

List of approved equipments alongwith specifications to be purchased during 2015-16

S. No.	Name of equipment & Specification	Name of firm	Approved rate(s) (in Rs.)	Tax	Remarks	
1.	Outsourcing of Whole Transcriptome Sequencing using a suitable platform	M/s Sandor Life Sciences Pvt. Ltd., 8-2-326/5, 2 nd Floor, Plot No. 1, Road No. 3, Banjara Hills, Hyderabad-530 034, India	Rs. 45000/-	Including		
	Parameter					Specifications
	Raw data output					3-4GB per sample
	Read type and read length					Paired end; 2x150bp
	Assembly					De novo and reference mapping
	Annotation					Annotation analysis of transcripts/CDS with NR database
	Gene ontology					Functional classification of transcripts/CDS
	Variant detection					SNP identification
	Microsatellite detection					SSR identification
	Gene expression					Transcript count based digital gene expression analysis
	Other analysis					Pathway analysis, transcription factor analysis
Reports	Comprehensive compiled report; Control lane summary report					
Others	All cost including library preparation, validation, sequencing and bioinformatics analysis/support should be included in the final cost.					
2.	Elisa Reader Specifications: <ul style="list-style-type: none"> ▪ Wavelength range 400–750 nm ▪ Photometric range 0.0–3.5 OD 	M/s Biogen Scientific, 3 rd Floor, Krishna Plaza, Tej Garhi	Rs. 153300/-	Extra		

	<ul style="list-style-type: none"> ▪ Linearity ≤1.0% from 0.0–2.0 OD; ≤2.0% from 0.0–3.0 OD ▪ Accuracy ≤1.0% or 0.010 from 0.000–3.000 OD at 490 nm ▪ Precision 1.0% or 0.005 OD from 0.0–2.0 OD; 1.5% from 2.0–3.0 OD ▪ Resolution 0.001 OD ▪ Filter wheel capacity 8 ▪ Plate shaking (3 speeds) Low, mid, high ▪ Duration, sec 0–999 ▪ Read time 6 sec at single wavelength, 10 sec at dual wavelengths ▪ Data output Onboard graphical thermal printer and USB2 interface with PC or Mac data stations ▪ Data storage Calender/clock functions; 64 assay protocols ▪ Userinterface LCD indication supported; printout report supported ▪ Dimensions (W x D x H), cm (in) 34.6 x 37.7 x 16.4 (13.6 x 14.8 x 6.5) 	<p>Crossing, Shastri Nagar, Meerut-250 005 (U.P.)</p>			
<p>3.</p>	<p>Ice Flaking Machine Specifications: HEAVY DUTY CONTINUOUS RATING</p> <ul style="list-style-type: none"> ▪ Outer wall made of Stainless Steel (SS-430) and inner chamber made up of Stainless Steel (SS-304 Grade). ▪ The crushing assembly consisting of heavy machined and concealed jacket made of Stainless Steel which runs a heavy extruded worm gear run through a heavy duty pressure die-casted GEAR ASSEMBLY fitted with a heavy duty motor ▪ Auto Cut-Off System when the collection bin is full. ▪ CAPACITY 35Kgs/24hrs TANK CAPACITY ▪ STORAGE BIN 20 ltrs ▪ Crusher assembly fitted with in-built water collection tank with a float valve for regulating water supply. 	<p>M/s Biogen Scientific, 3rd Floor, Krishna Plaza, Tej Garhi Crossing, Shastri Nagar, Meerut-250 005 (U.P.)</p>	<p>Rs. 116300/-</p>	<p>Extra</p>	

	<ul style="list-style-type: none"> ▪ AC Supply 220/230 Volts. ▪ Output capacities $\pm 10\%$ depending upon the feed water temperature as well the ambient from temperature (Calculated at 22°C-25°C). 				
4.	<p>Inverted Microscope with camera Inverted Tissue Culture Trinocular Microscope : Specifications:</p> <ul style="list-style-type: none"> ▪ For bright field and phase contrast applications (30° inclined, interpupillary 48mm – 75mm) having 6v 30w halogen light illuminator ▪ revolving nosepiece, coaxial coars (stroke: 37.7mm per rotation) & fine (stroke: 0.2mm per rotation) adjustment ▪ plain stage (160x250mm) with glass insert, auxiliary stage 70x180mm, condenser (NA 0.3) LWD 72MM (without condenser 150mm ▪ Long working distance plan infinity Bright field objectives 4x/0.1 (W.D 18mm) & 40x/0.6(W.D. 26mm- cover glass 1.2mm) ▪ phase contrast objectives 10x0.25(W.D. 10mm) & 20x0.4 (W.D. 5.1mm) ▪ phase annulus plate (10x- 20x, 40x) & high eye point , extra wide field eyepiece EW10x (F.N. 22). <p>Digital Camera System :-</p> <ul style="list-style-type: none"> ▪ Complete with Olympus SLR digital camera (12 million pixels) with rechargeable batteries & charger ▪ Magnus SLR microscope adapter & with 1GB memory card ▪ standard zoom lens(1) and carry bag 	<p>M/s Ramesh Traders, Shop No. 15, Opp. Zonal Police Head Quarters, Palace Road, Jammu-180 001</p>	Rs. 181000/-	Extra	

