



## JIWAJI UNIVERSITY, GWALIOR

No.

Date:

### **TENDER NOTICE**

Sealed Tenders are invited from the reputed manufactures/authorized dealers, having sales/income tax registration numbers, for import/supply of a Microprocessor with industrial CCTV camera and image analysis software, Fish Activity Recorder, Manual DNA sequencer with power supply, ERDAS imagine GIS software, High speed Refrigerator Centrifuge and Water Analysis System. Tender documents containing terms conditions, specifications of the equipment can be obtained from the Store, Jiwaji University, Gwalior 474011 up to 31.5.2011 on payment of Rs. 500/- drawn in favor of Registrar, Jiwaji University, Gwalior. The last date for submitting tenders is 5.30 PM on 31.5.2011. Alternatively, the tender form along with relevant documents may be downloaded from the University website (<http://www.jiwaji.edu>), and in such case only those forms with tender fee of Rs. 500/- (as D.D.) will be considered.

REGISTRAR

## **Specifications for Microprocessor, CCTV Camera and Image Analysis Software**

1. High-speed and high-resolution CCD video camera frame rate 30 frames/s, pixel resolution 1024X1024, pixel image 24-bit color
2. High speed frame-grabber image-digitizer for above CCD video camera
3. Software for continuous video image frame recording and image analysis
4. CCD video camera mount and fixtures suitable for the existing Microscope
5. Power supply for the CCD video camera
6. Cable for linking video camera with frame grabber
7. Microprocessor AT89S52 controlled Microscope light source switching PWM power supply of 0-6V 0-2A programmable with LED display of voltage and current, Microscope light brightness sensor photocell light intensity LED display and Microprocessor based brightness controller for constant brightness of the light source. Safety device need to be integrated in the power supply for protecting against over current and over voltage to the lamp to protect the lamp from sudden inrush current damage.
8. 500VA Uninterrupted sine wave noise free and isolated low leakage current very safe type power supply
9. One year free repair / replacement warrantee.

## **Specifications for “Fish Activity Recorder”**

1. Fish activity tank made of 5mm thick transparent glass wall 3ft. X 1.5ft. X 2ft. Quantity 2 numbers
2. Water cleaning pump and sensor with power controller using 1KV isolated 230V 8A power switch with TTL level drive control board for direct control by the computer interface. Quantity 1 numbers
3. Air bubbler pump with pump power controller using 1KV isolated 230V 8A power switch with TTL level drive control board for direct control by the computer interface. Quantity 1 numbers
4. Thermister water temperature sensor and PID temperature controller with interface to computer for programming and control. Quantity 1 numbers
5. CFL based cool lighting source 40W CFL tube array assembly, tube power control circuit for 90V to 280V AC/DC operation, with power controller using 1KV isolated 230V 8A power switch with TTL level drive control board for direct control by the computer interface. Quantity 1 numbers
6. Ultraviolet CFL based cool lighting source 40W CFL tube array assembly, tube power control circuit for 90V to 280V AC/DC operation, with power controller using 1KV isolated 230V 8A power switch with TTL level drive control board for direct control by the computer interface. Quantity 1 numbers
7. pH sensor with Analog to digital converter for direct data measurement by computer with proper computer interface hardware PCB, Quantity 1 numbers
8. Water conductivity measurement with conductivity to frequency converter for direct data measurement by computer with proper computer interface hardware PCB. Quantity 1 numbers
9. Light illumination LUX photo sensor with light to frequency converter for direct data measurement by computer with proper computer interface hardware PCB. Quantity 1 numbers
10. Water visibility sensor with visibility to frequency converter for direct data measurement by computer with proper computer interface hardware PCB. Quantity 1 numbers
11. Computer controlled chemical mixer peristaltic pump. Quantity 1 numbers
12. Fish surfacing activity sensor array made of sensor for fish surface activity of breathing as event counter and with interface to computer for information capturing in real time. Quantity 1 numbers
13. Sensor array made of 16 photo sensor elements for sensing presence of fish in two zones: bright zone and dark zone with time information for fish activity sensed by the sensor in zones as event record information and with interface to computer for information capturing in real time. Quantity 1 numbers
14. Microprocessor based real time controller for all above sensors listed from 2-13 in 2U height 19” rack based embedded computer. Quantity 1 numbers
15. Isolated RS232 interface board and RS232 interface cable to PC. Quantity 1 numbers
16. Real time embedded software fish activity recording in real time, Quantity 1 numbers
17. 1000W AC Mains power inverter for supporting instruments with 4 hours power back up in case of power failure

