

ICAR - CENTRAL INSTITUTE FOR RESEARCH ON BUFFALOES
SIRSA ROAD, HISAR-125 001 (HARYANA)
Phone No.01662-281611, website www.cirb.res.in

TENDER NOTICE

On behalf of Secretary, ICAR, Director CIRB, Hisar invites sealed tenders in two bid system (Technical Bid and Financial Bid) from reputed, eligible and qualified firms/manufacturers for supply of agricultural & scientific equipments viz. 1) Battery operated ultrasound Scanner, 2) Gradient PCR machine with accessories, 3) Nucleofactor transfection system with accessories, 4) Sonicator, 5) Shaker (Rocker), 6) Weighing Balance, 7) Double block gradient PCR machine, 8) Microscope for Semen Analysis, 9) Fully Automated Hematology analyzer for Veterinary Use, 10) Milk Chiller, 11) Semi-Automatic biochemistry analyzer, 12) Incubator, 13) Hybridization Oven, 14) Laminar Flow, 15) Fume Hood, 16) REFRIGERATED CENTRIFUGE (High speed > 1600 rpm, 17) Automatic Milking Parlour with Software 18) Laser leveler, 19) Trolley Loader, 20) Rain Gun (Mobile Irrigation System) - as per the specification given in the tender document and on the CIRB website Interested eligible bidders may purchase the Tender Document by Hand/Registered post or download the tender documents from CIRB website www.cirb.res.in which also contains all other necessary details. The date for submission of tender is 22.08.2016 upto 2.30 PM.

Asstt. Administrative Officer

ICAR -CENTRAL INSTITUTE FOR RESEARCH ON BUFFALOES
SIRSA ROAD, HISAR-125 001 (HARYANA)
Phone No.01662-281611, Website: www.cirb.res.in
TENDER NOTICE

On behalf of Secretary ICAR, Director, Central Institute for Research on Buffaloes, Hisar (Haryana) Invites tenders in the prescribed tender form from the eligible bidders for supply of equipments/implements as listed below:-

Item No.	Items with Specification	Quantity	Required Earnest money(in Rs.)
1.	<p><u>Battery operated ultrasound Scanner</u></p> <ol style="list-style-type: none"> 1. Light-weight portable ultrasound machine (-2 kg) for vet use, B mode-Real time imaging (- 40 frames/ Second), Clear visibility of image on screen in open area under field conditions <ul style="list-style-type: none"> o Probe wide frequency (3-7mHz) curved convex rectal transducer suitable for large animal reproduction, minimum 128-element. o Battery pack (suitable for 5-6 hours continuous operation), Battery charger, carry case and car charger adaptor o Large touch screen, LCD display, Head mounted goggles display o Battery operated, light weight wireless remote display (> 8 inch, < 2kg) having Gorilla tripod for fixing at any place. 2. Measurement functions for size. 3. Minimum 100 images storage on the scanner 4. Image storage with USB cable (for computer attachment and recording on PC) 5. Low Battery visual and audio alarm 6. Power Supply: AC 110V-240V, 50Hz/60Hz. 7. Broucher highlighting technical specifications asked 8. Contact details including phone no. of users in India with satisfactory performance reports from at least 3 users from university/ Govt organizations. 9. Onsite installation and demonstration / training. 10. Minimum 1 year warranty and after sale service facility. 	01	24000.00
2.	<p><u>Gradient PCR machine with accessories</u></p> <p><u>Specification</u></p> <ul style="list-style-type: none"> • 96-well Block format • 10-100 µLPCR volume range • Enabled to fast chemistry and controllable ramp rate • 8-10°C (5°C zone-to-zone) independent temp zones • ±0.25°C temperature accuracy • 4°C/sec max block ramp rate • 3°C/sec max sample ramp rate • Temperature range of 0-100.0°C • <0.5°C (30 sec after reaching 95°C) temperature uniformity • USB and on-board memory • Display interface of 6-8 inch color LCD • 100-240 V, 50–60 Hz, max. 600 W Power • Data connectivity with ethernet or Wi-Fi • Program features includes program overwrite protection, Auto Restart (after power off,), Edit/pause program during run and One-touch incubation • Compact centrifuge for speed up to 14000 rpm and RCF value Upto 16000 x g with temp range 0° to 40°C having rpm/rcf setting as require. Acceleration & Braking time to max rpm: max 15 sec.Metallic Rotor for 18 X 1.5, 2ml tubes (Autoclavable). Noise level of 60 dB(A).Motorized lid latch-automatic lid opening following application sequence and separate short spin function. Machine should inbuilt drain system and brushless motor to provide maintenance free drive. • Boucher highlighting specification asked • Warranty : 1 year 	01	15000.00

