

**CENTRAL INSTITUTE OF FRESHWATER AQUACULTURE
(INDIAN COUNCIL OF AGRICULTURAL RESEARCH)
P.O.- KAUSALYAGANGA, BHUBANESWAR- 751002, ORISSA**

No.CIFA/2-S/Advt./2010-11/

Dated: 17.08.2010

To

M/s. AKAR
Plot No. M.5/7, Acharya Vihar,
Bhubaneswar.

Dear Sir,

Please insert the text given in the following box in the leading newspaper. The Indian Express, all editions, The Statesman, Kolkota Editions, The Samaj, Oriya daily , all editions as per the given instruction and prefer your claim in a pre-receipted bill along with proof and DAVP certificate.

Date of insertion :19.08.2010

Advt. No. 09/2010-11

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TENDER NOTICE No. 09/2010

Tender inserting date:19.08.2010

Tender closing date: 15.09.2010.

Sealed tenders are invited by the Director, CIFA in **TWO bid systems (technical bid and price bid)** from reputed /reliable / registered firms/ agencies/suppliers **for procurement of various Scientific /laboratory equipments** for research purpose. Interested/Willing parties may visit the Institute website: <http://www.cifa.in> to get complete information about the Tender including name of the equipments with specifications and terms & conditions governing the tender. The last date of submission of Tender is fixed on 15.09.2010 (17.00 hrs.).

Sd/-

DIRECTOR

Yours faithfully,

प्रभारी अधिकारी (भण्डार)
/Officer-in-Charge (Stores)

LIST OF EQUIPMENT PROPOSED TO BE PROCURED UNDER PLAN FUNDS DURING 2010-11

Sl No.	Name of the Equipment	Qty	Imp. / Ind.	Specification	BID Security (in Rs.)
1	- 80° C freezer for Kausalyaganga	01	Imp.	<p>Model – Upright with capacity 430 – 450 L Operating temperature - 50 to – 86° C Refrigeration – Cascade design Refrigerant –CFC free Alarm systems – Visual and audible, condenser-temperature alarm, power failure alarm, high-low temperature alarm and remote alarm contact. Door system – Inner (4) and outer double door Shelves – 4-6 inner (interior finish stainless steel) Control and display – Microprocessor controlled, digital display of temperature and voltage Cooling system and cabinet insulation –To cope in high ambient conditions, preferably, polyurethane foamed insulation is preferably, Provided with electrical overload protection safety device to protect the compressor and sequence restart. Door key lock-safety locking system Should be quoted with blower motor, relay kits, timer, cryoracks, CO2 backup system Heavy duty dual wheel swivel locking casters. Suitable stabilizer need to be supplied. Three years warranty or two years free maintenance after the expiry of warranty period.</p>	10,000.00
2.	Crude fiber Analytical system for Kausalyaganga	01	Imp.	<p>Extraction system for simple determination of crude fibre, detergent fibre, cellulose, hemicelluloses, lignin and related parameters in plant materials and compound feeds. 6-8 sample places in the unit and analysis simultaneously, should consist of separate hot extraction unit and cold extraction unit. Hot extraction Unit, for hot hydrolysis and extraction with built-in systems for heating and filtration. Cold extraction unit, for defatting samples, extraction at ambient temperature e.g. lignin determination, and for solvent dehydration of fibre residues. No sample transfer. Measuring range – 0.1 to 100% More than 30 sample analysis per day Filtration by vacuum. Three to Five years warranty.</p>	10,000.00
3.	Nitrogen Analysis system (Automatic Kjeldhal system). for Kausalyaganga	01	Imp.	<p>Fully Automatic kjeldahl system with dilution of digested sample, addition of alkali, distillation and titration for analysis of nitrogen/protein in a single unit. Digital display, feather touch, screen for programming with reporting of results. Automatic tube drainage and alkali resistant polypropylene splash head Down loading facility to data to PC to eliminate transcription errors. Built-in recovery tests and built-in “service” Mode for easy troubleshooting. To be supplied with tanks for alkali, water receiver, and waste solutions,</p>	20,000.00