## **Technical Specifications Manual DNA Sequencer with Power Supply**

### **Specifications:**

#### **Gel casting system:**

1. The system should be multifunctional, include top and base sections; with bonded inner glass plates outer set of glass plates, adjustable leveling feet; leveling indicator; sandwich clamps to be used while gel casting and running, buffer drain system.
2. Horizontal gel casting with syringe.
3. No need of gel clamps, clips or fans.
4. Gel size: The gel size range may be 38x50cm (WxH) or more with integrated plate chamber. Size should be adjustable as per requirement.
5. All the accessories, like 0.4mm thick spacer sets, pair of glass plates and extension with shark tooth combs of different teeth numbers ranging from 12 to 72 well or more (along with minimum two spares), etc.

#### **Gel viewer:**

1. The UV trans-illuminator system with uniform UV field (low and high wavelength ranges) and white light platform for both DNA/RNA and protein gels.
2. Dark box (preferred for UV protection).
3. Photographic attachment (digital CCD camera) for gel documentation connected with a PC and printer for image recording and software for routine analysis.
4. Viewing surface size should be in proportionate with the gel casting system of the manual sequencer.
5. Spare one set of lamps.

#### **Power supply:**

1. High voltage programmable power supply with wide output range of 20-5000V, should be able to operate four electrophoresis units simultaneously for identical runs and graphic LED display, suitable UPS (30-60 min back-up time)
2. Temperature control inbuilt (30-90°C). With temperature probe.
3. Constant power supply, constant current, constant power or constant temperature options. Automatic power up after power failure.
4. Standard safety adaptor set with output jackets.
5. Inbuilt voltage overload protection, load change detection features.
6. Time control: 99h, 59min.
7. At least 4 recessed sets in parallel.

**The system should have at least three years warranty with one year free spare**

## **ERDAS Imagine Professional Remote Sensing Software**

### **Technical Specifications:**

1. ERDAS Imagine Professional Version 9.3 or latest (Academic Edition)
2. Software should provide a comprehensive geographic imaging package for advanced image processing, remote-sensing and GIS professionals.
3. It should include features such as graphical data modeling, advanced classification and radar analysis tools
4. It should have a tool for building and executing expert systems for image classification, post-classification refinement and advanced GIS modeling
5. For Spectral Analysis it should be capable of:
  - i. Standard task based workflows
  - ii. Hyperspectral image pre-processing steps
  - iii. Provision of Spectral libraries
  - iv. Spectral analysis workstation
  - v. Access to all pre-processing and task processes
6. An Expert classifier feature should be provided with Knowledge Engineer and Knowledge classifier
7. It should have features like Multispectral classification, Subpixel classification, Area frame sampling, Model maker, Radar Interpreter, etc.
8. It should create ECW Images
9. It should support Raster and Vector Data formats
10. It should have Geometric tools, Map composer capabilities, Advanced mosaicking tools, Image processing and spatial analysis tools, Multispectral classification tools, Raster GIS analysis tools, Hyper spectral analysis tools
11. It should allow user to borrow licenses
12. It should be completely a GUI (Intuitive Graphical User Interface) software

## Specification for High speed refrigerated centrifuges

- Brush-less induction motor with frequency drive
- Precise speed control and reproducibility
- Pre setting of speed, temperature and time
- Speed holding accuracy 100 RPM
- Safety lid interlock to prevent cover opening during centrifugation
- Digital speed indicator, 0-99 minutes digital timer
- Digital temperature indicator-cum controller.
- Better control of sample temperature
- Dynamic brake & Imbalance detector with cutoff

Max. Speed	-	2000
Max. RCF	-	37570
Max. Tube Size	-	100
Max. Capacity	-	400
Lowest Temp.	-	-8
Connected Load	-	1.6
Voltage Stabilizer	-	VS-03

### Accessories :

R-244	12 × 15 ML	ANGULAR	18000	31150
R-248	24 × 1.5 ML	ANGULAR	20000	37570

## **WATER ANALYSIS SYSTEM**

### Technical Specifications:

1. pH/Oxi 340i SET Robust and Waterproof hand held Multi-meter for battery operation or with optional mains supply. Set with case, stand, SenTix ® 41-3 pH sensor, Din plug, Cellox ® 325-3 oxygen sensor, 3 exchange membrane heads, cleaning solution, abrasive foil, technical buffers 4 and 7, 3 M KCL and fluoride meter

## TERMS AND CONDITIONS OF JIWAJI UNIVERSITY, GWALIOR

Tenders will be considered subject to following terms and conditions.

