transferable.
- 3. Bids have to be given in the desired format separately for each equipment, consumable items (i.e., chemicals, kits, glass wares, plastic wares, lab wares, custom services for Molecular Biology/Immunology/TranscriptomeAnalysis/Proteomics/Seque ncing/Primer/Peptide Synthesis and Annual Maintenance of existing equipment (i.e., Millipore Water Purifier (Make-Merck-Millipore), RT-PCR (Make-Applied Bio-system), Deep Freezer (-80°C Make-Thermo), CO2 Incubator (Make-Eppendorf).
- 4. Tender forms should be submitted in a sealed envelope along with the following documents.
  - (i) GST Certificate & Income Tax Clearance
  - (ii) Excise License (if needed).
  - (iii) Declaration Certificate and undertaking as per our format.
  - (iv) Original Price list with seal and signature of the tenderer on all pages at the bottom (No Tender shall be accepted without original price list / catalogue/ brochure) of the year 2023-2024.
  - (v) Original Authorization Certificate/ manufacture certificate from the Company.
  - (vi) Rates should be inclusive of all taxes, clearance and C.I.F. up to the Centre of Excellence in Integrated Omics & Computational Biology, 1st Floor, CIF Building (Adjacent to

Law Department), Utkal University, Bhubaneswar, along with prerequisites of installation.

(vii) DSIR Certificate will be provided by us if required.

#### N.B.:

- Last date for submission of sealed tender is Dt. 27.03.2024
   (Wednesday) at 1.00 P.M. at the Office of the Coordinator, Centre of
   Excellence in Integrated Omics & Computational Biology, 1st Floor,
   CIF Building (Adjacent to Law Department), Utkal University,
   Bhubaneswar.
- 2. The sealed tender will be opened on Dt. 27.03.2024 (Wednesday) at 4.00 P.M. in the Office of the Coordinator, Centre of Excellence in Integrated Omics & Computational Biology, 1st Floor, CIF Building (Adjacent to Law Department), Utkal University, Bhubaneswar in the presence of University purchase committee.
- 3. Bank Guarantee for EMD is not valid.
- 4. The authority may accept/reject/cancel/change/modify any part or tender as a whole without assigning any reason thereof.
- 5. The Authority is not responsible for any postal delay.
- 6. All supplies have to be made within 31st March, 2024 or 15 days from the date of confirmed order whichever is earlier or as decided by the University competent authority/ funding agency.
- 7. EMD of the parties whose Tender is not accepted will be returned back to the tenderer on submission of a stamped receipt.
- 8. Total pages of Tender paper: 53
- Confirmation of the order will have to be submitted by the party within 7 days of the confirmed order.
- 10. Compliance/ noncompliance of the technical specification must be mentioned along with tender.
- 11. Hard copy of the tender documents must be accompanied with soft copies by a pen drive.

Coordinator CoE-IOCB

COE-Integrated Omics & Computational Biology, Utkal University

## (In Company's Letterhead) Declaration

| - |   |   |   |   |   |    |    |   |    |    |   |
|---|---|---|---|---|---|----|----|---|----|----|---|
| D | a | ٠ | e | ٠ |   | ì. | ı. |   | a. | ď. | 2 |
| _ | • | • | ~ | ۰ | ۰ | ۰  | ۰  | ۰ | ۰  | ۰  | ۰ |

We hereby declare that we will quote same discount (i.e., as per price quoted for the CoE-IOCB, Utkal University), if other Departments within the Utkal University, Vani Vihar intend to purchase the items approved in this tender during the financial year 2023-2024.

Seal & Signature of the

Manufacturer / Authorized Dealer

Date:.....

#### Undertaking regarding Blacklisting & Non-Debarment

| Dated:  |             |         |
|---|-------------|---------|
| We M/s  | hereby      | confirm |
| and declare that we are not blacklisted/De-registered | /debarred   | by any  |
| Government department/ Public sector Undertaking/     | Private Sec | tor/ or |
| any other agency for which we have Executed/ Under    | taken the   | works/  |
| Services during last 5 years.                         |             |         |

Seal & Signature of the

Manufacturer / Authorized Dealer

Date:.....

Co-ordinator
COE-Integrated Omics
& Computational Biology,
Utkal University

### Consumable Items

Consumable items (i.e., chemicals, kits, glass wares, plastic wares, lab wares, custom services for Molecular Biology/Immunology/Transcriptome Analysis/ Proteomics/ sequencing/Primer/Peptide Synthesis.

### **CHEMICALS**

### **FORMAT**

| Fre    | om:  |   |  |  |
|--------|--|---|--|--|
| M/     | 'S   |   |  |  |
| To,    | To,  |   |  |  |
| The    | e Coordinator,                                   |   |  |  |
| Cer    | ntre of Excellence in Integrated Omics & Computa | tional Biology  |  |  |
|        | kal University, Vani Vihar, Bhubaneswar-751 004  |   |  |  |
| Sul    | b: Supply of Consumables items for the financi   | al year 2023-2024.  |  |  |
|        | Advertisement (Name of the News paper)           |   |  |  |
|        | D Value: Rs.10,000.00 (Rupees ten thousand)      |   |  |  |
|        | ntioned above.(D.D. NoDated                      |   |  |  |
| SI.    | Name of the Manufacturer / Brand                 | Discount (%) on the Price List                              |  |  |
| No.    | Chemical   |   |  |  |
| 1.     |  |   |  |  |
| 2.     |  |   |  |  |
| 3.     |  |   |  |  |
| 4.     |  |   |  |  |
| 5.     |  |   |  |  |
| Dated: | M  | Signature of the<br>anufacturer / Authorized Dealer<br>Seal |  |  |

## KITS/Antibodies

#### **FORMAT**

| Fı    | rom:                                      |                               |
|-------|---|-------------------------------|
| M     | /S  |                               |
|       |   |                               |
| To    |   |                               |
|       | ne Coordinator,                           |                               |
|       | entre of Excellence in Integrated Omics & |                               |
|       | tkal University, Vani Vihar, Bhubaneswar  |                               |
| Sı    | ub: Supply of Kits/ Antibodies for the fi | nancial year 2023-2024.       |
| SI.   | Name of the Manufacturer / Brand          | Discount (%) on the           |
| No.   |   | Price List                    |
| 1.    |   |                               |
| 2.    |   |                               |
| 3.    |   |                               |
| 4.    |   |                               |
| 5.    |   |                               |
|       |   |                               |
|       |   |                               |
|       |   |                               |
|       |   |                               |
|       |   |                               |
|       |   | Signature of the              |
|       | Man                                       | ufacturer / Authorized Dealer |
|       |   | Seal                          |
| Dated | 1:  | Scar                          |

## GLASS-WARES

#### **FORMAT**

| Fr     | om:                                      |                               |
|--------|--|-------------------------------|
| M,     | /S                                       |                               |
|        |  |                               |
| То     | ,  |                               |
| Th     | e Coordinator,                           |                               |
| Ce     | ntre of Excellence in Integrated Omics & | Computational Biology         |
|        | kal University, Vani Vihar, Bhubaneswar- |                               |
|        | b: Supply of Glass-wares for the financ  |                               |
| S1.    | Name of the Manufacturer / Brand         | Discount (%) on the           |
| No.    |  | Price List                    |
| 1.     |  |                               |
| 2.     |  |                               |
| 2      |  |                               |
| 3.     |  |                               |
| 4.     |  |                               |
| 5.     |  |                               |
|        |  |                               |
|        |  |                               |
|        |  |                               |
|        |  |                               |
|        |  | Signature of the              |
|        | Manı                                     | ufacturer / Authorized Dealer |
| D      |  | Seal                          |
| Dated: |  |                               |

## **PLASTIC-WARES**

#### **FORMAT**

|     | om:<br>/S                                |   |
|-----|--|---|
| To  | ,  |   |
| Th  | e Coordinator,                           |   |
| Ce  | ntre of Excellence in Integrated Omics & | Computational Biology                                     |
|     | kal University, Vani Vihar, Bhubaneswar- |   |
| Su  | b: Supply of Plastic-wares for the finan | cial year 2023-2024.                                      |
| S1. | Name of the Manufacturer / Brand         | Discount (%) on the Price                                 |
| No. |  | List  |
| 1.  |  |   |
| 2.  |  |   |
| 3.  |  |   |
| 4.  |  |   |
| 5.  |  |   |
| Dat | Man                                      | Signature of the<br>ufacturer / Authorized Dealer<br>Seal |
| Dal |  |   |

2.

3.

4.

5.