				<p>Measuring range 0.1 to 200 mg N, reproducibility 1% RSD, recovery: more than 99.5%. 24-30 place, for 250 ml tube each, digestion system with built-in electronic temperature control from 90-450° C. Exhaust system for handling tubes along with water aspirator, 2 tube rack, heat shields and retainer place. Provision for measurement of actual temperature using external thermometer Audible "alarm" alerts advice the user when errors/interruptions occur within the running application programme. Three years warranty or two years free maintenance after the expiry of warranty period.</p>	
4.	UV-Spectrophotometer for Kausalyaganga	01	Imp.	<ul style="list-style-type: none"> • Monochromator design preferred for better Optical resolution, very low stray light and relatively good photometric performance • Should cover 190nm to 1200 nm to span all UV & visible range • Stray-light less than 0.02% • Stability $\pm 0.0001A$/hour or better • Scan rate from 1 to 4000 nm/min • Wavelength precision 0.1 nm or better • Operating range should be -0.3 to 3.0 absorbance units • Noise less than $\pm 0.0001A$ • Reproducibility 0.1 nm or better • Optical bench should be rugged, heavy and sturdy preferably made of steel to ensure 8-10 years durability • Facility for kinetic study • Multiple cuvette holder (6-10) with 1 ml and 3 ml cuvettes • Supply of 10 quartz cuvettes with 5 number of 1 ml and 5 of 3 ml. • Standard software should include peak and valley tabulation, dynamic scan recall, auto sequential scans, scan storage, scan reprocessing, method storage, curve/line fit, curve storage, editing of standards, absorbance difference, self test and calibration, measurements in A,C, % T. • Three(3) to Five(5) years warranty. 	30,000.00
5.	Water Purification system. for Kausalyaganga	01	Imp.	<ul style="list-style-type: none"> • Water purification system consisting of reverse osmosis unit capable of producing type – II grade water having resistivity of 10-15 mega ohm. Com, TOC levels less than 50 ppb and flow rate not less than 2 L/hour • Coupled with water purification system producing type I grade water of resistivity: 18.2 mega ohm.cm, pyrogens: 0.005 EU/ml, bacteria:<1 cfu/ml, particulates: < 1 particle of 0.22 um/ml, TOC: not more than 10 ppb, Flow rate not less than 1L/min. • Storage tank capacity not less than 30 L to be included for the RO unit. • Diagnostic display of parameters (resistively and temperature) for both the RO and type I water purification unit. • Small floor print or wall mounting is preferred. 	10,000.00

6.	Automatic Bomb Calorimeter for Kausalyaganga	01	Imp.	<p>Instrument : Fully automatic microprocessor based true isoperibol calorimeter, with automatic oxygen filling, bomb washing, automated bucket and jacket fill as well as automated vessel fill and rinse</p> <p>Jacket temperature: The jacket temperature should be maintained automatically by using an internal thermo electric cooling system.</p> <p>Safety lock system form bomb: the lid should automatically locked electronically when the instrument is in operation mode.</p> <p>Measurement range: 1,000 K Cal/Kg to 10,000 Kcal /Kg for 1 gm of sample.</p> <p>Precision/Linearity: 0.1% RSD or better as per standards. 0.05% Linearity across operating range. As per ISO 1928, ASTM-D-5865/04 & DIN 51900 Methods</p> <p>Measurement Resolutions: 0.0001 Cal/gm</p> <p>Analysis Mode: Equilibrium mode / Dynamic mode or any other mode</p> <p>Operator timer per test: 1 minutes 6-8 tests per hour as equipped</p> <p>Temperature measuring resolution : 0.0001°C</p> <p>Display : Touch screen with graphical user interface should have option for monitoring temperature curve on instrument display or in PC</p> <p>Correction: spiking, ash/nitrogen or acid, fuse wire, sulphur and hydrogen, moisture, GCV, NCV</p> <p>Diagnostic mode: should be available with automatic report generation and message display for pretesting cycle, bomb leak, poor boucket stirring, lid not tight etc.</p> <p>Computer / printer / Balance connection : Ethernet, RS232 interface, flashrom memory to store or transfer the data, and for updating the software</p> <p>Sample crucible capacity : 0.5 gm – 1.5 gm</p> <p>Power requirement : 230 VAC +/- 10%, 50/60 HZ as per Indian condition</p> <p>Oxygen bomb: the Oxygen combustion bomb should be of 250ml capacity to with stand 3000 psi max and working pressure of 2000 psi</p> <p>Operating temperature: 15°C to 40°C, maximum relative humidity of 80% non-condensing, storage -25°C and 65°C, 10% to 85% relative humidity</p> <p>Reporting option : Btu/lb, cal/g, J/Kg or Mj/kg</p> <p>The instruments should be supplied with Oxygen bomb with 250 ml capacity to with stand 3000 psi, gelatin capsules, printer with connecting cable, pellet press with ¼ " punch & die set and oxygen cylinder with regulator. Suitable stabilizer need to be supplied. Three-Five years warranty.</p>	18,000.00
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7	Deep freezer (- 20° C) for Kausalyaganga	01	Imp./ Ind.	Temperature range at least -20° C Vertical freezer with capacity of 300l Electronic temperature and microprocessor controlled Facility for individual racks and suitable number of racks must be supplied with the instruments as accessories. Suitable voltage stabilizer	600.00
8	Meat grinder for Kausalyaganga	01	Imp./ Ind.	A fully equipped meat grinder ready to install with all accessories and electrical fittings running in 220 volt, single phase, AC current preferably with 1.5-2 HP motor with capacitor starter must have a large cast metal throat minimum 1.75 inch and 2.25 inch extruder tube. Provided with minimum sets of 5 grinding plates of different mesh size and knife for giving the final product in the form of a dough. Three –Five years warranty.	400.00
9	Ribbon saw type meat cutter for Kausalyaganga	01	Imp./ Ind.	A fully equipped ribbon saw type meat cutter for laboratory use with motor which can run 220 volt, single phase AC current. The meat saw cutter must have the cutting capacity of 7.5 -0.8 inch and fitted on the table. Equipped with meat grinder, stainless steel table blade. Cabinet type stands with upper and lower blade guide. Upper and lower aluminum wheels for running smoothness. Including accessories such as replacement meat saw bales (4 nos.) and quantum storage tub nesting (2 nos.). Complete electrical fitting ready to install the equipment. 3-5 years warranty.	3,500.00
10	Double distillation Plant for Kausalyaganga	01	Imp.	Double distillation quartz water plant with output capacity not less than 2.5l/hr. The water should be pyrogen free and of pH ranges 6.9-7. Conductivity requirement is $<1 \times 10^{-6}$ and distillate temp 65-80°C. The distillation plant should be accompanied along with water softener, from which water will be fed directly to the boiler of distillation plant. The softener unit should deliver about 2000 l of soft water for one cycle of regeneration.	4,000.00
11	Electronic Balance for Kausalyaganga	01	Imp.	The top pan electronic balance should be of weighing capacity 0-1510g with LCD display. Repeatability of balance should be 0.01g with a readability of 0.01g and linearity of ± 0.02 g. Fully automatic temperature controlled calibration, full tare range facility should be available as standard Piece counting, percent weighing, dynamic weighing, adaptation to the type of weighing, different weighing units facility should be provided. RS 232c interface should be available as standard. It should have high grade chemical resistant, die cast aluminum housing.	4000.00