3	<p><u>Nucleofactor transfection system with accessories</u></p> <ol style="list-style-type: none"> 1. System should allow transfection of DNA in to the cytoplasm and nucleus directly. 2. In addition system should be able to deliver not only DNA but also different substrate like RNA, siRNA, etc. 3. The Instrument should have pulse delivery module which is open for transfection of adherent state in 24 well culture plate directly. 4. System should allow for transfection of cells in adherence as well as in suspension in 16 well format; and also support transfection in 2 single cuvette format in the same unit 5. System should be capable to perform same program in Different Formats (i.e. cuvette and 16 well format) 6. System should have predefined electroporation parameters for easy optimization and experimentation 7. Intuitive operation software for designing and saving experiments Should be capable of delivering up-to 16 different pulses simultaneously 8. System operating temperature: at room temperature and support up to 40°C 9. Electrode should not be made up of metal; instead material like conductive polymer should have been used. 10. System should be capable of performing transfection of adherent cells in adherence as well as suspension, stem cells, iPS cells, endothelial and epithelial cells, mammalian cell lines, etc. 11. USB port for software update and data transfer 12. Supplement with live cell imaging and monitoring system should be able to be easily placed inside the CO2 Incubator and data should be stored online/offline system. 13. Warranty- two years 	01	40000.00
4	<p><u>Sonicator</u></p> <p>Microprocessor controlled LCD display for parameter (temperature, time, output power etc), temperature controlled to protect sample from overheating, 50 program memory, processing volume: up to 100 mL , operating frequency: 20 –25 KHZ, Power: ≥150 W, sound reduction box (acoustic enclosure) , time range: 99min, adjustable pulse 1s : 9s, auto tuning, probes required for sample from 0.2 ml to 250 ml, tool kit like wrench set, power cable etc., contact details of users in India. There should be supported with literature/leaflets for the quoted model.</p>	01	6000.00
5	<p><u>Shaker (Rocker)</u></p> <p>Suitable for mixing applications like gel staining and destaining, immune precipitation and Western blots etc. Motion : Sea Saw Rocking, speed (rpm): 10 –80 , tilt Angle :7°, load capacity (kg) : 3, Controller : Microprocessor , Display : LED, timing range: 1min –19hr59min, motor : DC, Platform (cm) : about 35 x 35, Dimension (mm) : about 330 x 270 x 130, Non Slip Mat, Universal attachment, contact details of users in India. There should be supported with literature/leaflets for the quoted model.</p>	01	2000.00
6.	<p><u>Weighing Balance</u></p> <p>Electromagnetic sensor based, stainless steel pan, bright LCD display with backlight, clear glass windshield, overload protection, multi weighing unit conversation g/mg, stabilization time-least universal power adaptor supplied as standard, internal motorized calibration and monobloc weighting and adjustment weight. Just touch the CAL key and the balance should calibrate and adjust automatically. Backlit and high contrast display provides outstanding even under poor lighting conditions, weighing capacity-0-220 g, readability-0.1mg, pan size ~90mm, response time -2.5 sec (avg), with battery backup. Contact details of users in India. There should be supported with literature/leaflets for the quoted model.</p>	01	5000.00
7.	<p><u>Double block gradient PCR machine</u></p> <ol style="list-style-type: none"> 1. Gradient Thermal Cycler with peltier heating and cooling system, which can run on 220-230 volt 50-60 Hz. 2. Multiple block type with standard dual block of 2x 48x0.2 ml tubes in which each block can be independently controlled and run. 3. Dual block should have gradient capability which can be independently controlled. 	01	14000.00