## LAB-WARES

#### **FORMAT**

From:

Dated:....

| M,  | /S  |                           |
|-----|---|---------------------------|
| То  |   |                           |
| Th  | e Coordinator,                            |                           |
| Ce  | entre of Excellence in Integrated Omics & | Computational Biology     |
|     | kal University, Vani Vihar, Bhubaneswar   |                           |
| Su  | b: Supply of Lab-wares for the financia   | al year 2023-2024.        |
| S1. | Name of the Manufacturer / Brand          | Discount (%) on the Price |
| No. |   | List                      |
| 1.  |   |                           |
| 2.  |   |                           |
| 2   |   |                           |
| 3.  |   |                           |
| 4.  |   |                           |
| 5.  |   |                           |
|     |   |                           |
|     |   |                           |
|     |   |                           |
|     |   |                           |

Co ordinator COE-Integrated Omics & Computational Biology, Utkal University

Manufacturer / Authorized Dealer

10

Seal

Signature of the

## **CUSTOM SERVICES**

### (for Molecular Biology/ Immunology/Transcriptome analysis)

#### **FORMAT**

From:

Dated:....

| ,   | To,  |                           |
|-----|--|---------------------------|
|     | The Coordinator,                           |                           |
| (   | Centre of Excellence in Integrated Omics & | Computational Biology     |
| 1   | Utkal University, Vani Vihar, Bhubaneswar  | -751 004                  |
|     | Sub: Customs Services for Molecu           | lar Biology/ Immunology   |
| -   | Transcriptome Analysis/Proteomics/         | Sequencing/Primer/Peptide |
| 5   | Synthesis for the financial year 2023-202  |                           |
| SI. | Customs Services for Molecular             | Discount (%) on the Price |
| No. | Biology/ Immunology/                       | List/Specific custom      |
|     | Transcriptome                              | service                   |
|     | Analysis/Proteomics/Sequencing             |                           |
|     | Primer/Peptide Synthesis                   |                           |
| 1.  |  |                           |
| 2.  |  |                           |
|     |  |                           |
| 3.  |  |                           |
|     |  |                           |
|     |  |                           |

Signature of the

Seal

11

Manufacturer / Authorized Dealer

### 2. Annual Maintenance

| FORMAT   |  |
|--|--|
| From:  |  |
| M/S  |  |
| То,  |  |
| The Coordinator,   |  |
| Centre of Excellence in Integrated Omics & Computational Biology |  |
| Utkal University, Vani Vihar, Bhubaneswar-751 004                |  |
| Sub: Annual Maintenance for the financial year 2023-2024.        |  |
| Ref. Advertisement (Name of the Newspaper) Dated:                |  |
|  |  |
| EMD Value: Rs.3,000.00 (Rupees three thousand) only              |  |
| D.D. No, Dated:  |  |
|  |  |

| Sl. No. | Name of the Existing Equipment  | Unit Price + Tax FOR Destination |
|---------|---|----------------------------------|
|         | Annual Maintenance of existing equipment (i.e., Millipore Water Purifier (Make-Merck-Millipore), RT-PCR (Make-Applied Biosystem), Deep Freezer (-80°C Make-Thermo), CO <sub>2</sub> Incubator (Make-Eppendorf), |                                  |
| 1.      |   |                                  |
| 2.      |   |                                  |
| 3.      |   |                                  |
| 4.      |   |                                  |

|                | Signature    | of the |
|----------------|--------------|--------|
| Manufacturer / | Authorized I | Dealer |
|                |              | Seal   |

Dated:.....

### Nano Drop (Micro volume) Spectrophotometer

#### FORMAT

| Fi  | om:   |
|-----|---|
| 9.5 | /S  |
|     |   |
|     | To,   |
|     | The coordinator,  |
|     | Centre of Excellence in Integrated Omics & Computational Biology,                   |
|     | Utkal University, Vani Vihar, Bhubaneswar-751 004                                   |
|     | Sub: Procurement of Nano Drop (Micro volume) Spectrophotometer for the FY 2023-2024 |
|     | Ref. Advertisement (Name of the Newspaper), Dated:                                  |
|     | EMD: Rs.14, 000.00 (Rupees fourteen thousand) only (D.D. No,                        |
|     | Dated: Bank   |

| Sl. No. | Specification  | Unit Price + Tax FOR Destination |
|---------|--|----------------------------------|
| A.      | Make & model   | FOR Destination                  |
| A.      | Make & model   |                                  |
|         | Technical specifications for Micro volume spectrophotometer:   |                                  |
|         | <ul> <li>Sampling Option-The instrument should have both Pedestal as<br/>well as cuvette sampling option.</li> </ul>       |                                  |
|         | Sample Retention Mode- The instrument should have advanced   |                                  |
| 9       | technology of sample retention which facilitates the application of  |                                  |
|         | sample directly onto the optical measurement surface.  |                                  |
|         | Wavelength Range: 190-850 nm or better   |                                  |
|         | Minimum Sample Size: 1.0 μL  |                                  |
|         | Pathlength: 0.030 to 1.0 mm (auto-ranging)   |                                  |
|         | <ul> <li>Light Source: Xenon flash lamp(Life time of the xenon lamp must</li> </ul>  |                                  |
|         | be mentioned)  |                                  |
|         | Detector Type: Type of detector to be mentioned  |                                  |
|         | Wavelength Accuracy: ±1 nm   |                                  |
|         | Spectral Resolution: ≤1.8 nm (FWHM @Hg 254 nm)   |                                  |
|         | • Dynamic range: 0.2 - 27,500 (ng / μL dsDNA) or better  |                                  |
|         | • Maximum Concentration: 27,500 ng/μL (dsDNA) or better  |                                  |
|         | Measurement Time: 8 seconds or less  |                                  |
|         | The system should be equipped with safety features to ensure   |                                  |
|         | measurement accuracy and integrity.  |                                  |
|         | <ul> <li>Data storage: The system should have inbuilt/internal storage<br/>system within the spectrophotometer.</li> </ul> |                                  |
|         |  |                                  |
|         | Resolution: The system should have high resolution integrated touch screen.  |                                  |
|         | Cuvette: Two pair of compatible quartz cuvette should be included.   |                                  |
|         | Software: Software should have features to identify the  |                                  |
|         | contaminants/ other confounding factors like bubble in the sample  |                                  |
|         | and automated correction strategy. Software should be enabled  |                                  |
|         | with guided trouble shooting and instant response about the  |                                  |

Co-ordinator COE-Integrated Omics & Computational Biology, Utkal University

sample quality. The instrument should be able to perform following applications or measurement Nucleic Acid, Labeled Nucleic Acids; Protein A280 and A205, nucleic acid protein Ratio and other standard protein estimation Online UPS: Compatible online UPS and required electric point at the site may be quoted separately. The warranty of the instrument as well as Online UPS should be 3 years from the date of installation. Additional warranty period for 2 years may be quoted separately. No. Of preventive maintenance visits during the period of warranty. Separate quotation may be given for interface computer with compatible software (if applicable). Software upgradation: The bidder has to mention weather free upgradation will be provided or not. General Terms and Conditions: Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB) No. Of preventive maintenance visits during the period of warranty. Duration of service support and years of availability of spare parts must be mentioned. Service response time within warranty need to be mentioned. Softcopy of the tender documents need to be given in pen drive/CD. Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

Number of installations of the specific make and model in this

region need to be mentioned.

Signature of the Manufacturer Authorized Dealer

Dated:....

