



YOGI VEMANA UNIVERSITY

Department of Genetics and Genomics

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SUB: Yogi Vemana university-Department of Genetics and Genomics. Dr.A.Muni Kumari-Principal investigator, SERB-DST- New Delhi Sanction Order No: SB/YS/LS-55/2013. Dated 11thSeptember 2013- Purchase of Equipment- Call for quotations- Reg.

We are inviting tenders for the supply of the following equipment for the SERB DST Project, Department of Genetic & Genomics, Y.V.U., Kadapa. The suppliers are requested to send their lowest quotations (the items listed below) in duplicate in favor of *the Registrar, Y.V. University, Vemanapuram, Kadapa-3* through speed/registered post along with your terms and conditions. The sealed cover should super scribed as "*QUOTATIONS FOR EQUIPMENT –Dr. A. MUNI KUMARI, PI, SERB, Dept. of Genetics and Genomics -2013-14*" and should reach the university on or before 22-11-2013.

SLNo.	ITEMS	Quantity Required
1	Balance: Shimadzu electronic top loading balance bl220h, Specifications for Model : BL 220H(L), Display: LCD Capacity :220 gms, Readability : 0.001g Standard deviation 0.001, Linearity 0.002g Calibration weight 200g Volts : 12V d.c., Pan Size : 100 x 100 (mm) Main body size (mm) approx 170(W)x240(D)x114(H)mm Main body weight approx 2.2kg Stability of sensitivity (10°C to 35°C) + 3ppm/°C Applicable temperature range 5~40°C Powersupply AC adaptor : 100 ~ 250 VAC, 47~63 HZ Balance :12 VDC. 0.1A ^(*)	1
2	Incubator: Make. Thermo Fisher scientific USA Temperature Range 5° C above ambient to 75° C.The temperature uniformity shall be $\leq \pm 0.6^\circ$ C at 37° C.. The temperature Stability (deviation over time) : $\leq \pm 0.2^\circ$ C. The air convection technology shall be Gravity convection for reduced drying out. The incubator shall have an internal glass door for easy viewing of samples without disturbing internal Environment. The unit's usable space shall be approximately 75.The incubator shall provide automatic over temperature alarm, without need for manual setting. The interior surface shall be made from AISI 430 / 1.4016 grade stainless steel. The chamber shall have rounded corners for easy cleaning and to avoid contamination. The shelf system shall be easy to fit and remove easily with one hand and without the use of tools. The user interface shall be microprocessor controlled and shall have a large vacuum fluorescent display and touch button control. The units shall be stackable	1