12	Electronic Precision balance for Kausalyaganga	01	Imp.	Weighting capacity – 0-220g, Repeatability -= 0.03mg/0/1mg, Radability – 0.01mg/0.1mg. Linearity : ± 0.2 mg, Display: LCD display and weighing pan 80 mm Fully automatic temperature controlled calibration (FACT), full tare range facility should be available as standard. Piece counting, percent weight, dynamic weighing, adaptation to the type of weighing, different weighing units facility should be provided. Hook for weighing below the balances should be available as standard. RS 232c interface should be available as standard Weighing process adapter with colour different settings to weight in difficult environments It should have high grade chemical resistant, die case aluminum housing.	2000.00
13	Freezer (- 20 ^o C) for Kausalyaganga	01	Imp./ Ind	Upright model with single/double door Capacity 350 L approx. Pullout drawers and shelves facility Temperature range – 15 ^o C to – 25 ^o C Quality refrigerant and cooling system Alaram system Digital display of temperature Economical in power consumption At least one year free After sales service after warranty in Bhubaneswar	2500.00
14	On line 5KVA UPS for Kausalyaganga	01	Imp/Ind	Manual and Static Bypass switch, external Input Isolation, Transformer for output load protection and LCD display showing various input/output, Parameters, I/P:1 Φ , 230V, 3 wires, 50 Hz AC., O/P: 1 Φ , 230 V, 3 wires, 50 Hz, Battery 12V/26Ahx20Nos. for 60 mints, Battery back-up of make Exide/Quanta only, Battery Rack & Standard accessories for Installation.	2000.00
15	Aquarium Pump for Kausalyaganga	01	Ind.	Voltage-22-240, Frequency-60/50 Hz, Power-240 watt., Output=9000 Ltr/hr., Maxjet-5.8m., Weight-4.2Kg., Size-305x162x183mm, (Specially Japanease Make)	1000.00
16	Dissolved Oxygen Probe for Kausalyaganga	01	Imp./ Ind	Portable and water proof., Field replaceable Dissolved Oxygen electrode, Stirring independent dissolved oxygen sensor, Measurement range: 0 to 200% saturation and 0-20mg/l, Resolution 1% /0.1mg/l, water tightness submersible type with 10-15ft cable, Built in calibration chamber, low battery indicator and salinity, temperature and altitude compensation, Fast response times.	1000.00
17	Carbon Dioxide Probe for Kausalyaganga	01	Ind.	Portable, water proof and secure electrode connectors, Field replaceable Carbon Dioxide (CO ₂) gas sensing combination electrode, Measurement of carbon dioxide, carbonate and bicarbonate in aqueous solutions, Measurement range: 4.40 to 440 ppm., Standard and waterproof BNC electrode with 3.5ft cables, Builts in calibration, low battery indicator and temperature compensation, Fast response times.	500.00
18	Ammonia Probe for Kausalyaganga	01	Ind.	Portable and water proof, Field replaceable dissolved ammonia gas sensing combination electrode, Measurement of dissolved ammonia in aqueous solutions, Measurement range: 0.01-17000ppm, Standard and waterproof BNC electrode with 3.5ff, water proof and secure electrode connectors, Built in calibration, low battery indicator and temperature compensation, Fast response times.	500.00