	<p>4. Maximum rapid ramp rate of 5 deg C or more/second and average ramp rate of 3.0 deg C/sec or more.</p> <p>5. Should have adjustable heated lid and also block and calculated temperature control.</p> <p>6. Should have a temperature range of 0-100°C.</p> <p>7. Should have a temperature accuracy of $\pm 0.2^\circ\text{C}$.</p> <p>8. Should have a temperature uniformity of $\pm 0.4^\circ\text{C}$.</p> <p>9. Should have a gradient range of 30-100 deg C and use dynamic ramping for gradient.</p> <p>10. Should have a state of the art graphical user interface for easy programming and quickly checking of run status, and have USB ports with an option of using the instrument through a PC.</p> <p>11. Should have a memory of > 1000 programs with further expansion through a USB flash drive for transfer of files.</p> <p>12. Programmable, power-saving auto standby option when instrument is idle.</p> <p>13. Original company literature from principal company, manufacturer must be supplied; clearly verifying all specifications.</p> <p>14. System should have license based PCR and certified and vendor should produce the certificate for the same.</p> <p>15. Supplemented with a set of micropipette (0.2-2.0μl, 1.0-10.0μl and 10-100μl) of reputed company.</p> <p>16. Warranty of the machine and its accessories for a period of at least two years from the date of installation must be provided and AMC charges for additional three years must be given.</p> <p>17. Provide used list.</p>		
8.	<p><u>Microscope for Semen Analysis</u></p> <p>Microscope body- Universal infinity corrected optical system with built in fly eye lens for uniform illumination throughout the field of view including periphery,</p> <p>Eye piece tube-Trinocular observation tube inclined at 30 Degree with paired piece (10X), antifungus type.</p> <p>Objectives- Antifungus plan Achromat phase objectives for flat, sharp images. Plan Achromat 10X N A 0.25 with Phase & 20X N.A 0.40 with phase,</p> <p>Coarse/Fine focussing- Fine and coarse rotation focussing. Coarse motion torque adjustable. Refocusing stopper should be incorporated.</p> <p>Condenser-Universal condenser should have bright field, dark field and Phase contrast application-Built in illumination with appropriate LED lamp, having intensity, equal and even light distribution through the field.</p> <p>Warm stage- Super hard alunite coated surface, stay in position stage handle. Height should be adjustable. Rectangular stage with capacity to hold multiple glass slides at a time. Temp. Controlling range-Room temperature to 50 degree centigrade, Controller-2 LED digital display, auto cut option for internal temperature control.</p> <p>Microscope system should be suitable for semen evaluation compatible for up-gradation/extension with 130W mercury/ metal halide/ allied Epi-fluorescence setup and high resolution CCD camera device in future.</p> <p>Microscope and its objective, optical accessories should be of one reputed brand, make and model and supported by Boucher highlighting technical specifications asked.</p> <p>Contact details including phone no. of users of same model in India with satisfactory performance reports from at least 3 users from university/ Govt organizations including performance of warm stage.</p> <p>Certification: should have ISO, CE, UL certification and complies international quality standard.</p> <p>Onsite installation and demonstration / training.</p> <p>Warranty - 2years with one year AMC is required.</p>	01	21000.00
9.	<p><u>Fully Automated Hematology Analyzer for Veterinary Use</u></p> <ul style="list-style-type: none"> • Should be 3 part differential blood cell counter specifically for veterinary applications/ calibrated for veterinary applications. • Should be able to analyze minimum 20 important blood parameters and 3 histograms • Throughput minimum 30 samples/hour and should have cyanide free reagents • Sample size: 10-30RI whole blood or 20-30RI prediluted 	01	15000.00