#### **UV-VIS Spectrophotometer**

#### FORMAT

| F | rom:  |
|---|---|
| M | ·<br>/S   |
|   |   |
|   | To,   |
|   | The coordinator,  |
|   | Centre of Excellence in Integrated Omics & Computational Biology, |
|   | Utkal University, Vani Vihar, Bhubaneswar-751 004                 |
|   | Sub: Procurement of UV-VIS Spectrophotometer for the FY 2023-24   |
|   | Ref. Advertisement (Name of the News paper), Dated:               |
|   | EMD: Rs.6,500.00 (Rupees six thousand five hundred) only D.D. No  |
|   | Dated: Bank   |

| S1. No. | Specification  | Unit Price + Tax |
|---------|--|------------------|
|         |  | FOR Destination  |
| A.      | Make & model   | M                |
|         | Technical specifications   |                  |
|         | recimical specifications   |                  |
|         | Double Beam spectrophotometer.   |                  |
|         | Spectral Bandwidth: 2 nm or better.  |                  |
|         | <ul> <li>Light Source:- Xenon Flash Lamp or more advanced technical</li> </ul> |                  |
|         | option (3 years guaranteed or above)   |                  |
|         | Detectors :- Silicon Photodiodes   |                  |
|         | Wavelength Range:- 190-1100 nm   |                  |
|         | Wavelength Accuracy:- ±0.5 nm  |                  |
|         | Wavelength Repeatability:- <±0.2 nm  |                  |
|         | <ul> <li>Scan Speed :- Slow, medium and fast (up to 1600 nm/min)</li> </ul>    |                  |
|         | <ul> <li>Photometric Linear Range –2A to +3.5A</li> </ul>                      |                  |
|         | Photometric Display range: -3A to +5A or less                                  |                  |
|         | Baseline Flatness: ≤0.003 Abs  |                  |
|         | <ul> <li>Stray light: &lt;0.05%T at 220nm and 340nm</li> </ul>                 |                  |
|         | Photometric Accuracy: - ±0.004 A at 1.0 A                                      |                  |
|         | Photometric Noise :- should be <0.0004A  |                  |
|         | Photometric Drift :- <0.0005 A/hr  |                  |
|         | The instrument should be available as either a PC operated                     |                  |
|         | unit or as a stand-alone instrument with an integrated colored                 |                  |

Co ordinator COE-Integrated Omics & Computational Biology, Utkal University

and high resolution touchscreen. A branded desktop PC of suitable configuration is to be offered with the system even if it is a stand-alone instrument with touchscreen (May be quoted separately)

• Cuvette Glass- 4ml-2Number

Quartz- 50 ul-2 Nos

1ml-2 Nos

4 ml-2 Nos

- Operating mode: Single wavelength, multi wavelength, spectral scan, time scan
- Instrument should come with all required software for bioapplication like DNA/RNA estimation, Protein estimation by various assay (BCA, Bradford, Lowry), Enzyme kinetics.
- Compatible online UPS should be provided along with instrument (may be quoted separately).
- Warranty: Three years on the equipment as well as on the lamp.

#### General Terms and Conditions:

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.
- Number of installations of the specific make and model in this region need to be mentioned.

Signature of the Manufacturer / Authorized Dealer Seal

Dated:.....

Co ordinator
COE-Integrated Omics
& Computational Biology,
Utkal University

## Item no. 3 High speed cooling centrifuge

#### FORMAT

| F | rom:   |
|---|--|
|   | /S   |
|   | То,  |
|   | The coordinator,   |
|   | Centre of Excellence in Integrated Omics & Computational Biology,    |
|   | Utkal University, Vani Vihar, Bhubaneswar-751 004                    |
|   | Sub: Procurement of High speed cooling centrifuge for the FY 2023-24 |
|   | Ref. Advertisement (Name of the Newspaper), Dated:                   |
|   | EMD: Rs.4000.00 (Rupees four thousand) only (D.D. No, Dated          |
|   | Bank   |

| Sl. No. | Specification   | Unit Price + Tax FOR Destination |
|---------|---|----------------------------------|
| A.      | Make & model  | 2 OX DOMMATOR                    |
|         | Technical Specifications  |                                  |
|         | <ul> <li>Cooling Centrifuge with minimum Speed of 15000 rpm/21000</li> <li>x g or above</li> </ul>  |                                  |
|         | • Temperature range: -10°C to +40°C and should be able to maintain 4°C at maximum speed   |                                  |
|         | Timer settings:10 sec to 9:00 h, with continuous run function   |                                  |
|         | <ul> <li>Maximum capacity: 24 x 1.5/2.0ml tubes and 10 x 5 mL tubes</li> <li>Rotor must be metallic</li> </ul>  |                                  |
|         | <ul> <li>Rotors, lids &amp; adaptor must be autoclavable at 121°C for 20<br/>mins</li> </ul>  |                                  |
|         | <ul> <li>System should also have the provision to use both fixed angle<br/>and swing bucket rotor</li> </ul>  |                                  |
|         | <ul> <li>Aerosol tightness of the rotor should be certified.</li> </ul>   |                                  |
|         | <ul> <li>System should be able to operate the rotor even without rotor<br/>lid and provision of rapid cooling of centrifuge chamber.</li> </ul>                   |                                  |
|         | <ul> <li>System should have an in-built condensation drain to prevent<br/>water accumulation inside the stainless rotor chamber to<br/>avoid corrosion</li> </ul> |                                  |
|         | <ul> <li>System should have a compatible and calibrated timer count<br/>which should start only when the set centrifugation RPM is<br/>reached.</li> </ul>        |                                  |

Co ordinator COE-Integrated Omics & Computational Biology, Utkal University

- Separate short spin key
- Soft function to perform gentle acceleration and deceleration to enhance sedimentation.
- Noise level: <55 dB(A)
- · Emergency lid opening system should be there
- Bright digital display with LCD/ equivalent model
- · Instrument should be CE Certified
- Warranty: minimum of 3 years from the date of installation.
- Fixed angle rotor for 24 x 1.5 /2.0 mL tubes with aerosol tight lid with maximum of 15000 rpm or more and 21000 x g or more
- Fixed angle rotor for 10 x 5 mL tubes with aerosol tight lid with maximum of 15000 rpm or more and 21000 x g or more

#### General Terms and Condition:

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.
- Number of installations of the specific make and model in this region need to be mentioned.

Signature of the Manufacturer / Authorized Dealer Seal

Dated:.....

Co ordinator
COE-Integrated Omics
& Computational Biology,
Utkal University

#### **Ultra Sonicator**

#### FORMAT

| From:  |                      |  |
|--|----------------------|--|
| M/S  |                      |  |
|  |                      |  |
| To,  |                      |  |
| The coordinator,                               |                      |  |
| Centre of Excellence in Integrated Omics & Com | nputational Biology, |  |
| Utkal University, Vani Vihar, Bhubaneswar-751  | 004                  |  |
| Sub: Procurement of Ultra Sonicator for the    | FY 2023-24           |  |
| Ref. Advertisement (Name of the News paper)    | , Dated:             |  |
| EMD: Rs.1, 000.00 (Rupees one thousand) only   |                      |  |
| Dated: Bank                                    |                      |  |

| SI. No. | Specification  | Unit Price + Tax |
|---------|--|------------------|
|         |  | FOR Destination  |
| A.      | Make & model   |                  |
|         |  |                  |
|         | Technical specifications   |                  |
|         | System should be provided with   |                  |
|         | intense cleaning action.   |                  |
|         | Self-tunning, Simple to operate  |                  |
|         | SS lead  |                  |
|         | Digital countdown timer with LED display   |                  |
|         | Transducer frequency: 30Khz or more  |                  |
|         | Supplied with water drain valve.   |                  |
|         | Operate on 220V  |                  |
|         | Water Capacity: 2.5L or more   |                  |
| 555.31  | Tank Dimension: Must be compatible with water capacity.  |                  |
|         | Warranty: Three years on the equipment.  |                  |
|         | General Terms and Conditions:  |                  |
|         | <ul> <li>Price quoted should be inclusive of all taxes and custom<br/>clearance (if applicable) and FOR destination (Utkal</li> </ul>                              |                  |
| 3 24    | University-CoE-IOCB)   |                  |
|         | <ul> <li>No. Of preventive maintenance visits during the period of<br/>warranty.</li> </ul>  |                  |
|         | <ul> <li>Duration of service support and years of availability of spare<br/>parts must be mentioned.</li> </ul>  |                  |
|         | Service response time within warranty need to be mentioned.  |                  |
|         | <ul> <li>Softcopy of the tender documents need to be given in pen<br/>drive/CD.</li> </ul>   |                  |
|         | <ul> <li>Make and model of the equipment/item quoted need to be<br/>mentioned with documental evidence/brochure of authorized<br/>company/manufacturer.</li> </ul> |                  |
|         | <ul> <li>Number of installations of the specific make and model in this<br/>region need to be mentioned.</li> </ul>  |                  |

Signature of the Manufacturer / Authorized Dealer Seal

Dated:....