19	Deep Freezer (-20%) for Kausalyaganga.	01	Ind.	200liter capacity, micro possessor controller , procession tube controller.	2000.00
20	Micro Centrifuge for Kausalyaganga	01	Ind.	14000g, RPM-mn- 1000, 1.5ml rotor, 20.5ml rotor, Antilock, Noise free.	2000.00
21	Oxygenarators for Kausalyaganga	01	Ind.	BPL OG 4203, double channel wt. 32Kg. 640(H)x410(W)x410(D)	1000.00
22	H. Urine Analyser for Kausalyaganga	01	Ind.	H-100,Dirui Industrial Control., Peerless Biotech Pvt.ltd, Wt. 36kg., Dimension 376mn.x316mn.x170mn., Datammory-1000	1000.00
23	Automated ESR Analyser for Kausalyaganga	01	Ind.	ESR 2010, weight 2.5kg, Dimension 22cmx21.6cmx17.5cm (wxhxd)	1000.00
24	Digital Camera (Sony) for Kausalyaganga	01	Ind.	80GB hard disk drive, Ten Mega Pixel Still Photography, Record on In Built Hard Disk, Built in Zoom, Microphone, Carl Zeiss Vario-Tessar Lense, 25xoptical (2000x Digital) Zoom, Dolby Digital 5.1 creator, Steady shot.	1000.00
25	Lawn Mover for Kausalyaganga	01	Ind.	Honda Grass cutting machine, Model –UMK-435, TU-2ST	1000.00
26	Grass Cutter for Kausalyaganga	01	Ind.	Honda Brush cutter (Preferably Honda Make)	1000.00
27	Autoclave for Kausalyaganga	01	Imp./ Ind.	Capacity-40lt. approx., Compact space saving with economical power consumption, Autoclave operates within temperature range-105 °C to 140 °C, Fully automatic door with automatic locking, Double independent monitoring of Temperature and Pressure, Chamber and the jacket must equipped with safety valve., Built-in steam generator, Emergency Shut-off, After service and warranty for at least 2 years.	1000.00
28	Blood Autoanalyzer for Kausalyaganga	01	Imp.	Fully automated, 5 part differentiation of WBC, 15-25 parameters +3 histograms of WBC, RBC and PLT, Sample Volume: 10-20 µl of whole blood/Capillary Blood, Counting modes: All parameters, WBC/HGB, RBC/PLT, Automatic diluting, lyzing, mixing, rinsing and clog-clearing, Automatically cleaning sampling probs, Display: Large colour LCD display, Input/Output: IRS 232, 1 keyboard, 2USB,1 Printer port. 1mouse port, 1VGS, Printout: Built-in thermal printer, optional external printer. Operating Environment: Temperature: 20 ⁰ C-30 ⁰ C, Humidity: 30%-90%, Power Supply: 100-220V, 50/60Hz, Necessary start up kit and standard accessories, 2 yrs Warranty and after sales service, Stabilizer with copper wire (input range 90V-280V)	6000.00
29	Multilabel Counter for Kausalyaganga	01	Imp.	Detection method: Fluorescence, Luminescence, UV-Visible Absorbance, Photometric UV/VIS technology for ELISA assays with Monochromator based system(upto 1000nm), Fluorescence Intensity detection with-monochromator Ultra-sensitive luminescence, Fully automated, Read method: end-point, kinetic, spectral scanning,well-area scanning, supports up to 384-well plates,	24000.00
30	Analytical Balance for Kausalyaganga	01	Imp.	Fully automatic calibration and adjustment function, monolithic load cell, rugged housing, Back light display, Readability-0.0001g to 200g.	6000.00

31	Semi dry Transfer unit (western Blot Apparatus) for Kausalyaganga	01	Imp.	Semi dry Transfer unit including power supply for transfer of proteins and nucleic acids. Complete blotting apparatus set, which include all the spares including power supply, minimum gel size 14x16cm, for separate power supply, it must atleast 2 nos. cathode and 2 nos. anode point.	5000.00
32	Lyophiliser for Rahara (W.B.)	01	Imp.	Condenser chamber total volume – 7.2 ltr Condenser chamber surface area – 1497 cm ² Condenser max condensing capacity – 5 ltr. Ice-removal capacity in 24 hrs. – 2.3 kg Max Ice capacity – 4.5 kg Operating temperature - -55°C (guaranteed - 50°C, even at high ambient temperature of 50°C) Digital Digital Pressure Display – 30 u bar to 50.0mbar Refrigeration type – CFC free, HCFC-free Ref. Compressor type – 1/3 HP, Hermetic unit <u>Features</u> Multi-tasking ice-condenser with 5 ltr sample capacity. Compact Bench top foot print. Variety of drying accessories including those used for flask/vials/ampoules and bulk tray etc. An RS232 port to access to real time temperature and pressure data. High quality stainless steel drum manifold (16 ports) with a removable neoprene valve for each port, for attaching flask up to 1 ltr capacity. For bulk drying samples in trays and beakers etc. inside the drum manifold, (Chamber Freeze drying). Neoprene manifold sealing gasket are provided for both top and bottom of the drum manifold; 350 X 25 mm Clear Acrylic Lid for Drum Manifold. The acrylic lid is a 25 mm thick disc of clear acrylic plastic with two 20 mm openings sealed with special removable rubber plugs. Vaccum pump Displacement Rate 195 L/minutes Maximum vacuum 1.5 motor/1.95 X 10 ⁻³ mBar. Oil Capacity: 1.75 ltr total including pump and VPOF 110 (0.75 L for Pump + 1 L VPOF 110) Lyo Pump vacuum system pump should be complete with in built automatic gas ballast oil return kit (GBORK), Oil Mist Filter (EMF10) and patented vacuum pump oil filter re-circulator (VPOF 110), drain kit and & EMF 10 filters the exhaust to keep the air clean. Warranty period one year from the date of Installation and free service for another year.	18000.00
33	Gas Chromatograph FOR Rahara (W.B.)	01	Imp.	1. GAS CHROMATOGRPH Should be microprocessor controlled single channel GC with extensive self diagnostics. Gas chromatograph with build-in-graphical user interface (Touch Screen) for ease of operation. Injection counts down for accurate injection. Built-in back flush mode to reduce analysis time. 2. OVEN Temperature Range : Ambient to 450°C Heating Rate : 50°C – 250°C in 2 minutes. Cooling Rate : 250°C-50°C in less than 5 minutes. Oven Rate : 0.1 - 45° minimum increment 0.1°C	25,000.00