	<ul style="list-style-type: none"> • Should have facility for user selectable mode for different species with 3 user defined species • Should have electronic impedance as measurement Principle. • Should have facility for automatic cleaning, flushing and cauterizing • Should be able to carry out calibration and Quality control for each sample • Preferably Large Color LCD display and Linux Operating system • Should automatically save up to 1 lac test record with histograms • Support: RS232, Standard network port and USB, Internal Thermal printer • Instruments and Reagents should be CE and ISO Certified • Should be supplied with 1 KVA online UPS with at least 1 hour backup • Should be provided with started reagent pack (1 set) • Price list (2016-17) of recommended reagents/ consumables highlighting running cost per sample. • Broucher highlighting technical specifications asked • Contact details including phone no. of users of same model in India with satisfactory performance reports from at least 3 users from university/ Govt organizations. • Onsite installation and demonstration / training. • Power supply AC 100-240V, 50-60 Hz • Warranty : 1 year 		
10.	<p><u>Milk Chiller 1000 Liter</u></p> <ol style="list-style-type: none"> 1. Rated capacity 1000 Litres 2. Semi cylindrical & horizontal type of Tank, AISI 304 SS. 3. SS thickness inner 2 mm & outer 1.5 mm 4. Insulation of tank of high Density 40 kg/cu Mtr, polyurethane foam insulation. Thickness of insulation 50 mm. The efficient of insulation should be such that at max. 40 degree centigrade ambient temp the rate rise of the mean temp. of the milk shall not exceed by 1 degree centigrade in four hours. 5. The refrigeration compressor shall be adequate enough to ensure that is cooled to 4 degree centigrade in prescribe time limit & suitable to operate at wide range of temperature. It should be of reputed make like Denfoss / Emerson Copland etc. & should be energy efficient hermetically sealed reciprocating/rotary/scroll/CFC free refrigerant. 6. Condenser should be air cooled fine tube type having sufficient heat transfer area designed for high ambient temperature. 7. Refrigeration control panel should be provided with motor starter, on / off push buttons, MCB. Panel should have facility to operate refrigeration unit on auto / manual & as soon as the milk temperature reaches to pre set value compressor should be switched off to avoid freezing of milk. 8. There should be provision of connection of milk chiller with milk dispensing unit. 9. Equipment should confirm to ISO 5708-2A latest version. 10. Unit should be complete with refrigeration system, agitator, lockable inlet & outlet valve with line strainer to outlet 11. Eco-friendly CIP system- saves water & Washing Agents. 12. Advanced & user friendly Electronic Control System with Digital Indicators. 13. Filling system with balance tank should be provided. No residual milk/ water in pipe after feeding in tank and cleaning operation from ground surface. 14. Heavy duty wheel to be provided for movement. 15. 5 year Guarantee on stainless steel parts and 1.5 years Performance Guarantee on Entire System. 16. Broucher highlighting technical specifications asked. 17. Contact details including phone no. of users in India with satisfactory performance reports from Govt organizations. 18. Onsite installation and demonstration. 	01	7500.00

11.	<p><u>Semi-Automatic Biochemistry Analyzer</u></p> <ul style="list-style-type: none"> • Should have light source: Halogen lamp of more than 2000 hours life time • Should have high quality interference filter (mimumum 7 filters) • Should have wavelength, 340 nm to 670 nm • Should have photometric range of min 0 to 3 OD • Should have Band width precision: ± 2nm • Stray light: $< -0.5\%$ (absorbance > -2.5), Absorbance Range: -0.214 -3.000, Absorbance Linearity $\pm 1\%$, Absorbance Repeatability: ± 0.001, Absorbance Resolution: 0.0001 • Precision: $< -1.0\%$; Carry over: $< -1\%$ • Should have inbuilt incubator with Temperature 37°C (min 20 positions) • Should have Peltier controlled temperature range 25°C, 30°C, 37°C, $\pm 0.3^{\circ}\text{C}$ • Should have measuring units: flow cell (min $15\mu\text{l}$), square cuvette (8-10 mm), round tube (4-6mm) with adapter • Sampling system: Pressure auto releasing pumps ensure the accuracy of suction volume • Test method: end point fixed time, two point end, kinetic, fixed, turbidometry, absorbance • Modes: Bichromatic, linear and non-linear calibration modes (1, 2 point linear, multipoint linear, line graph and spline) • Parameter setting: Patients profile and calculated item should be easily set • Aspiration volume: max $204\mu\text{l}$ — $300\mu\text{l}$ • Reaction curve: Real time display of the reaction curve • Blanking: Automatic Zeroing • Memory: Min. 250 tests & Min. 150000 sample results. • QC: Automatic Levy-Jennings curve • Reagent: Open reagent system • Display: 240×128 dots graphic LCD with high resolution or touch screen display • Input: Via alphanumeric keypad or touch screen • Printer: inner thermal printer, able to be connected to external printer, should have minimum 3 USB for connectivity, Interface: RS232 serial port can connect to computer • Report content: Absorbance, concentration, activity, detailed patient information and abnormal result making and operate the instrument through PC software • Instrument should be CE and ISO Certified • Working condition: temperature: 10°C- 30°C, relative Humidity: 20%-90% • Voltage: AC 85-264V, 50-60 Hz, Auto adaption according to the input voltage • Broucher highlighting technical specifications asked • Contact details including phone in India with satisfactory performance reports from at least 3 users from university/ Govt organizations. • Onsite installation and demonstration / training. • Should be provided with 1 KVA online UPS of reputed make • Warranty : 1 year 	01	4500.00
12.	<p><u>Incubator:</u></p> <ul style="list-style-type: none"> • Benchtop model having 160-185 L capacity CO_2 incubator • Air jacketed heating system (not direct and not water jacketed heating system) with temperature control by Microprocessor • It should come with CO_2 and N_2 Cylinder (1 each) • With CO_2 tank depletion alarm system • Double stage CO_2 pressure regulator with stainless steel diaphragm and 18-30 Kg CO_2 cylinder filled with CO_2 gas 99.5% or better purity required for operation of CO_2 Incubator should also be quoted. • CO_2 Concentration should have a range between 1 to 20% • Chamber Material should be of 100% copper/ stainless steel & Easy-to-clean interior 	01	15000.00