Co ordinator COE-Integrated Omics & Computational Biology, Utkal University

### Shaking Incubator with automatic thermostat

#### FORMAT

| Fr | om:  |
|----|--|
| M  | /S   |
|    |  |
|    | To,  |
|    | The Coordinator,   |
|    | Centre of Excellence in Integrated Omics& Computational Biology,                       |
|    | Utkal University, VaniVihar, Bhubaneswar-751 004                                       |
|    | Sub: Procurement of Shaking Incubator with automatic thermostat for the financial year |
| 20 | 23-24  |
|    | Ref. Advertisement (Name of the News paper)  |
|    | Amount: Rs.1,000.00 (Rupees one thousand) only (D.D. No                                |
|    | Dated:Bank   |

| S1. No. | Specifications   | Unit Price + Tax FOR Destination |
|---------|--|----------------------------------|
| Α.      | Make and Model   | FOR Destination                  |
|         | Technical Specifications   |                                  |
|         | Temperature Range & Accuracy: 5°C to 60°C, ± 0.5°C   |                                  |
|         | Internal Volume (Liters): 215 or more  |                                  |
|         | Maximum Shaking Capacity (Volume x No. of flasks)*: 100ml                                      | x                                |
|         | 49, 150ml x 49, 250ml x 33, 500ml x 24, 1000ml x 15, 2000 r                                    |                                  |
|         | Shaking Speed range (RPM): 0 to 300  |                                  |
|         | Shaking Amplitude: 25 mm   |                                  |
|         | <ul> <li>With Microprocessor Temperature control having advanced sensor.</li> </ul>            |                                  |
|         | Display: LCD, large enough for clear reading   |                                  |
|         | Power Failure Alarm: Audio Visual Alarm  |                                  |
|         | Door Open Alarm: Audio Alarm in case door open for over one minute                             |                                  |
|         | <ul> <li>Temperature Variation Alarm: Temperature range 10-60 °C, Andrews</li> </ul>           | adio                             |
|         | Visual Alarm; Set temperature < ±2 °C  |                                  |
|         | Illumination: 8 Watts Fluorescent Tube   |                                  |
|         | <ul> <li>Internal and external body material: High grade Stainless Steel<br/>better</li> </ul> | lor                              |
|         | Insulation (CFC free polyurethane foam): 70 mm minimum for                                     |                                  |
|         | Body & 80 mm for Door  |                                  |
|         | Timer - Continuous   |                                  |

Co ordinator
COE-Integrated Omics
& Computational Biology,
Utkal University

- Incubator noise level should be minimal
- Warranty: The warranty of the instrument should be 3 years from the date of installation. Additional warranty period for 2 years may be quoted separately.

#### General Terms and Conditions:

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.
- Number of installations of the specific make and model in this region need to be mentioned.

|                | Signature of the  |
|----------------|-------------------|
| Manufacturer , | Authorized Dealer |
|                | Seal              |

Dated:....

#### Roto-spin test tube rotor

#### FORMAT

| From:         |   |
|---------------|---|
|               |   |
| То,           | •   |
| The coordina  | tor,  |
| Centre of Ex  | cellence in Integrated Omics & Computational Biology, |
| Utkal Univer  | sity, Vani Vihar, Bhubaneswar-751 004                 |
| Sub: Procur   | ement of Roto spin test tube rotor for the FY 2023-24 |
| Ref. Advertis | ement (Name of the News paper), Dated:                |
| EMD: Rs.1,    | 000.00 (Rupees one thousand) only (D.D. No,           |
| Dated:        | , Bank  |

| Sl. No. | Specification  | Unit Price + Tax FOR Destination |
|---------|--|----------------------------------|
| Α.      | Make & model   |                                  |
|         | Technical Specifications   |                                  |
|         | Rotor RPM range: -5-50rpm  |                                  |
|         | Time setting option: Should be available.  |                                  |
|         | <ul> <li>Plastic coated spring clips and adjustable from horizontal to<br/>vertical angle for mixing.</li> </ul>   |                                  |
|         | Warranty: Three years on the equipment.  |                                  |
|         | General Terms and Conditions:  |                                  |
|         | <ul> <li>Price quoted should be inclusive of all taxes and custom<br/>clearance (if applicable) and FOR destination (Utkal<br/>University-CoE-IOCB)</li> </ul> |                                  |
|         | <ul> <li>No. Of preventive maintenance visits during the period of<br/>warranty.</li> </ul>  |                                  |
|         | <ul> <li>Duration of service support and years of availability of spare<br/>parts must be mentioned.</li> </ul>  |                                  |
|         | <ul> <li>Service response time within warranty need to be mentioned.</li> <li>Softcopy of the tender documents need to be given in pen drive/CD.</li> </ul>    |                                  |
|         | Make and model of the equipment/item quoted need to be<br>mentioned with documental evidence/brochure of authorized<br>company/manufacturer.                   |                                  |

Signature of the Manufacturer / Authorized Dealer Seal

Dated:....

## Item no. 7 Refrigerator (Double Door)

#### FORMAT

| From: |   |
|-------|---|
|       | 'S  |
|       | То,   |
|       | The coordinator,  |
|       | Centre of Excellence in Integrated Omics & Computational Biology, |
|       | Utkal University, Vani Vihar, Bhubaneswar-751 004                 |
|       | Sub: Procurement of Refrigerator (Double Door) for the FY 2023-24 |
|       | Ref. Advertisement (Name of the News paper) Dated:                |
|       | EMD: Rs.1, 000.00 (Rupees one thousand) only (D.D. No,            |
|       | Dated:Bank  |

| 31. No. | Specification  | Unit Price + Tax |
|---------|--|------------------|
|         |  | FOR Destination  |
| Α.      | Make & model   |                  |
|         | Technical Specifications   |                  |
|         | Function: Frost free double door refrigerator.   |                  |
|         | <ul> <li>Capacity: 230-260,260 and above.</li> </ul>                                       |                  |
|         | <ul> <li>Operation: Stabilizer free operation. Top mounted freezer compartment.</li> </ul> |                  |
|         | No. of Doors:2; with door lock.  |                  |
|         | Star Rating 3 Star or better.  |                  |
|         | Shelves: minimum 4   |                  |
|         | Self-material; Toughened glass/fiber.  |                  |
|         | Digital display: Optional.   |                  |
|         | Quieter operation and less power consuming.  |                  |
|         | Warranty: 5 years on the body, on compressor 10 years.                                     |                  |
|         | General Terms and Conditions:  |                  |
|         | Price quoted should be inclusive of all taxes and custom                                   |                  |
|         | clearance (if applicable) and FOR destination (Utkal                                       |                  |
|         | University-CoE-IOCB)   |                  |
|         | No. Of preventive maintenance visits during the period of warranty.                        |                  |
|         | Duration of service support and years of availability of spare                             |                  |

parts must be mentioned.

- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

|                | Signature of the  |
|----------------|-------------------|
| Manufacturer / | Authorized Dealer |
|                | Seal              |

Dated:....

#### Semi-motorized microtome

#### FORMAT

| Fr | rom:  | 1 |
|----|---|---|
| M  | /S  |   |
|    | ,   |   |
|    | То,   |   |
|    | The coordinator,  |   |
|    | Centre of Excellence in Integrated Omics & Computational Biology, |   |
|    | Utkal University, Vani Vihar, Bhubaneswar-751 004                 |   |
|    | Sub: Procurement of Semi-motorized microtome for the FY 2023-24   |   |
|    | Ref. Advertisement (Name of the News paper), Dated:               |   |
|    | EMD: Rs.17,000.00 (Rupees seventeen thousand) only (D.D. No       |   |
|    | Dated: Bank   |   |

Co ordinator
COE-Integrated Omics
& Computational Biology,
Utkal University

- Should have Visual/acoustic signals indicating the remaining feed and the front and rear travel limits.
- Should have Efficient and rapid specimen exchange.
- · Should have anti-Static Charged section waste tray.
- Precision specimen orientation with horizontal and vertical rotation of +/- 8°, and calibrated controls.
- Quick clamping systems for fast removal of specimen.
- With provision of Universal cassette clamp.
- Should have the two-in-one blade holder with colored safety guard and safe blade ejection.
- Number of disposable blades-100no.
- · Technical Specifications:

Trimming section thickness setting range: 1.0 to  $600\mu m$  Setting values:

From 1 to 10  $\mu m$  in 1.0  $\mu m$  increments From 10 to 20  $\mu m$  in 2.0  $\mu m$  increments From 20 to 50  $\mu m$  in 5.0  $\mu m$  increments From 50 to 100  $\mu m$  in 10.0  $\mu m$  increments

• Section thickness setting range: 0.5 to 100 μm Setting values:

From 100 to 600 µm in 50.0 µm increments

From 0.5 to 5.0  $\mu m$  in 0.5 $\mu m$  increments From 5 to 20.0  $\mu m$  in 1.0  $\mu m$  increments From 20 to 60.0  $\mu m$  in 5.0  $\mu m$  increments From 20 to 60.0  $\mu m$  in 5.0  $\mu m$  increments From 60 to 100.0  $\mu m$  in 10.0  $\mu m$  increments

- Horizontal feed range:24±1 mm/0.94 inches
- Vertical stroke length: 70±1 mm
- Electronic coarse feed speeds: slow forward and back ward:300 μm/s or less, fast forward:800 μm/s or less and superfast backward (Fast homing):1800 μm/s or less
- Specimen retraction in motorized sectioning mode.
- · Warranty: Three years on the equipment.