			<p>Ramp Rate : 0.1 to 45°C/min with minimum increment of 0.1°C</p> <p>Column Overheat Protection : User settable up to 450°C</p> <p>3. BACKGROUND CORRECTION Should have dual channel background correction facility</p> <p>4. INJECTOR Programmable Split/Splitless:</p> <ul style="list-style-type: none"> • Temperature range : 50°C-500°C • Mode of operation : Split, Splitless, On-Column, Solvent Purge Conventional Capillary Injector • Prevent mode: To prevent higher boiling components or residues from going through the Column. • Heating rate: 1°C/min to 200°C/min. • Programmable Pneumatic Control facility • Large volume injection facility i.e. 150 ul or more. • Facility for injector maintenance during analysis in progress. <p>5. Columns for analyzing long chain fatty acid (C₂ to C₂₆) and should be compatible with GC.</p> <p>6. DETECTORS Flame Ionization Detector (FID) with PPC:</p> <ul style="list-style-type: none"> • Temperature range: 100°C-450°C • Minimum detectable level:2.5pgC/Sec. • Operating Temperature:350°C-450°C • Make-up gas not required for capillary operation. • Metal alloy construction of detector and flame tip. • Field replaceable • Auto flame ignition and flame out detection. • Flame out warning and ready interlock. <p>7. DATA HANDLING SOFTWARE</p> <ul style="list-style-type: none"> • Software be user friendly and compatible with XP or windows 7. Software should have audit trail facility for G. (A)LP/GMP requirements. <p>8. PC and printer of standard make which is compatible with the software.</p> <p>9. Gas Cylinders and Regulators.</p> <ul style="list-style-type: none"> • Hydrogen Gas Cylinder 47 lit. Water Capacity with Double Stage Pressure Regulator. • Nitrogen Gas Cylinder 47lit. Water Capacity with Double Stage Pressure Regulator. • Zore Air Cylinder 47 lit. Water Capacity with Double Stage Pressure Regulator. <p>10. Servo Voltage Stabilizer, 3 KVA.</p> <p>11. Essential Accessories should be consist of :</p> <ul style="list-style-type: none"> • 10 µL liquid S.S.Pipes for gas connections, Nuts & ferrules for S.S.Pipes. • Spanner & Soap bubble flow meter • Ball rubber • Clamp molecular sieve filter 	
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				<ul style="list-style-type: none"> • Connection bulls eye • Ferrual/brass 1.6mm • Ferrules front & back brass 1/8" • Ferrules brass front & back 1/4" • Filter molecular sieve • Filter activated carbon • Gas lighter electronic • Fuse glass small 3.5, 1 & 1.5 AMP • Plug al.dbb • Washer Teflon 9.5x6x1 • Nut nipple flow measurement • Cover dust screen • Nut brass to shock 1/8" • Nut wide connector with bush • Nut 6MB blind (W/O Hole) • Septum rubber 11.5 mm • Splitter for servo air • Tube PVC small for flow measure • Filter Oxytrap & Tube latex • Tube PVC bid for flow measure • Tube S.S. 1/8" & Catheter No. 6 • Screw driver set • Cylinder key & Nut driver 8 mm • Service manual & Instruction manual • Allen key 1.5, 2, 2.5, 3, 4&5mm • Adjustable wrench 12" etc. and other as may be required for installation of GLC. <p>12. Split AC-2 tons</p> <p>13. Table for installing the GC & Chair for the Operator</p> <p>14. 5 KVA-UPS with maintenance free Batteries & one hour back up.</p> <p>15. warranty period one year from the date of Installation and free service for another year.</p>	
34	Digital Camera FOR Rahara	01	Ind.	10X Optical Zoom, 4x digital Zoom CCD, Slusor, 15-1/25 of Shutter speed. Page No. 65 EFC Memo 2007-2012, for	500.00
35	Public Address System FOR Rahara	01	Ind.	<p>Wireless Microphone: Shure's patented audio reference commanding Delivers crystal-clear audio transmission, for superior to conventional wireless technology. Page No. 59. (Under RC, Rahara) of EFC memo 2007-2012. Auto transmitter Set up: Infrared link automatically syncs the transmitter and receiver.</p> <p>Wireless receiver:</p> <ul style="list-style-type: none"> • Microprocessor controlled diversity • Upto 12 compatible systems • Available Frequencies : 702-720 MHz. • Operating Range: 300ft. (100m)under typical conditions. • Maximum out put level: -9Dbv (XLR, mic, level),-5dBV (1/4"). <p>Handheld:</p> <ul style="list-style-type: none"> • Power, mute and battery status LEDs. • Power and mute switch • 2 AA batteries (included) provided 8 hours of continues use. 	2500.00