1. All tenders must be carefully accompanied by a bank draft drawn in favor of the Registrar, Jiwaji University, Gwalior, for an amount mentioned in the enclosed table in the offer as earnest money. Tenders received without earnest money will be liable to be rejected and may not be considered.
2. Tenderer can obtain tender documents against payment of Rs 500.00 by demand draft in favor of the Registrar, Jiwaji University, Gwalior, on or before **31st May 2011 on any working day between 11 A.M. to 5.30 P.M.**
3. The last date for submission of Tender (by speed post or registered post only) is 31<sup>st</sup> May 2011 before 5.30 P.M. at the office of the Registrar, Jiwaji University, Gwalior.
4. The Tenderer should agree for furnishing of **Bank Guarantee from Nationalized bank upto 10% of the cost of the equipment during** the warranty period and extendable to at least five years or as many as desirable by the University so as to ensure proper and satisfactory working of the equipment.
5. The Tenderer should agree to execute an agreement for proper supply, installation and satisfactory working of the equipment exactly to the satisfaction mentioned.
6. The rates should be for FOR Gwalior. The prices should be inclusive of sales tax and other charges. The exact details of taxes should be given separately.
7. Being an educational Institution it is entitled to issue concessional sales tax certificate. No other sales tax form is issued. If concessional sales tax certificate is not acceptable to the supplier, the actual rate of sales tax to be charged must be clearly mentioned.
8. This institution is exempted from payment of Central Excise duty in terms of Govt. Notification No. 1097-Central Excise dated 01.03.1997. Necessary copy to be provided by the University.
9. For imported equipments the price should be without any custom duty. The institution is registered with Department of Science and Industrial Research (DSIR) Govt. of India, and is exempted from payment of custom duty. Necessary certificate copy to be provided by the University.
10. If the rates are quoted Ex-Godown or FOR railway Station of dispatch then the tenders must also indicate charges towards packing and forwarding, railway freight etc. so as to compare these rates with those of others who have quoted FOR destination failing which such offer will be ignored.

11. Manufacturer name, their trademark and brand should invariably be mentioned in the tender and illustrated leaflets giving technical particulars / details etc. should be attached with the quotation to facilitate consideration of the offer.
12. The tenderer should quote their best willing price which should be firm from the period of 120 days from the due date of tender.
13. The minimum period of delivery of the material should be quoted. Ready stock offers will get preference.
14. The quantities of each item to be purchased may vary according to actual requirement at the time of placing order.
15. If there is any DGS & D rate contract of Government approved rates the same should be quoted enclosing the copy of the rate contract, which will get preference.
16. The payment (in FE) for imported items will be made preferably by advanced site-draft.
17. The tenderer should avoid the use of vague terms such as "extra as applicable". Such tenders will be rejected.
18. Printed conditions on the back of the offer submitted will not be binding unless separately mentioned.
19. Quotations for each item (as per serial number in the specification sheet) along with terms and conditions must be submitted separately in separate cover so that for individual item separate comparative chart could be prepared. This is very important.
20. Advance payment either direct or through bank will not be accepted in any case. As per rule, full payment will be made after receipt of material, inspection there of and after satisfactory installation and working of the entire equipment.
21. The successful tenderer, if so required by the University, shall place a Security Deposits in cash or furnish Bank Guarantee from the Nationalized Bank up to 10% of the total value of the order which is refundable after satisfactory execution of order within the stipulated delivery period. The penalty of half percent per week shall be imposed by the University, subject to a minimum of 10% for the delivery of the material. No interest shall be paid on the Security Deposit or Earnest Money.
22. The Tenders should clearly state regarding charges for installation, maintenance etc. of the equipment, if any.
23. Offers received not according to our terms and conditions within the time prescribed shall be rejected. Delay due to postal service of any kind will not be considered for acceptance of the order.
24. In all matters of dispute the decision of the Registrar, Jiwaji University, Gwalior shall be final and binding on the tenderers.