#### Accessories (May be quoted Separately)

- Tissue embedding L molds (Metallic).
- Tissue embedding station or system.
- Tissue floating bath.

#### Tissue embedding station or system.

Should be provided with

- LCD display
- · Low noise compressor for cold plate
- High power LED light

Co Ordinator
COE-Integrated Omics
& Computational Biology,
Utkal University

- Operating condition: ≤240 Volts
- · Parafilm bath capacity: should be mentioned.
- · Cassette tray: minimum 8 nos. or more
- Work load capacity: More than 100 blocks/Hr.
- Temperature range: Ambient to 70°C or more.
- · Capacity: 3L or above
- Cold plate: Ambient to -20°C

#### Tissue floating Bath

Should be provided with

- Water Temperature range: Ambient to 60°C or more
- · Power: 180VA or more
- · Water bath dimension: Should be mentioned.
- Temperature tolerance: ±1°C

#### General Terms and Conditions:

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

|              | Signature of the    |
|--------------|---------------------|
| Manufacturer | / Authorized Dealer |
|              | Seal                |

Dated:.....

## Item no. 9 Tissue Homogenizer (Motorized)

#### FORMAT

| Fre | om:   |
|-----|---|
| M/  | 'S  |
|     |   |
|     | То,   |
|     | The coordinator,  |
|     | Centre of Excellence in Integrated Omics & Computational Biology,     |
|     | Utkal University, Vani Vihar, Bhubaneswar-751 004                     |
|     | Sub: Procurement of Tissue Homogenizer (Motorized) for the FY 2023-24 |
|     | Ref. Advertisement (Name of the News paper), Dated:                   |
|     | EMD: Rs.1, 000.00 (Rupees one thousand) only (D.D. No,                |
|     | Dated: Bank Bank  |

| Sl. No. | Specification   | Unit Price + Tax |
|---------|---|------------------|
|         |   | FOR Destination  |
| A.      | Make and model  |                  |
|         | Technical specifications:   |                  |
|         | Power Supply: 230V  |                  |
|         | <ul> <li>Speed Range-6000-30,000 rpm with digital display.</li> </ul>                       |                  |
|         | Can be operated on hand as well as stand.   |                  |
|         | Suitable for small sample volume.   |                  |
|         | <ul> <li>High-quality stainless-steel dispersing head.</li> </ul>                           |                  |
|         | <ul> <li>Corrosion and temperature resistance.</li> </ul>                                   |                  |
|         | <ul> <li>Applicable for RNA/DNA extraction and pharmaceuticals.</li> </ul>                  |                  |
|         | Suitable for looping sample into narrow space between high                                  |                  |
|         | speed and relative motion state to shear and break.   |                  |
|         | • Handling Capacity: 0.5-50mL, 1-100mL, 1-250mL (To be                                      |                  |
|         | quoted separately).   |                  |
|         | Warranty: Three years on the equipment.   |                  |
|         | General Terms and Conditions:   |                  |
|         | Price quoted should be inclusive of all taxes and custom                                    |                  |
|         | clearance (if applicable) and FOR destination (Utkal  |                  |
|         | University-CoE-IOCB)  |                  |
|         | <ul> <li>No. Of preventive maintenance visits during the period of<br/>warranty.</li> </ul> |                  |
|         | Duration of service support and years of availability of spare                              |                  |

Co-ordinator
COE-Integrated Omics
& Computational Biology,
Utkal University

parts must be mentioned.

- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

|                | Signature of the  |
|----------------|-------------------|
| Manufacturer / | Authorized Dealer |
|                | Seal              |

Dated:....

## Item no. 10 High precision Weighing Balance

#### FORMAT

| Fr | om:  |
|----|--|
| -  | 'S   |
|    | To,  |
|    | The coordinator,   |
|    | Centre of Excellence in Integrated Omics & Computational Biology,      |
|    | Utkal University, Vani Vihar, Bhubaneswar-751 004                      |
|    | Sub: Procurement of High precision Weighing Balance for the FY 2023-24 |
|    | Ref. Advertisement (Name of the Newspaper), Dated:                     |
|    | EMD: Rs.1200.00 (Rupees One thousand two hundred only ) D.D. No,       |
|    | Dated:Bank   |

| S1. No. | Specification  | Unit Price + Tax |
|---------|--|------------------|
|         |  | FOR Destination  |
| A.      | Make & model   |                  |
|         | Technical specifications   |                  |
|         | Weighing balance should have complete glass wind shield.                 |                  |
|         | Having Function key and sliding door opening/closing system.             |                  |
|         | Overload protection: Should be available.                                |                  |
|         | <ul> <li>Leveling feet and level indicator anti-theft device.</li> </ul> |                  |
|         | Unit conversion facility   |                  |
|         | Brilliant back lit display.  |                  |
|         | Maximum capacity: 220g.  |                  |
|         | Readability :0.1mg   |                  |
|         | Repeatability: 0.1mg   |                  |
|         | Linearity: 0.2mg   |                  |
|         | Response Time; 2Sec  |                  |
|         | AC adaptor; 230 volts  |                  |
|         | Tare range: Full   |                  |
|         | Platform dimension: to be quoted.  |                  |
|         | Balance Dimension: To be quoted.   |                  |
|         | Warranty: Three years on the equipment                                   |                  |
|         | General Terms and Conditions:  |                  |
|         | Price quoted should be inclusive of all taxes and custom                 |                  |

- clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

Signature of the Manufacturer / Authorized Dealer Seal

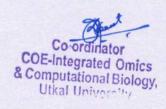
Dated:....

### **BOD** incubator

#### FORMAT

| Fre | om:   |
|-----|---|
| M/  | 'S  |
|     |   |
|     | To,   |
|     | The coordinator,  |
|     | Centre of Excellence in Integrated Omics & Computational Biology, |
|     | Utkal University, Vani Vihar, Bhubaneswar-751 004                 |
|     | Sub: Procurement of BOD incubator for the financial year 2023-24  |
|     | Ref. Advertisement (Name of the Newspaper), Dated:                |
|     | EMD: Rs.2500.00 (Rupees Two thousand five hundred) only (D.D. No, |
|     | Dated:Bank.   |

| Sl. No. | Specification   | Unit Price + Tax |
|---------|---|------------------|
|         |   | FOR Destination  |
| A.      | Make & model  |                  |
|         | Technical Specifications  |                  |
|         |   |                  |
|         | Microprocessor controlled BOD incubator  Temperature Range 50-600   |                  |
|         | <ul> <li>Temperature Range: 50-600</li> <li>Accuracy: ±0.50c</li> </ul>   |                  |
|         | HE 18 18 4 19 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |                  |
|         | o Microprocessor with sensor-controlled temperature   | re               |
|         | o PUF insulation  |                  |
|         | Forced air circulation by fan motor   |                  |
|         | Inbuild SS tubular heater   |                  |
|         |   |                  |
|         | SS Trays: 2 or more., Adjustable     CFC free refrigerant and hermitically seeds  |                  |
|         | <ul> <li>CFC free refrigerant and hermitically seale<br/>compressor</li> </ul>  | d                |
|         | Electrical Circuit breaker Sensor Failure alarm.  |                  |
|         |   |                  |
|         | <ul> <li>Touch screen LED display for temperature control an<br/>set with PLC &amp; inbuilt audio-visual alarm</li> </ul> | a                |
|         | See through inner door  |                  |
|         |   |                  |
|         | o Outer door with smart handle, auto closur mechanism   | e                |
|         | O Dimensions: Up-Right model, (Dimension to b   |                  |
|         | mentioned)  | е                |
|         | o Volume:   |                  |
|         | Model <b>A.</b> 170-200L  |                  |
|         | B.270-300L  |                  |
|         | Over load protection for compressor   |                  |



- o Interior Stainless steel
- Exterior: CRCA steel/SS (SS is more preferred)
- o Recommended voltage stabilizer should be supplied.
- Warranty: Three years on the equipment and stabilizer.

#### General Terms and Conditions:

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

|             |                | Signature  | e of the |
|-------------|----------------|------------|----------|
| Manufacture | Manufacturer / | Authorized | Dealer   |
|             |                |            | Seal     |

Dated:.....