				<ul style="list-style-type: none"> • 100m (300ft) operating range. • Transmitter RF Output power: 30 m W maximum • 50-15000Hz • Cardioid (unidirectional) • 300 ohms • 54.5 Dbv/Pa (1.85mv) • Die case metal handle. Dark gray matte finish silver coloured, spherical steel mesh grille. • 298g (10.5oz) <p>TIE MIKE:</p> <ul style="list-style-type: none"> • Omnidirectional • Condenser • 50Hz-20KHz • Power, mute and battery status LEDs • Power and mute switch • 2AA batteries (included) provided 8 hours of continuous use • 100m (3ft) operating range. • Transmitter RF Output Power: 30mW maximum. <p>WIRELESS GOOSENECK MICROPHONE: Wireless gooseneck mike transmitter:</p> <ul style="list-style-type: none"> • 10 inch length (25.4cm) • Super cardioid polar patterns • By color status indicator or single color light ring • Programmable mute switch • Wireless gooseneck mike receiver • Detachable ¼ wave antennas backlit LCD • Auto frequency selection • Complies audio reference commanding for crystal clear sound • Available Frequencies: 702-726 MHz <p>Monitor Speaker (Conral-25 AV) 1 pair:</p> <ul style="list-style-type: none"> • Frequency Range: 70Hz-23 Hz • Power capacity :200 W(program) • Normal coverage : 100° x 100° • Sensitivity : 87 dB SPL • Nominal Impedance: 8 ohms • Components: Low freq: 5 ¼ in (130mm) • Components : Highfreq: ¾ in (20mm) <p>Crown Amplifier: Power Output: (Per Channel) 4 Ω-300W, 8Ω-200W Frequency range: 22Hz-20KHz Signal to Noise ratio: (20Hz to 20 kHz)>100 dB Total Harmonic Distribution: <0.5% Damping Factor (8Ω)10Hz to 400Hz >200 Input Impedance: 20 Kilohms balanced, 10 Kilohms unbalanced.</p> <p>Digital Feedback Processor (DFR) Stereo 16 band digital feed back reducer Linked 30-band graphic equalizers Stereo compressor with soft knee</p>	
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				<p>Linked 10-band parametric equalizers with additional cut/shelf filters Stereo limiter</p> <p>Frequency response= 20Hz to 20 kHz +/-1dB, Dynamic range= 110dB minimum, Sampling rate=48 kHz, Digital to analog, Analog to Digital conversion= 24 bit, Total Harmonic Distortion=<0.05%, +4dBu, 20Hz to 20 kHz</p> <p>8-Channel Microphone Mixer (SCM800)</p> <p>Adjustable channel EQ=Low frequency: 6dB/octave cut, High-frequency: +/-6 dB at 5kHz, frequency Response= 50Hz to 20kHz +/- 2dB, Total Harmonic Distortion=<0.1%, +18 dBu, 50Hz to 20 kHz, Phantom Power= 48 Vdc open-circuit through 6.8k ohm series resistance.</p>	
36	UPS, for Rahara	01	Ind.	5 KVA commercial Grade UPS 1 Phase Input/1Phase Output, Model: Atut 6000 with battery rack and accessories capable to provide 2 Hours back up. Battery: 12V, 65AH, 20 No. SMF;	2000.00
37	Digital Balance, for Rahara	01	Ind.	For weighing samples & sampling of small fish, Specification: Weighing range-200gm, Linearity: ±0.02, read out "d" g: 0.01	500.00
38	Generator, for Rahara	02	Ind.	<p>KVA Rating-10, Maximum Power(KW)-8, Full load Current (AMPS)-43.5/13.9, rated Voltage-230/415, Voltage Regulation System-AVR, Frequency(Hz)-50, Phase-Single/Three,</p> <p>Engine:</p> <p>Make: Any Standard Company, Model-L3E, No. of Cylinders-3, Power at 3000 RPM-16.69 BHP, Cooling System-Water Cooled, Bore (MM)-76, Stroke (MM)-70, Computation System-IDI, Total Displacement (CC)-0.952(L), Oil Sump Capacity-4.7 lt., Type/Class of Governor-Mechanical, Starting-Electric</p> <p>Dimension:</p> <p>L(MM)-1440, W (MM)-780, H (MM) [Body +Extended Louvers]-995+355, Dry weight (Approx.) (Kg.)-355</p>	20,000.00
39	Trinocular Microscope FOR Bangalore	01	Imp.	<p>UIS2 (2nd generation Universal Infinity Corrected Optical System) Optical system, Sidntopf Head, Plan Achromat Objective, Anti-fungal treated optics, Ergonomic design, Optics and performance should be outstanding in its class with the following attachments.</p> <ul style="list-style-type: none"> • Microscope frame wit quintuple revolving nosepiece • Mechanical stage (Right handed), 30w illuminator, Filter 32.5C-2, • Trinocular tube photoport • Brightfield condenser, N.A. 1.25, with A.S. veriner scale • Plan achromat objectives: 4X10X40X and 100X • Wide field eye pieces 10X • Immersion oil (8ml)bottle • Spare 6v/30w halogen bulb • 10 or 12 Mpixel digital SLR camera compatible with the photoport of the microscope, exposure selector, Release cord cable, 2/4GB memory card and data transfer (USB) cable. 	8,000.00