	<ul style="list-style-type: none"> •Main body made of stainless steel •With LCD/LED display showing inside temperature and % CO₂ •Sealed inner glass door (Single/Split)& air tight seal door sytem •3-8 shelves/racks with adjustable and perforated shelving •Temperature range-ambient + 4°C to 50 °C •Should provide stable RH •Should prevent culture drying •There should be choice of O₂ level control •TC or IR Sensor technology for CO₂ and O₂ •High-temperature sterilization for contamination control apart from use of ULPA filter and UV-Lamp decontamination to provide 100% decontamination •CE or CSA compliant certification •It should be noise free/ have very low-noise& vibration-free &operate under 220-240V, 50/60 Hz. •It should be provided with contact details of users including phone nos. of users in India with satisfactory performance report from research organizations of repute. •It should have product brochure highlighting the technical specifications asked. •It should be provided with on-site installation/demonstration and 2 year product Warranty. •Should include compliance with the specs in tabular format for each technical specification point. 		
13	<p><u>Hybridization Oven</u></p> <ul style="list-style-type: none"> •The benchtop model should have LCD/LED Display for current temperature inside the chamber •The Speed should be upto 10 to 20 RPM •with suitable Heating Element •The temperature range should be fromambient to +10°C to >75°C with temperature accuracy of ±0.5°C and temperature stability and uniformity of<1°C (Inside Oven), ±0.1°C (In Bottles/tubes); •Bottles/tubes Numbers Capacity should be 10 to15 and provided with 10-15 bottle capacity rotisserie •It should operate under 220-240V, 50/60 Hz •It should be provided with contact details of users including phone nos. of users in India with satisfactory performance report from research organizations of repute. •It should have product brochure highlighting the technical specifications asked. •It should be provided with on-site installation/demonstration and product Warranty. 	01	5500.00
14	<p><u>Laminar Flow</u></p> <ul style="list-style-type: none"> •It should be floor standing model with clean work area cabinet of 4'-5' width and with wheeled base stand. •It should provide vertical and clean Laminar flow of air •It should come with pre-filter, heavy duty blower assembly/ high performance fan system, ULPA Filter (Absolute/ Main Filter) and the clean work area •It should have completely stainless steel (1.2 mm (0.05") 18 gauge stainless steel, grade 304)working area and rear panel except the front UV protecting certified sliding glass/polymer door& Side. •The door should be sliding with no hinges or foldable doors, •It should be provided with UV lamp (30-40 Watt or more) suitable for decontamination •It should also have LED lamp for working area illuminationproviding >1500 lux illumination. •Efficiency of clean air down to 0.12 µm particles should be 99.999%. •It should have energy efficient DC electronically commutated motor (ECM) blower system. •It should conform to a standard.Cabinet performance should conform to IEST-RP-CC002.2 standard. •It should have low sound noise. 	01	6000.00