25. The address of local office at Gwalior for maintenance along with the list of well reputed organizations who have purchased the same equipment should be provided.
26. List of spare parts must be supplied.
27. The test report of the equipment quoted from reputed Government organizations/ academic institutions must be submitted along with the offer.
28. In case of an authorized dealer, Certificate from Manufacturer must be attached as proof.
29. Preference will be given to the companies having service center at Gwalior. Companies with ISO-9000 certificates will also be preferred.
30. Date and time of opening is **3<sup>rd</sup> June 2011 at 3.00 P.M.** in the presence of intending Tenderers or their representatives who may like to be present in the office of Registrar, Jiwaji University, Gwalior.
31. If any of the dates of the receipt or opening the tender happen to be declared as holiday, the schedule will be shifted to the next working day automatically.
32. The tender envelope should contain two envelopes. First, superscribed as Technical Bid for (the item). This should contain the specifications of the equipment & terms and conditions of supply, Earnest money. The second should be superscribed as Commercial Bid for (the item). These envelopes should be placed in one envelop and should be super scribed as Serial No. . . . . vide Tender no. **JU/SSZ/01/2011** to be opened on **3rd June2011, at 3.00 P.M.** Only who fulfill the technical specifications shall be considered for opening the commercial bid.
33. Canvassing for support in any form for the acceptance of any tender is strictly prohibited. Any tenderer doing so will render himself liable to the penalties which may include removing of his name from the register of approved suppliers.
34. Separate tender to be submitted for each item.
35. Tender should reach by speed post or registered post. Tender sent by courier, by hand telegraphic, fax and conditional tenders shall not be accepted.
36. Any item or offer may increase in number or even might not be purchased without assigning any reason. Registrar, Jiwaji University, Gwalior reserves the right to accept or reject any or all tenders without assigning any reason there of.

**Important Note:**

Quotations along with terms and conditions must be submitted in duplicate separately in separate cover (please **see enclosed Table for EMD rates**) so that for individual set of equipment separate comparative statement could be prepared.

**Registrar  
Jiwaji University**

**Note:** 1) Unless the questionnaire is completely filled in and detailed information provided as required, your offer is liable to be rejected.

2) Complete questionnaire should be signed by the bidder and sent along with the quotation in Technical Bid and a copy in Price Bid.

### **Further Instructions**

1. Technical bid and price bid should be submitted separately under wax sealed covers and both the envelopes put together in another cover which should be wax sealed. This is to ensure that if the technical bid qualifies with the laid down specifications and configurations, only then price bid will be opened. Otherwise the price bid will automatically get rejected along with the technical bid not fulfilling the specifications/ configurations. The envelope should be super-scribed as "Technical bid for \_\_\_\_\_(Name of the equipment)". "Quotations for price bid for (Name of the equipment)", envelope super-scribing "Quotations for \_\_\_\_\_(name of the equipment) & Tender document No. \_\_\_\_\_" respectively.

### **EMD: EMD SHOULD BE KEPT IN SEPARATE COVER**

2. The technical bid must have the following enclosures:
  - a) True copy of the commercial bid but with the prices omitted. All items quoted must be clearly indicated.
  - b) The original D.D. of the EMD should be kept in a separate cover along with the Commercial bid.
  - c) Photocopy of the EMD should be enclosed with the Technical bid without showing the amount.
  - d) Detailed literature, illustrative pamphlets, company profile, customers list & questionnaire duly filled.
3. Latest income tax and sales tax clearance certificate must accompany the technical bid.
4. Authorized dealers should submit a copy of valid dealership certificate along with quotation.
5. Last date for the receipt of the sealed quotation shall be on or before **31<sup>st</sup> May 2011 at 5.30 P.M.**
6. Late/ delayed offers will not be accepted.
7. Conditional, telegraphic, tenders by hand or by courier shall not be accepted.
8. In event of any date indicated above is a declared holiday the next working day shall become operative for the respective purpose mentioned therein.
9. The technical bids will be opened in the presence of the bidders or their authorized representatives on **3.6.2011 at 3.00 P.M.** in the office of the Finance Officer, Jiwaji University, Gwalior. It is the responsibility of the bidders to present themselves at the time of opening of the technical bids.
10. The Registrar of Jiwaji University reserves the right to accept or reject any offer in part or whole without assigning any reasons whatsoever.

Signature of the Bidder with Seal

**Table: Ernest Money**

For the deposition of earnest money, following table may be followed.

<b>S. No.</b>	<b>Instrument</b>	<b>EMD (Rs.)</b>
1.	Microprocessor, industrial CCTV camera & image analysis software	15,000
2.	Fish activity recorder	7,000
3.	Manual DNA sequencer with Power supply	7,000
4.	ERDAS Imagine GIS Software	8,000
5.	High Speed Refrigerator Centrifuge	5,000
6	Water Analysis system	1,000