40	High Accuracy water Bath FOR Bangalore	01	Imp.	Temperature range: -20 to 90°C with an accuracy of $\pm 0.2^\circ$ C to the set temperature throughout the temperature range. Temperature controlled by Digital PID controller with $\pm 0.1^\circ$ C resolution and Pt200 sensor. Over temperature safety protection device, alarm, timer, autotuning, and inbuilt temperature calibration functions. Bath of not less than 10 liters capacity made of SS grade 304 material or higher corrosion resistance. Easy to drain and clean access for the bath. Heated by direct immersion SS heaters and circulation by magnetically driven pump in ABS or Teflon material circulating at not less than 5 lpm and pressures up to 350 bar. Cooling by hermetically sealed compressor with non-green house causing refrigerant, Bath of Steel IT body and epoxy powder coating and a SS flat lid	6000.00
41	Wet and dry vacuum cleaner FOR Bangalore	01	Ind.	Vacuum cleaner capable of both sweeping and mopping operations, with attachments for cleaning of floor, furniture, shelves, upholstery, narrow crevices, computer keyboard, without grills and mopping (wet) of floors and wall tiles. Easily detachable and washable dust/slop collector. Mounted on castor wheels for easy maneuverability and retractable power cord. To be supplied with one full extra set of all accessories if any.	2000.00
42	Autoclave For Vijayawada	01	Ind.	Boiler depth X depth 450X250 mm, Electrically double walled, Made of Stainless Steel, Pressure 5 psi, with safety, valve, 220volts.	500.00
43	Distillation Unit for Vijayawada	01	Ind.	Double unit with thermal sensor auto cut off 5 liter capacity	500.00
44	Hot Air Oven, for Vijayawada	01	Ind.	Stainless Steel: 600X600X600mm size, double walled with digital controller cum indicator temp 5° to 250° C 220/230 volt AC	500.00
45	Muffle Furnace, for Vijayawada	01	Ind.	Rectangular, 150x150x300mm size temp 900C with digital controller cum indicator	500.00
46	Refrigerator, for Vijayawada	01	Ind.	230lt capacity double door	500.00
47	Hotplate, for Vijayawada	01	Ind.	Round 20cm dia with energy regulator	500.00
48	Gel Electrophoresis apparatus, for Vijayawada	01	Ind.	Complete set with electrodes with power pack 0-300 volts (0-100ma)	1000.00
49	Water Bath, for Vijayawada	01	Ind.	Temp controlled 95° C, double walled, stainless steel with rings 400x300x100mm 12 holes.	1000.00
50	Kjeldhal apparatus, for Vijayawada	01	Ind.	Digestion cum distillation unit 6 test tubes	1000.00
51	Soxhlet extraction apparatus, for Vijayawada	01	Ind.	With individual energy regulator for 6 tests hotplate type	1000.00
52	Tissue homogenizer for Vijayawada	01	Ind.	Vessel length 400x210x25, 40ml capacity	1000.00
53	UV- VIS Spectrophotometers , for Vijayawada	01	Imp	2nm high resolution analysis, wavelength range of 315-1100nm.	6000.00

TERMS & CONDITIONS

1. Only Reputed and registered Firms/Agencies are eligible to submit the tenders. Tenderers who are accredited with ISO 9000/9001/9002/9003/14000 certificate will get preference.
2. Tenderers should furnish complete details of the latest technology available with full documentation & descriptive literature and point out any special features of their system. Please note that changing of model after opening of tender will be liable to rejection of the offer.
3. Tenderers must furnish details of the Back-up engineering and system support that will be made available to CIFA.
4. The Director, CIFA, Bhubaneswar reserves the right to revise or alter the specifications of the equipment before the acceptance of tender and may ask for any document related with purchase at any point of time before issue of order.
5. The tenderers shall be responsible for FREE installation of the equipment at destination site and for making it fully operational.
6. The tenderers must provide complete details regarding space and all infrastructures needed for installation of the equipment, which CIFA, should arrange before its arrival.
7. The tenderers shall be fully responsible for the manufacturers warranty in respect of proper design, quality and workmanship of the equipment, accessories etc. Covered by the tender for a minimum period of 12 months from the date of installation of the system. The extended warranty asked for against particular equipment should be offered accordingly.
8. Tenderers shall make provision for imparting training to our scientist(s)/maintenance engineers on operation and use of equipment, its accessories and software for the intended applications and trouble shooting repair and maintenance. Cost of such training (if any) and the details regarding the course covered and its duration should be specified.
9. All our imports will be under Open General License (OGL) and are exempted from payment of custom duty.
10. The prices quoted must be firm and on FOB basis. Different components of the price for insurance, freight, installation and commissioning at destination site should be shown separately. DISCOUNT OFFERED if any, should be indicated prominently.
11. Liquidated Damages, Director, CIFA may claim the liquidated damages due to failure of accepting the order or delivery of material after their tender is accepted, subject to maximum of 5% of FOB value.
12. Prices should be shown separately for each item (foreign exchange component, rupee element viz. Basic unit, its accessories, computer, software, critical spares, components etc).
13. Prices: submit your latest price catalogue with your price bid only.
14. The offer should be valid for a minimum period of 180 days from the specified date of opening.
15. Delivery schedule may be indicated clearly in the tender.