	<ul style="list-style-type: none"> •The laminar flow should be provided with minimum of two 15 A power socket and switch (one inside working area and one outside) •It should come with manometer, gas cock, with drawer/cupboard and key and switches for blower, UV and fluorescent lamps and Ergonomic foot rest. •It should not have any wooden material. •It should operate under 220-240V, 50/60 Hz •It should be provided with contact details of users including phone nos. of users in India with satisfactory performance report from research organizations of repute. •It should have product brochure highlighting the technical specifications asked. •It should be provided with on-site installation/demonstration and 2 year product Warranty. 		
15	<p><u>Fume Hood</u> Structures : Aerodynamic and floor mounted having exteriors 304grade and inside 316grade Stainless Steel</p> <ol style="list-style-type: none"> 1. Baffle arrangement: As per ASHRAE & EN norms using imported exhaust 2. Worktop: Acid resistant splash & spillage proof 316grade Stainless Steel worktop with sink, water tap and drain arrangement, with proper lighting arrangement on working area. Provision of minimum four electric sockets of 15/5amp for operation of instrument like hot plate or digestion bench inside the chamber, while having their on/off switch and blower switch outside the chamber. 3. Shutter: double skin, vertical, transparent, sliding shutter made up of acid resistant material. 4. Air flow and suction: Automatic, bypass type air flow using Silent, high efficiency blower having chemical resistant impeller with capacity to deliver face velocity of 80 to 120 feet/minute (FPM) as per ANSI/AIHA Z9.5 at the safe working Height with 650 CFM air suction capacity confirming to international face velocity Norms. Frame of Fume Hood should be of Stainless Steel 304grade from outside and 316 grade inside. Indication of digital approximate face velocity of airflow with facility of warning in condition of low air flow and decreased air flow should be indicated by an audible alarm. 5. Space underneath the work surface to be provided with storage compartments. 6. Working Area size: 150 x 60 x 60 cm 7. Provision of efficient duct system for fumes exhaustion. 8. A list of user's in India with working contact number should also be attached separately. 9. Brochure of the product quoted must also be attached. 	01	15000.00
16	<p><u>REFRIGERATED CENTRIFUGE (High speed > 1600 rpm)</u></p> <ul style="list-style-type: none"> • Microprocessor controlled • Safety lid interlock • Imbalance detection and motor overload protection • Rotor angle heads for: 15ml, 50ml, 100 ml tubes • Rotor angle heads for micro capacity i.e. 1.5 ml, 5 ml, 0.5 ml, 2 or 1.5 ml micritubes • Temp. range between -20 C to Ambient RT • Reduction adaptors suitable for Falcon and vacutainer and microtubes • Suitable stabilizer and essential accessories, instruction manual, rotor cleaner, silicon grease • With actual run timer, RCF calculator & time-temp. display 	01	11000.00
17	<p><u>Automatic Milking Parlour with Software</u> Includes following 3 essential components compatible together for an integrated system (Specifications attached)</p> <p>Sub-item 1. Automatic milking parlour Sub-item 2. Animal Identification and Activity Metering system</p>	01	150000.00

<p>Sub-item 3. Herd Management software</p> <p>1. <u>Automatic Milking Parlour:</u> 2 x 6 Stationary Herringbone Milking Parlour suitable for buffaloes, 30 degree stalling suitably integrated with Herd management software and having suitable voltage protection. The milking parlour should be complete with 12 Milking units, Vacuum line, Milk line, Wash lines and Automatic milk measurement system for milk yield recording and also include Milk Transfer system, Programmable Automatic Cleaning System, Pit ladders on entry and exit sides, and pit edging / anti-kick curb protection with Vacuum controlled set of Entry & Exit gates. Further specifications are as under:</p> <p>Parlour Frame: Should be animal friendly and sturdy with Hot dip Galvanized Pipe having Semi- Staggered/Deported Rump Rail and Adjustable Breast Railing with integrated indexing for perfect positioning of animals. Complete with all fittings.</p> <p>Vacuum Pump: Vacuum pump should be belt driven/direct coupled. Minimum 1500 litre/min at 50 kpa with suitable capacity drive motor and having necessary safety devices. Servo controlled vacuum regulation device for stable vacuum to avoid vacuum fluctuations so as to provide accurate/stable vacuum. Vacuum tank with all necessary fittings like Drain valve, connecting tubes and vacuum gauge for display.</p> <p>Milking Clusters: 12 numbers individual milk control units with digital display and milking cluster with claw piece (minimum 300 cc volume, non-breakable); minimum 10L/minute milk flow rate; Automatic cluster removal control, made of SS 304. One set of suitable rubber liners, milk tubes, stainless steel shells, twin pulsation tubes and other accessories should be provided for the fully functional cluster.</p> <p>Pulsation system: Individually controlled electronic pulsators with suitable stimulation devices.</p> <p>Milk meters: 12 numbers ICAR-approved milk meters with digital display and data transfer facility to Herd Management Software with high weighing accuracy ($\pm 0.2\%$) - independent of air contents in milk.</p> <p>Milk Lines: Stainless steel Milk pipe lines of suitable size and sufficient length to transport milk from receiver to the Bulk milk cooler and also from cooler to the milk delivery point. Should include all necessary fittings like SS union, valves and return line for CIP cleaning.</p> <p>Milk Receiver: Each made of SS304; 70L capacity; equipped with overflow/safety trap and suitable sanitary type milk pump for conveying milk to Bulk Milk Cooler.</p> <p>Teat Spray: Consisting of suitable numbers (minimum 4) of teat spray guns for spraying disinfecting solution on teats and udder after milking, accessible to all 12 buffalo milking units in parlour, complete with all necessary pumps, guns, lines, tubing and all basic units / fittings.</p> <p>Cleaning system: Milking parlour should be provided with fully automatic CIP cleaning system. There should be 12 no's of CIP jetter heads & minimum 100 L wash tank. The cleaning system should also be capable of Cleaning in Place (CIP) of the pipeline. Suitable external hot water generating system is already available at site.</p> <p>2. <u>Animal Identification And Activity Metering System:</u> Individual animal tied (neck / leg) electronic devices (200 numbers) to log animal ID and integrated activity monitoring including heat detection, integrated with the Herd management software, through wireless communication with receiver antenna (minimum two numbers or as per requirement of the site viz. Modern Animal Sheds at CIRB Hisar) and reported on computer with suitable herd management software.</p> <p>3. <u>Herd Management Software:</u> WINDOW-based software, along with CD & suitable data acquisition and processing power through latest model PC with advanced features. The PC/ System connected & interlinked to the software to all possible mechanized/ electronically controlled activities, like recording of milking time, milk quantity & conductivity etc. to acquire and process the data for appropriate reporting. The system to be equipped with data security system with suitable backup of daily data & generation of daily report which can be customized by the user as per specific requirements.</p> <p>Following essential items are to be supplied within the above quoted cost and of reputed make:</p> <p>i. One 2 KVA online UPS for the complete system.</p>		
---	--	--