	without the need for using tools. The incubator shall be provided with 2 shelves as standard and shall be capable of accommodating a maximum of 13 shelves. The shelf shall be capable of carrying a load of 25 kg. Footprint shall not exceed : 0.3m ² The Incubator shall have RS 232 Interface.	
3	P ^H meter: CyberScan pH 700 Microprocessor based precision pH/mV meter with automatic temperature compensation, parallel temperature display, automatic calibration system, built in memory & digital interface. The package consists of the following: Basic meter, Temperature probeTEMP-01P, Buffer Gel for pH 4.01, 7.00 & 10.01, Single junction pH electrode, stand with flexible arm, electrode holder and universal power adapter. Cat No : ECPH70042SEU	1
4	Microscope: Trinocular microscope: research microscope with microphotography attachment. make : lynx – lawrence & mayo , model no : lm-52-1803 (lexar)total magnification : 40-1600x eyepieces wf10x / fov 20 , p16x pair with eye guard infinity plan achromatic objectives 4x,10x,40x(sl),100x(sl)oil built in illumination halogen 6v 30w/led with koehlerillumination sidentopf trinocular head inclined 45 ⁰ 360 ⁰ rotatable , with standard c mount to fix the photography attachment , ipd 48-75mm co-axial coarse and fine focusing system , focusing range 0.001mm double layer mechanical stage 140x140 , moving range 75x50 sliding in centerable condensor na 1.25 with dove tail mount ,calculated iris diaphragm & filter microphotography attachment with imaging software resolution : 14 mega pixels or higher zoom : 3.6x zoom lens design : versatile swivel design with magnesium body internal memory : approx of 13.5 mb (approx) display : 3” led screen connectivity: usb port to connect to the system / monitor for live viewing and analysis of the images. imaging software for analysis should be supplied along with the microscope and camera,the above quoted camera is supplied with relay lens and adaptor to fix to the trinocular microscope with c mount	1
5	Computer with accessories: Dell laptop inspiron 15R(5537) 4 th generation intel i7-4500U,Ram memory 8 GB, TB 5400 RPM, SATA hard drive, 15.6 inch, 6 cell battery, Windows 8, micro soft, single language (64 bit), tray loading DVD-R/W, touch screen, black color, wt 2.32 kg. 32gb pen drive, 160gb store jet. Printer and scanner: make EPSON, model no: L350, on demand ink jet method, double sided print yes, copying black draft 5sec, color draft 10sec, Scanning flatbed color image scanner, weight 4.4kg9.7lb.additional inkbottles black T6641, Cyan T6642, Magneta T6643, Yellow T6644,	1
6	-20C deep freezer: Make. Voltas, Model, 320 LSD, Insulation System 60mm Thick Polyurethane Foam, overall package Dimensions(WXDXH) Mm 1240X720X880.No of Doors	1
7	Refrigerator: Godrej make, Model GFE 35 EZ Double Door, capacity 330 liters, Automatic defrosting, 5star energy rating; 160-250 v, Dimensions 600x706x1745 mm.	1
8	Hot Air Oven: Make: Thermo Fisher Scientific, USA. The ovens shall	1

	<p>have gravity convection . Temperature Range 50° C to 250° C. Spatial Temperature Deviation at 150°C : $\leq \pm 4.4^\circ\text{C}$. Temperature Deviation over Time at 150°C : $\leq \pm 0.4^\circ\text{C}$. Chamber Volume, - 65 Liters. Footprint shall not exceed : 0.3m². The Inner chamber shall be made of AISI 430 / 1.4016 Stainless Steel The oven shall have an automatic over temperature alarm – no need to set manually The ovens interior shall have rounded corners for easy cleaning The shelf system shall be easy to fit and remove easily with one hand and without the use of tools. The ovens interface shall be microprocessor controlled and shall have a large vacuum fluorescent display and touch button control. The oven shall be provided with 2 shelves as standard and shall be capable of accommodating a maximum of 13 shelves. Each of the shelves shall be capable of accommodating a load of at least 25 Kg. The ovens shall have an on/off timer to automate on and off cycle after a preset time. The oven shall have a manual damper for venting out the chamber air. The door shall be able to open at 180° angle for complete access to chamber interior. The oven shall have RS 232 interface</p>	
9	<p>Reciprocal Shaker: Major Science, USA. The reciprocal shaker should have horizontal (left to right) linear action to provide gentle to vigorous shaking for a variety of applications. The operation should be continuous or timed, with the integral electronic timer ensuring accurate repeatability of time-sensitive incubations. Speed and time settings should be straightforward in the LED display. Its load weight up to 15kg. An audible signal should accompany automatic shut-off to indicate the completion of a set time period. The interchangeable / stacking platforms and accessories enable a wide choice of vessels to be used, including bottles, flasks and beakers, dished, boxed and petri-dishes. Continuous or timed operation with automatic switch-off, Variable shaking speed from 5 to 100rpm, Interchangeable / stacking platforms, and accessories for a variety of vessels, 33 lb (15kg) carry capability, Should be quoted along with the 250ml flask holders, Motion reciprocal, Maximum stroke length 20mm, Controller Digital microprocessor controller, Speed/Inc 5 ~ 100rpm/ 1 rpm. Timer 1~9999mins with alarm, continuous/1 min, Carrying capacity 33 lb (15 kg), Motor DC brushless type, Operating temperature Ambient to 40°C. Platform Dimension (WXL) 30x30cm, Platform Material painted iron metal, Stacking Platform yes, unit Dimension (WxLxH) 300x310x 130mm, Construction flame retardant PC and painted iron metal bottom plates.</p>	1
10	<p>Auto clave – vertical model : labline/inlab/hasthas make ss inner, (or) total ss, for extreme safety. electrically heated. a neoprene rubber gasket is provided on the flange, which helps the lid to seat properly thereby eliminating steam loss. the unit is also provided with water drain attachment. the unit is fitted with pressure gauge, steam release cock, and safety valve. the unit is tested at 25 psi by hydraulic pressure. the operating pressure is 15 psi. unit size: 500x300 mm, rating: 2.0kw, capacity : 35ltrs optional : automatic pressure cut off & digital temp. controller and auto cutoff . imported make, low water level specification :-</p>	1