16. The successful tenderer shall have to furnish an unconditional performance Bank guarantee valid till 90 days after the warranty period from a scheduled bank for 10% of the order value within 15 days of acceptance of order where LC has to be established full payment failing which the contract shall be deemed as terminated. Incases where part payment is made on deliver and part on installation, the performance BG shall be asked for at the time of release of the final payment.
17. If the identical/similar equipment supplied to the other ICAR/CSIR Laboratories/Institutes, the details of such supplies for the preceding three years shall be given together with the prices eventually or finally paid along with the copy of supply/work order.
18. **Bid Security indicated in the right side of the specification of the each item** will be submitted along with the technical bid in the form of Demand Draft drawn in favour of “ICAR UNIT-CIFA” payable at SBI, Kausalyaganga (Code No-8874) Bhubaneswar. The separate quotations should be submitted for each items enclosing Tender Fee & Bid security demanded.
19. Tender received without Bid Security shall be summarily rejected.
20. Bid Security of unsuccessful tenderers shall be released at the earliest possible after the award of contract/work order/successful installation/ demonstration.
21. Purchases made for scientific purpose are exempted of custom/excise duty.
22. All the tender documents must be duly stamped and signed by the Principals. If the Indian Agent/Representative submits tender, then he will have to produce a certificate of such authority for making quotation on manufacturer’s behalf.
23. Indian Agents of foreign suppliers shall have to submit the authorization certificate from the principals. Income tax, sales tax clearance certificate must be furnished.
24. While preparing the tender the followings may please be mentioned clearly:- (a) Tender No., (b) description of items, (c)Price (whether inclusive/exclusive of taxes and duties etc. (d) Discount offered (e) Delivery schedule (f) Terms of delivery, (g) payment terms (h) agency Commission payable in rupees to the Indian Agents of Foreign Suppliers (i) any other charges for pricing, transport etc.
25. DGS&D registration certificate may be furnished along with the tender in case the items quoted fall in the category of restricted list of the Export and Import Policy of Govt. of India.
26. In case of proprietary item, a valid certificate of proprietary manufacturing / item be enclosed with the tender / offer.
27. JURISDICTION – All questions / disputes arising in connection with the contract conducted shall be referred to the sole arbitration by an arbitrator appointed under the provisioning of Indian Arbitrator ACT.
28. All the tenders should be addressed to DIRECTOR, CIFA, Kausalyaganga, Bhubaneswar-751002, Orissa, India in separate **sealed envelope of each item super scribing “Tender No., Tender due on and Item No.”**.
29. Late, delayed, incomplete, conditional tenders and amendments and additions to tender after opening will not be accepted.
30. On confirmation of purchase order, delivery / supply is to be made at the risk of supplier. Damage/ loss if any in transit shall be borne by the supplier only.

31. **Tender fee of Rs.500/- (Rupees five hundred) only** (Non-Refundable) may be submitted in shape of Demand Draft favoring “ICAR Unit, CIFA” payable at SBI, Kausalyaganga, Code-8874, for the amount indicated for each item along with the tender document downloaded from the CIFA website : <http://www.cifa.in>.
32. The last date of submission of tender/documents is on or before **15.09.2010 at 17.00 hrs.** the tender will be opened next day **on 16.09.2010 at 11.30 hrs** onwards.
33. The Tender documents duly completed in all respect should reach Director, Central Institute of Freshwater Aquaculture, P.O- Kausalyaganga, Bhubaneswar-751002, and Orissa, India by **Speed Post/Courier/ on** or before **15.09.2010 (at 17.00 hrs)**. Those who are interested to submit the Tenders by hand may drop the quotation/tenders at the tender box available in the stores.
34. **Check list in accordance with technical specification shall be invariable submitted in technical bid by the tenderer. Price bid shall contain only price applicability along with tax component or any other financial implication if any.** Without submission of check list the tender shall not be entertained.
35. The price once quoted shall not be altered later on at any stage.
36. The Director, CIFA, and Bhubaneswar reserves the right to accept or cancel any tender/all tenders in part or full without assigning any reason thereof.