	<p>i. Two latest configuration PCs with advanced features, licensed operating system & MS office software and for herd management software.</p> <p>ii. Two laser printers each with minimum 20 ppm speed.</p> <p>v. Servo stabilizer (10 KW, 3-phase) for milking parlour.</p> <ul style="list-style-type: none"> • The above fully integrated system must be supplied alongwith complete installation, commissioning, demonstration, training of staff and also training of animals during the first year of operation. • List of installations in India with satisfactory installation certificate from minimum 3 users. • Comprehensive onsite warranty for two years after installation & commissioning • Extended warranty option for 3rd, 4th, 5th years. • Guarantee for ready stock and supply of consumables / spares / parts for the 7 years after installation. <p>Optional Accessories:</p> <p>1. Integrated Sorting gate: Vacuum controlled gate for automatic two-way sorting in exit area as per software command for sick, pregnant and in-heat buffaloes.</p> <p style="padding-left: 40px;">a) Address/list of installation atleast one in buffalo farm of similar capacity/nature.</p> <p style="padding-left: 40px;">b) Broacher Highlighting technical specification may also be asked and Demo Video CD of the system of actual users/Demo</p>		
18	<p><u>laser leveller</u> Its bucket should be 6 feet wide, 2.5 feet depth and 2 feet height Thickness of covering sheet should be at least 10.0 mm. Blade should be EN 30 grade (Reversible option) with dual side. It should be fitted with auto hydraulic power mast and have 4 tyres. Transmitter and receiver should be imported and of reputed make: Transmitter with operating range of 1200 meters (Dia), bright red Laser & Display with dual grade facility along with receiver and complete unit of carry case. Transmitter range should 900 meters or above It should give slope levelling as well as plain levelling It should be fitted with all accessories like tripod, battery, cable set and ready to use. Company have to provide service and spare parts within a week after reporting the problem Minimum one year warranty Levelling error should not be more than 4-6mm per 100 feet</p>	01	11000.00
19	<p><u>Trolley Loader Specification</u> Able to fit on New Holland 3630 tractor Heavy duty hydraulic trolley loader (weight 1 tonne approx.) with following attachments</p> <ul style="list-style-type: none"> - Booster bucket (size approx. 0.6 m³ volume) - Dozer blade (approx. 6 feet length or above) - Grabbing fork for silage handling (size approx. 1 m³) <p>Loader working height - 13 feet (approx.) with booster bucket and 10 feet (approx.) with Dozer blade Easy loader detachment system Quick exchanging of loader bucket attachments Dump angle 90 degrees ; roll back around 60 degrees or better Complete with all required accessories With installation to Institute tractor and training of staff Boucher highlighting technical specification asked with minimum 1 year warranty</p>	01	15000.00