11	Magnetic Stirrer with Hot plate: with Digital Display. Dimension (DxWxH) 280x160x85. 5ml H.	1
12	<p>Gel electrophoresis unit with power pack: Mini Vertical should be an injection molded vertical electrophoresis system providing a leak-proof environment and safe operation. Its vertical tank should be designed for blotting compatibly. The dual 10 x 10cm plate is the most popular application and it must be capable of handling up to 4 plates. Low buffer consumption, Single molded tank, Up to 4 gels run at one time, Great indications for gel making and running, Ice cooling pack, Easy gel casting and no gel leakage, Competitive pricing, Compatible with all precast gels (10x10cm) Unit dimension(WxLxH) 190x130x150 mm, Plate dimension(WxL) 100x100mm, Gel Dimension(WxL)75x80mm,Maximum Sample 80 samples per gel, Buffer volume 250 ~ 1200ml, Ice Cooling pack yes, Dummy plate and Casting Base yes, Construction Injection molded construction, Durable, leak proof environment for complete safety and long life, lid can be fastened only one way, on removal, power is disconnected from buffer chamber, use casting dams. Power pack :power supply should be designed to meet most electrophoresis needs, running horizontal & vertical electrophoresis, and two-dimensional electrophoresis, or SDS-PAGE applications. And should be capable of running 4 systems simultaneously. Must be stackable case. Microprocessor control must offer an easy user interface. The user should have a control of constant voltage output as well as constant current output. Pause/resume functions and a timer with alarm allow run capability during timed or continuous operation. The safety devices should include no load detection, leakage detection, sudden load change detection, over temperature protection, and over load detection. output voltage/inc 2-300v/1V, out put current/inc 1-700mA/1mA,output power 150W, output type constant voltage or constant current, controller microprocessor controller, Terminal Pairs 4 pairs, Timer 1~999 minutes with alarm, continuous, pause function yes, Safty device no load detection,leaking detection,sudden load change detection, over temperature protection, over load detection, shrouded plug and sockets. Crossover yes, operation temperature 4°C to 40°C, unit dimension (WxLxH) 7.48x12.0x3.74(190x305x95mm)Construction material flameretardant ABS plates and aluminum, Stackable yes.</p>	1
13	Gel Rocker (Rocking Shaker) : Major Science, USA, The rocking shaker should be microprocessor controlled instrument for precise rocking control. The operation must be continuous or timed, with the integrated electronic timer ensuring accurate repeatability of time-sensitive incubations. Speed and time setting should be straightforward in the LED display. The load weight should be up to 15kg. An audible signal should accompany automatic switch-off to indicate the completion of a set time period. The interchangeable / stacking platforms, and accessories enable a wide choice of vessels to be used, including bottles,	1

	flasks and beakers, dishes, boxes and petri-dishes. Continuous or timed operation with automatic switch-off. Variable shaking speed from 5 to 100rpm. Interchangeable / stacking platforms, and accessories for a variety of vessels. 33 lb (15kg) carry capability. Should be quoted along with the 500ml flask holders	
14	Silica column C18 (25X0.46cm) for HPLC	1

A. Muni Kumari

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SERB-DST Project**