### Item no. 12 CO<sub>2</sub> Incubator

#### FORMAT

| From |  |
|------|--|
| M/S  | [;<br>   |
|      |  |
| 7    | Γο,  |
|      | The Coordinator,   |
|      | Centre of Excellence in Integrated Omics& Computational Biology,             |
|      | Utkal University, VaniVihar, Bhubaneswar-751 004                             |
|      | Sub: Procurement of CO <sub>2</sub> Incubator for the financial year 2023-24 |
|      | Ref. Advertisement (Name of the News paper), Dated:                          |
|      | Amount: Rs.8,000.00 (Rupees eight thousand) only (D.D. No,                   |
|      | Dated: Bank  |

| Sl. No. | Specifications for CO <sub>2</sub> Incubator  | Unit Price + Tax<br>FOR Destination |
|---------|---|-------------------------------------|
| Α.      | Make and Model  |                                     |
|         | Technical specifications  |                                     |
|         | <ul> <li>Internal capacity: Minimum 170 ltr or more</li> <li>Temperature management: 4°C above ambient to 50°C with increment of 0.1°C</li> <li>Temperature accuracy: ±0.4°C at 37°C or better</li> <li>Temperature uniformity: ±0.3°C at 37°C or better</li> <li>CO2 gas range: 0.1 - 20% with control increment of 0.1%,</li> <li>Co2 gas accuracy: ±0.3% at the specified Relative Humidity (RH) at 37°C and ambient 22°C,</li> <li>Co2 gas uniformity: ±0.1% at 37°C and ambient 22°C across the chamber</li> <li>CO2 recovery rate: 6 min or less after door closing to attain 5% CO2.</li> <li>Should have advanced feature for even distribution of heat throughout the entire chamber.</li> </ul> |                                     |
|         | <ul> <li>Facility for cleaning and refilling of distilled water.</li> <li>Advanced /updated feature to minimize contamination, reduce noise level, minimum air turbulence.</li> </ul>   |                                     |
|         | <ul> <li>CO2 sensor: Dual Channel Infra-Red (IR), NDIR type with autocalibration features</li> <li>High-Temperature Disinfection [HTD] of at least 140°C for 2 hours or better.</li> </ul>  |                                     |
|         | Shelves: At least 3 or more; stainless-steel, may be perforated.  | 3                                   |

Co-Goordinator
COE- Integrated Omics
& Computational Biology
Utkal University, Bhubaneswan

- Display: LCD/ LED display for control of temperature along with alarms
- May be with separate single inner glass door and options for 4split inner doors or 8-split inner doors
- · Should be with inline pressure regulator.
- The Inner chamber should be a single piece of stainless-steel sheet.
- Advanced probing facilities for temperature, gas and water level.
- Should have optional incubator software command which allows tracking key operational information such as time, temperature, CO2 concentration and humidity.
- Must be supplied with 3 KVA Servo Stabilizer, CO2 gas cylinder with 30kg CO2 gas capacity & ISI mark double stage CO2 gas regulator.
- · Warranty: Three years on the equipment as well as on the lamp.

#### General Terms and Conditions:

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

|                | Signature of the  |
|----------------|-------------------|
| Manufacturer / | Authorized Dealer |
|                | Seal              |

Dated:....

#### Vacuum filter unit for cell culture and Vacuum pump

#### FORMAT

| Fr | om:    |  |                  |
|----|--------|--|------------------|
| M  | /S     |  |                  |
|    | To,    |  |                  |
|    | 10,000 | coordinator,   |                  |
|    | Cer    | tre of Excellence in Integrated Omics & Computational Biology,       |                  |
|    | Utk    | al University, Vani Vihar, Bhubaneswar-751 004                       |                  |
|    | Sul    | : Procurement of Vacuum filter unit for cell culture and Vacuum pump | for the FY 2023- |
| 20 | 24     |  |                  |
|    | Ref    | Advertisement (Name of the Newspaper), Dated:                        |                  |
|    | EM     | D: Rs.1000.00 (Rupees one thousand) only (D.D. No, Da                | ted:             |
|    | Bar    | ık   |                  |
| 01 | N.     | Casification   | TT-14 P-1 1 M    |

| 31. No. | Specification  | Unit Price + Tax |
|---------|--|------------------|
|         |  | FOR Destination  |
| Α.      | Make & model   |                  |
|         | Technical specifications:                                    |                  |
|         | Vacuum pump  |                  |
|         | Pump should be oil free and piston should be powered.        |                  |
|         | Motor Power (V/Hz): Greater than or equal to 220 volt /50 Hz |                  |
|         | Maximum power (w): Approximately 60                          |                  |
|         | Maximum current (A): approximately 0.3 or more               |                  |
|         | Port Thread Size/outlet: approximately 8-10 mm               |                  |
|         | Motor rotation: equivalent to 1450 rpm                       |                  |
|         | Weight: Less than 10 kg                                      |                  |
|         | Noise level: Not beyond 50 db                                |                  |
|         | Ultimate vacuum (mbar): 100 or more                          |                  |
|         | Glass filtration assembly:                                   |                  |
|         | Filter Funnel Glass with capacity 250 ml or more.            |                  |

Co-ordinator
COE-Integrated Omics
& Computational Biology,
Utkal University

- Glass filters with conical/bottle receiver (500 ml/1lt). 500 ml or more.
- 100% Autoclavable and ready to reuse.
- · With flexible tubing.
- Metallic clamp (preferably aluminium).
- Filter support base: ≥ 47 mm
- Clamp size: ≥ 47 mm
- Additional: Preferably with membrane filters.

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.
- Number of installations of the specific make and model in this region need to be mentioned.

Signature of the Manufacturer / Authorized Dealer Seal

Dated:....

# Chemiluminescence-based (Chemidoc) Imaging system

### FORMAT

| From:       |   |
|-------------|---|
| M/S         |   |
|             |   |
| To,         |   |
| The Coordi  | nator,  |
| Centre of E | excellence in Integrated Omics & Computational Biology,                 |
| Utkal Univ  | ersity, Vani Vihar, Bhubaneswar-751 004                                 |
| Sub: Proc   | arement of Chemiluminescence-based (Chemidoc) Imaging system for the FY |
| 2023-24     |   |
| Ref. Advert | isement (Name of the Newspaper), Dated:                                 |
| EMD: Rs.2   | D, 000.00 (Rupees Twenty thousand) only (D.D. No,                       |
| Dated:      | , Bank  |

| Sl. No. | Specification  | Unit Price + Tax |
|---------|--|------------------|
|         |  | FOR Destination  |
| A.      | Make & model:  |                  |
|         | Technical specifications:  |                  |
|         | Chemiluminescence-based (Chemidoc) Imaging system with following     |                  |
|         | applications: Suitable imaging of                                    |                  |
|         | · DNA and RNA gels and fluorescence stain imaging with UV-Pad or     |                  |
|         | Blue-Pad   |                  |
|         | Chemiluminescent and colorimetric western blots.                     |                  |
|         | Fluorescent stained nucleic acid gel.                                |                  |
|         | Fluorescent stained protein gel                                      |                  |
|         | Colorimetric stained protein gel                                     |                  |
|         | Colorimetric membrane stained  |                  |
|         | RGB fluorescence western blot detection.                             |                  |
|         | Camera: Cooled CCD scientific grade camera having                    |                  |
|         | <ul> <li>Camera resolution: ≥ 6 megapixel or above.</li> </ul>       |                  |
|         | Dynamic Range: 4.5 OD or above.                                      |                  |
|         | • Lense aperture: ≤f/0.70  |                  |
|         | Native Resolution: 2838×2224   |                  |
|         | · One clicked to image facility: Auto exposure, Auto focus, auto     |                  |
|         | lighting.  |                  |
|         | Camera Cooling: Three stage peltier thermos electric cooling system. |                  |
|         | Absolute cooling: -25°c to -30°c                                     |                  |
|         | USB: 3.0 speed.  |                  |
|         | Excitation source: Slide-out UV tray with Trans-UV (302 or 312 nm)   |                  |

Co ordinator
COE-Integrated Omics
& Computational Biology,
Utkal University

38

& Epi white LED

- A White-Light Table or Conversion Screen is to be included in the offer for colorimetric stained protein gels.
- Epi-blue LED, Epi-green LED and Epi-red LED excitation source coupled with appropriate emission filters for Visible/RGB Fluorescent Imaging.
- The instrument should be available as either a PC operated unit or as
  a stand-alone instrument with an integrated colored touchscreen. An
  i5 desktop PC of suitable configuration is to be offered with the
  system even if it is a stand-alone instrument with touchscreen.

#### Software:

- Free License free software for image acquisition with full GLP compliance.
- Molecular weight calculation, band quantification, distance calculation, text annotation and image enhancement facilities should be included.

Maximum imaging area to be mentioned.

Data output format should be mentioned.

•UPS if required may be quoted along with instrument.

Warranty: Three years from the date of installation.

### General Terms and Conditions:

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

|                | Signature of the  |
|----------------|-------------------|
| Manufacturer / | Authorized Dealer |
|                | Seal              |

Dated:.....