20	<p><u>Rain Gun (Mobile Irrigation System)</u></p> <ul style="list-style-type: none"> • Tanker Round barrel shaped water tanker Capacity 7000-8000 letrs (approx.), made of GI Sheet (minimum 3mm/10 gauge thickness) with minimum joints and cap with lid; on 8mm plate Foundation with 8"x10" with attached bolts Main chassis 200mm x 75 mm channel of suitable length to carry the water tanker, front pumping system size 2.5" x3" with 50 meter head; output valve 2" (brass) • With space for mounting rain gun • With 2.5" forigen hook, with stand, Axle 90mm square with new bearing, Kade wala Rim, 1000-20 size reputed make tyre (Apollo/JK/MRF/CEAT) • Rain gun Heavy duty Raingun of reputed make- water spread 100-115 feet, fitted front side of water tanker with brass gate valve and 20 feet flexible pipe; • Back side with fountain system with 2" valve and 2" pipe • Upper side carrier (heavy duty) • Complete system with red-oxide and enamel spray paint on exterior including channel / chasis and other structures; Rubberised paint on inner surface of tank and lower portion of chasis 	01	5000.00
----	--	----	---------

The detailed specifications and other terms and conditions of the equipments are available at CIRB website www.cirb.res.in

1. Interested and eligible bidders may obtain further information from the office of Admn. Officer, ICAR - Central Institute for Research on Buffaloes, Sirsa Road, Hisar-125001 (Haryana) and inspect the bidding documents at the above address on any working **day between 10.00 A.M. to 5.00 P.M.**

2. A complete set of bidding document for said instrument may be purchased by interested eligible bidders by submitting written application to the address given above and upon payment of non refundable fee of Rs. 1000/- (Rs. One thousand only) **for each item separately** in the form of Demand Draft/Bankers Cheque drawn on a scheduled commercial bank in favour of ICAR UNIT CIRB, Hisar payable at Hisar. The bidding documents can be mailed by registered post/speed post to the bidder. Extra expenditure for mailing the bidding document will be Rs. 100/- (Rs. One hundred only) for registered post/speed post. The interested bidders should add the applicable postage cost indicated above in its non refundable fee mentioned earlier. However, if a bidder so desires, the bidding documents can also be collected by hand from purchase office of this Institute on receipt of a request letter alongwith non-refundable fee. Tender documents can also be down loaded from our website www.cirb.res.in. The document fees of Rs. 1000/- **for each item** in shape of D.D. is to be enclosed along-with the tender form for the tender document down loaded from the website otherwise the tender will be cancelled.

3. The closing and opening dates of the bidding documents will be as per schedule/detail given as under:-

Sr. No.	Item No.	Last date for issue of tender form	Date & time for submission of tender	Date & time for opening of tender (Technical Bid)	Date and time for opening of tender (Financial Bid)
1.	Sr.No. 1 to 20	20.08.2016 up to 5.00 PM	22.08.2016 up 2.30 PM	22.08.2016 at 3.00 PM	30.08.2016 at 3.00 PM

The interested firms will submit separate Technical and Financial bids to under take the supply of each item separately and simultaneously in different sealed covers superscribed "TECHNICAL BID" and "FINANCIAL BID". Both these sealed covers should then be placed in a third separate cover superscribed as "Tender for supply of item no. -----, name ----- (Item No. and name of equipment) at CIRB, Hisar". Tenders accompanied by an EMD of appropriate amount in the form of a demand draft favouring Director, CIRB, Hisar should reach this office by **22.08.2016 upto 2.30 P.M.** The duly filled in tender can also be dropped in the tender box kept for the purpose in the office of Admn. Officer, CIRB, Sirsa Road, Hisar by the stipulated date & time.

4. Bids received late or without Tender Fee/EMD will be rejected.

5. The tenderer should not have been blacklisted from any government department/undertaking. An undertaking to this effect should be enclosed with the technical bid.

6. Bids received by scheduled time & date as per para 3 above will be opened in the presence of the bidders/authorized representatives who choose to attend at scheduled time & date given in para 3 above.

7. In the event of any of the above date being declared as a holiday/closed day for the purchaser, the bids will be sold/received/opened on the next working day at the scheduled time.

8. In case of any imported items the supply will be on FOB basis and CDEC will be issued availing customs duty exemption .

9. Director, CIRB, Hisar reserves the right to accept/reject any or all the tenders without assigning any reason.

(Chetan S. Issar)
Administrative Officer
01662-281611 (O)