# Ice Flaker

### FORMAT

| From:   |                                       |
|---|---------------------------------------|
| M/S   | · · · · · · · · · · · · · · · · · · · |
|   |                                       |
| To,   |                                       |
| The coordinator, .  |                                       |
| Centre of Excellence in Integrated Omics & Computational Biology, |                                       |
| Utkal University, Vani Vihar, Bhubaneswar-751 004                 |                                       |
| Sub: Procurement of Ice Flaker for the FY 2023-24                 |                                       |
| Ref. Advertisement (Name of the News paper), Dated:               |                                       |
| EMD: Rs.3, 000.00 (Rupees three thousand) only (D.D. No           |                                       |
| Dated:Bank  |                                       |

| Sl. No. | Specification  | Unit Price + Tax FOR Destination |
|---------|--|----------------------------------|
| Α.      | Make & model   | FOR Destination                  |
|         | Technical specifications   | 4                                |
|         | <ul> <li>Ice flaker should produce daily ice flakes of up to 100 KG or more.</li> <li>Up to 30KG ice storage capacity.</li> <li>High Low maintenance bearing for enhance reliability.</li> <li>Heavy-duty stainless-steel cabinet resist corrosion.</li> <li>Easy Access door, slide up and out of the way.</li> <li>Flake Ice should be small, hard bits of ice ideally suited for healthcare applications.</li> <li>Standard equipment to be supplied with ice scoop with bin legs, alternate low profile legs standard. Legs adjustable.</li> <li>Refrigerant: R452A</li> <li>Operating limits:</li> <li>Ambient temperature range: 10°C - 43°C</li> <li>Water pressure ICE maker-Water in: Minimum 1 bar, maximum 6 bar.</li> <li>The tenderer should mention all installation pre requisites and space for installation with adequate clearance.</li> </ul> |                                  |
|         | Warranty:Three years on the equipment.   |                                  |

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

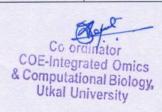
Signature of the Manufacturer / Authorized Dealer Seal

Dated:.....

# **Computational Workstation**

| Fr | om:  |  |
|----|--|--|
| M  | /S   |  |
|    |  |  |
|    | To,  |  |
|    | The coordinator,   |  |
|    | Centre of Excellence in Integrated Omics & Computational Biology,  |  |
|    | Utkal University, Vani Vihar, Bhubaneswar-751 004                  |  |
|    | Sub: Procurement of Computational Workstation for the FY 2023-2024 |  |
|    | Ref. Advertisement (Name of the Newspaper), Dated:                 |  |
|    | EMD: Rs.1, 000.00 (Rupees one thousand) only (D.D. No,             |  |
|    | Dated:Bank   |  |

| Sl. No. | Specification  | Unit Price + Tax |
|---------|--|------------------|
|         |  | FOR Destination  |
| A.      | Make & model   |                  |
|         | Technical specifications:                                    |                  |
|         | Processor- One nos., x86 Architecture based Intel/AMD Latest |                  |
|         | Generation processor. Each processor with clock speed of     |                  |
|         | 3.9GHz base frequency, processor with 8Cores. Supports       |                  |
|         | DDR4 2900 or better memory, 2MB cache per core or higher     |                  |
|         | System utility with Frameworks Preloaded- System should be   |                  |
|         | preloaded with Precompiled frameworks (CPU & GPU             |                  |
|         | optimized MxNet, CuDNN, Caffe and Pytorch) to be supplied    |                  |
|         | with the system.   |                  |
|         | Chipset- Compatible CHIPSET                                  |                  |
|         | Memory -32GB Memory or more. Higher capacity of DIMMs        |                  |
|         | must be up to 768GB or higher.                               |                  |
|         | Licensed Node Management S/W and Scheduling Utility-         |                  |
|         | Support Package and Image based provisioning,                |                  |
|         | Intuitive web interface to manage and customize the node     |                  |
|         | Customizing networks and compute node profiles through       |                  |
|         | GUI.   |                  |
|         | Solid State Drives- 1 x 1000 GB 3.5" SATA 7200 RPM HDD.      |                  |
|         | Accelerator -1 x Computational GPUs , each with on board     |                  |
|         | GPU Memory: 4GB, 300 CUDA Cores, and 3rd Gen Tensor          |                  |
|         | cores.   |                  |
|         | Ethernet ports- At least 1 × 1Gbps Ethernet port             |                  |
|         | I/O slots-3 × PCIe 3.0 slots including x16 & x8 bandwidth    |                  |
|         | based slots.   |                  |



- Ports- Minimum 4 USB ports , 1 COM Port
- OS- Windows / Ubuntu OS Linux Prelaoded.
- Monitor-22" or higher LED Monitor.
- KBD+Mouse- Standard Keyboard + Optical Mouse (Wireless +USB)

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

|   |                | Signature of the  |
|---|----------------|-------------------|
| N | Manufacturer / | Authorized Dealer |
|   |                | Seal              |

Dated:....

# Item no. 17 Liquid Nitrogen tank

| Fr | om:   |
|----|---|
|    | /S  |
|    | To,   |
|    | The coordinator,  |
|    | Centre of Excellence in Integrated Omics & Computational Biology, |
|    | Utkal University, Vani Vihar, Bhubaneswar-751 004                 |
|    | Sub: Procurement of Liquid Nitrogen tank FY 2023-24               |
|    | Ref. Advertisement (Name of the News paper), Dated:               |
|    | EMD: Rs.7, 000.00 (Rupees seven thousand) only (D.D. No,          |
|    | Dated: Bank Bank  |

| S1. No. | Specification   | Unit Price + Tax |
|---------|---|------------------|
|         |   | FOR Destination  |
| A.      | Make & model  |                  |
|         | Technical Specifications  |                  |
|         | The item should be provided with  |                  |
|         | o both manual and computerized inventory record                             |                  |
|         | keeping method.   |                  |
|         | o Temperature Uniformity:   |                  |
|         | <ul> <li>Audible alarm incase liquid nitrogen falls below range.</li> </ul> |                  |
|         | o Advanced vacuum insulation to minimize liquid                             |                  |
|         | nitrogen evaporation.   |                  |
|         | o Secured lock system.  |                  |
|         | o Capacity: >4.0 cu. Ft.  |                  |
|         | o Capacity:>120L or above   |                  |
|         | o Temperature range:-180°C  |                  |
|         | o Rack capacity: Minimum 4 Nos.   |                  |
|         | 0   |                  |
|         | General Terms and Conditions:   |                  |
|         | Price quoted should be inclusive of all taxes and custom                    |                  |
|         | clearance (if applicable) and FOR destination (Utkal                        |                  |
|         | University-CoE-IOCB)  |                  |
|         | No. Of preventive maintenance visits during the period of                   |                  |
|         | warranty.   |                  |

- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

|               | Signature of the  |
|---------------|-------------------|
| Manufacturer, | Authorized Dealer |
|               | Seal              |

Dated:.....

# Incubator/Rearing Chamber for Drosophila culture

| Fre | om:   |
|-----|---|
| M/  |   |
|     | To,   |
|     | The coordinator,  |
|     | Centre of Excellence in Integrated Omics & Computational Biology,                       |
|     | Utkal University, Vani Vihar, Bhubaneswar-751 004                                       |
|     | Sub: Procurement of Incubator/Rearing Chamber for Drosophila culture for the FY 2023-24 |
|     | Ref. Advertisement (Name of the News paper) Dated:                                      |
|     | EMD: Rs.3, 000.00 (Rupees three thousand) only (D.D. No,                                |
|     | Dated:  |

| 81. No. | Specification   | Unit Price + Tax FOR Destination |
|---------|---|----------------------------------|
| Α.      | Make & model  |                                  |
|         | Technical specifications  |                                  |
|         | <ul> <li>Microprocessor PID controlled and Refrigeration capacity control</li> <li>Ideal for Fruit flies / Drosophila culture.</li> <li>Capacity: 290-300 litres</li> <li>Chamber temperature Range: 3-45°C (±0.5 °C).</li> <li>Light Cycle: Instrument should have light cycle that will reproduce diurinal cycle.</li> <li>Cooling: Thermo Electric Cooling.</li> <li>Dimensions Exterior, interior need to be mentioned.</li> <li>Having Shelves -5 or more.</li> <li>Digital Display</li> <li>Should be provided with over temperature thermostat and alarm.</li> <li>Program Function: Temperature, light and humidity</li> <li>Minimum 10-step repeated 1-90(minimum) times. Max 10 programs memorized. Clock mode, timer mode, Start and time reservation function.</li> <li>Temperature resolution: 0.1°C or better.</li> <li>Temperature Accuracy: ±1°C</li> </ul> |                                  |
|         | <ul> <li>Humidity range: higher than ambient to 90%(± 10%)</li> <li>Lighting Range 0-20,000 Lx with adjustable Fluorescent lamp</li> </ul>  |                                  |

- Inner-wall painted stainless steel is preferred.
- · Non CFC insulation.
- Chamber should be provided with HEPA filter/UV sterilization to maintain sterile environment.
- Warranty: Three years on the equipment

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
  - No. Of preventive maintenance visits during the period of warranty.
  - Duration of service support and years of availability of spare parts must be mentioned.
  - Service response time within warranty need to be mentioned.
  - Softcopy of the tender documents need to be given in pen drive/CD.
  - Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

Signature of the Manufacturer / Authorized Dealer

Seal

Dated:.....

# Silent Disel Generator Set

### FORMAT

| F | rom:   |
|---|--|
| M | /S   |
|   | the state of the s |
|   | To,  |
|   | The coordinator,   |
|   | Centre of Excellence in Integrated Omics & Computational Biology,  |
|   | Utkal University, Vani Vihar, Bhubaneswar-751 004  |
|   | Sub: Procurement of 40KVA silent D.G Set with manual control panel for the FY 2023-24  |
|   | Ref. Advertisement (Name of the News paper), Dated:  |
|   | EMD: Rs.7, 000.00 (Rupees seven thousand) only (D.D. No,   |
|   | Dated: Bank.   |

| Sl. No. | Specification   | Unit Price + Tax |
|---------|---|------------------|
|         |   | FOR Destination  |
| A.      | Make & model  |                  |
|         | Technical Specifications                                      |                  |
|         | o Meeting latest CPCB-II norms.                               |                  |
|         | o Noise level needs to be mentioned                           |                  |
|         | o Engine Details:   |                  |
|         | o Engine rated HP: 52.3 or higher.                            |                  |
|         | o Stroke four   |                  |
|         | o Number of Cylinder: 4                                       |                  |
|         | o RPM: 1500   |                  |
|         | o Fuel consumption at full load need to be mentioned          |                  |
|         | <ul> <li>Method of Cooling: Coolant Cooled.</li> </ul>        |                  |
|         | o Type of Governor: Electronic.                               |                  |
|         | o Starting system: 12 V electric stat.                        |                  |
|         | o Applicable standard: ISO 3046, BS 5514.                     |                  |
|         | Alternator details  |                  |
|         | <ul> <li>Make and model need to be mentioned</li> </ul>       |                  |
|         | o Rating: 40KVA   |                  |
|         | o KW: 32KW  |                  |
|         | o Type: Brush less.   |                  |
|         | <ul> <li>Excitation: Self excited, self-regulated.</li> </ul> |                  |
|         | o Enclosure: SP-DP  |                  |
|         | o Encloser protection: IP-23                                  |                  |
|         | o Rated current: 56 Amp                                       |                  |
|         | o Rated voltage: 415V   |                  |
|         | o Number of Phases: 3   |                  |
|         | o Frequency: 50Hz   |                  |
|         | o Power factor; 0.8 PF  |                  |

48

- Voltage regulation: ±0.5%
- Over Load capacity: 10% for 1 hour for every 12 hour running.
- o Applicable Standard: IS4722/BS5000
- Accessory are to be supplied with the DG set.
- Fuel tank-75L capacity minimum shall be supplied and to be mounted inside the canopy.
- o 12V 90Ah battery of reputed brand.
- Battery lead and link as per needed.
- Anti vibration mounted pads.
- Residential silencer.
- First fill of Lube oil and coolant.
- Fuel for starting and testing for one hour.
- Canopy dimension: As per requirement.
- Validity: 90 days from the last day of tender.
- Warranty: Minimum 24 months or 5000 running hour which is earlier on engine and alternator against any manufacturing defects provided manufacturers recommended lube oil, coolant and genuine spare part are used.
- o Complete installation including civil foundation and 4 numbers of earthing. Commissioning and standard electric cable connection up to the main supply board with change over switch will have to be done by the tenderer.

- Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)
- No. Of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

Dated:....

Signature of the Manufacturer / Authorized Dealer Seal

49

# AUTOCLAVE

| Fr | om:  |
|----|--|
| M  | 'S   |
|    |  |
|    | To,  |
|    | The Coordinator,   |
|    | Centre of Excellence in Integrated Omics& Computational Biology, |
|    | Utkal University, Vani Vihar, Bhubaneswar-751 004                |
|    | Sub: Procurement of Autoclave for the financial year 2023-24     |
|    | Ref. Advertisement (Name of the News paper), Dated:              |
|    | Amount: Rs.1,000.00 (Rupees one thousand) only (D.D. No,         |
|    | Dated:Bank.  |

| Sl. No. | Specifications   | Unit Price + Tax FOR Destination |
|---------|--|----------------------------------|
| A.      | Make and Model   |                                  |
|         | Technical specifications   |                                  |
|         | <ul> <li>Autoclave should have sturdy construction and double walled</li> <li>Inner chamber i.e. boiler made of high-quality stainless steel.</li> <li>Outer shell may be painted.</li> <li>Boiler and Outer shell provided with air insulation</li> <li>Lid made up of thick good quality steel and tightened by radial locking system</li> <li>Joint less neoprene gasket</li> <li>Paddle lifting device to open and close lid</li> <li>Fitted with water indicator, pressure gauge, steam release cock, and spring loaded safety valve.</li> <li>Pressure Range: 5-20 psi</li> <li>Temperature: 121 °C</li> <li>Chamber Volume: 50 L or more</li> <li>Should be with stainless steel perforated basket</li> </ul> |                                  |
|         | Power supply: must be mentioned and the power Consumption should be 3 kW or lesser.  |                                  |
|         | General Terms and Conditions:  |                                  |
|         | Price quoted should be inclusive of all taxes and custom clearance (if applicable) and FOR destination (Utkal University-CoE-IOCB)   |                                  |
|         | No. Of preventive maintenance visits during the period of  |                                  |

warranty.

- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

Signature of the Manufacturer / Authorized Dealer Seal

Dated:....

# pH meter

| Fi  | rom:   |
|-----|--|
| M   | /S   |
| 7.5 | To,  |
|     | The coordinator,   |
|     | Centre of Excellence in Integrated Omics& Computational Biology, |
|     | Utkal University, VaniVihar, Bhubaneswar-751 004                 |
|     | Sub: Procurement of pH meter for the financial year 2023-24      |
|     | Ref. Advertisement (Name of the Newspaper), Dated:               |
|     | Amount: Rs.1,000.00 (Rupees one thousand) only (D.D. No,         |
|     | DatedBank  |
|     |  |

| Dut     | DatedBank   |                 |
|---------|---|-----------------|
| S1. No. | Specifications  | FOR Destination |
| Α.      | Make and Model  |                 |
|         | Technical specifications  |                 |
|         | The Range of pH meter should be 0 to 14 pH and with minimum                       |                 |
|         | resolution of 0.01 pH   |                 |
|         | The stability should be 0.01 pH per hour  |                 |
|         | Relative accuracy should be minimum ± 0.02 pH ±1 digit                            |                 |
|         | Slope should range from 85% to 115%   |                 |
|         | Standard buffers 7.000, 4.004 or 9.183 should be supplied along                   |                 |
|         | with the system.  |                 |
|         | Electrochemistry  |                 |
|         | Resolution should be minimum 1 mV   |                 |
|         | Accuracy should be ±1 mV and ± 1 digit  |                 |
|         | Temperature   |                 |
|         | Compensation should be auto or manual   |                 |
|         | Display   |                 |
|         | <ul> <li>Should be at least 7 digits, 7 segments LED with 3 digits for</li> </ul> |                 |
|         | temperature and 4 digits for pH.  |                 |
|         | Power   |                 |
|         | Should be compatible with 230 V AC ± 10%, 50 Hz                                   |                 |
|         | General Terms and Conditions:   |                 |
|         |   |                 |
|         | Price quoted should be inclusive of all taxes and custom clearance.               |                 |
|         | (if applicable) and FOR destination (Utkal University-CoE-IOCB)                   |                 |

- No. of preventive maintenance visits during the period of warranty.
- Duration of service support and years of availability of spare parts must be mentioned.
- Service response time within warranty need to be mentioned.
- Softcopy of the tender documents need to be given in pen drive/CD.
- Make and model of the equipment/item quoted need to be mentioned with documental evidence/brochure of authorized company/manufacturer.

Signature of the Manufacturer / Authorized Dealer Seal

Dated:....