5.	<p>pH meter Specifications: Ranges: pH -2.00 to 16.00 -2.00 to 16.00 Temperature -5.0 to 105.0°C or 23.0 to 221.0°F -5.0 to 105.0°C or 23.0 to 221.0°F Resolution: pH 0.01 0.01 Accuracy: pH ±0.02 ±0.02 (@20°C/68°F): ORP - ±2 mV Temperature ±0.5 up to 60°C, ±1°C up to 105°C ±0.5 up to 60°C, ±1°C up to 105°C ±1°F up to 140°F, ±2°F up to 221°F ±1°F up to 140°F, ±2°F up to 221°F Typical EMC pH ±0.02 ±0.02 Deviation: ORP - ±2 mV Temperature ±0.2°C or ±0.4°F ±0.2°C or ±0.4°F pH Calibration: Automatic 1 or 2 points with 2 set of standardized buffers (4.01, 7.01, 10.01 or 4.01, 6.86, 9.18)</p> <p>Temp. Compensation: Automatic from -5 to 105°C (23 to 221°F) (for pH only) Electrode: HI 1296D combination amplified pH/temperature HI 1297D combination amplified pH/ORP/temperature with DIN connector and 1 m (3.3') cable (included) with DIN connector and 1 m (3.3') cable (included)</p> <p>Environment: 0 to 50°C (32 to 122°F); RH 100% Battery Type: 3 × 1.5 V AA Battery Life: Approximately 1500 hours of continuous use. Auto-off after 8 minutes Dimensions: 150 × 80 × 36 mm (5.9 × 3.1 × 1.4") Weight: 245 g (8.6 oz.)</p>	<p>M/s Ramesh Traders, Shop No. 15, Opp. Zonal Police Head Quarters, Palace Road, Jammu-180 001</p>	Rs. 17500/-	Extra	
----	---	---	-------------	-------	--

6.	<p>Electronic Balance Specifications:</p> <ul style="list-style-type: none"> ▪ Capacity (Max) 100g ▪ Tare range 100g ▪ Accuracy class I ▪ Working temperature +18 ÷ +30°C ▪ Resolution: 0.0001g Reading unit (d)0,1mg ▪ Verification unit (e) 1mg ▪ Precision ±0.0001 ▪ Pan Diameter 75mm ▪ Wind Draft Shield Standard 	<p>M/s Ramesh Traders, Shop No. 15, Opp. Zonal Police Head Quarters, Palace Road, Jammu-180 001</p>	Rs. 31000/-	Extra	
7.	<p>Thermal Cycler Master cycler nexus gradient 230 V/50-60 Hz Specifications:- Universal Block for 96 x 0.2ml PCR Tube, 71 x 0.5 ml PCR Tube, One 8x12 PCR plate Gradient PCR, capable of testing 12 different temperatures simultaneously across a gradient range of 1 - 20° C SteadySlope Gradient Technology ensures ramp rates are identical in both gradient and normal operation Heating and cooling via peltier technology. Patented Triple Circuit Technology, ensures precise control of temperature Temperature control range: from 4 °C to 99°C Temperature Control Mode: Fast, Standard and Safe Lid Temperature range: 37 - 110 °C Block Temperature Accuracy: ± 0.2°C Block Homogeneity: 20° C to 72° C: ≤ ±0.3° C, 95° C: ≤ ± 0.4° C Temperature control speed: approx. 3 °C/s (heating) Temperature control speed: approx. 2 °C/s (cooling) Lid descent and closing pressure - Flexlid technology with Thermal</p>	<p>M/s J&K Scientific Agencies, Residency Road, Shaheedi Chowk, Jammu-180 001</p>	Rs. 229000/-	Including	

	<p>sample Protection Intuitive Graphic programming with larger display. Time or Temperature increment with cycles in PCR program Adjustable ramp rate from 0.1° C to 3.0° C to meet critical amplification conditions Auto Restart facility with user defined time interval when power fails and resumes Instrument status indicates the step, cycle and remaining runtime during the run Runtime display shows remaining time in larger font for better view from distance System memory of more than 100 User folders and more than 700 programs USB ports: for Protocol transfer, Self-test, USB, printer / mouse</p>				
<p>8.</p>	<p>Orbital Shaker Specifications:</p> <ul style="list-style-type: none"> ▪ Fitted with Microprocessor based Digital Temperature Indicator-Cum-Controller. ▪ Supplied with shaking tray and one set of flask holding clamps. ▪ INNER DIMENSION 450X450 mm ▪ TEMP. RANGE+5°C TO 100°C ▪ Speed Range 40 to 400rpm ▪ Temperature Range (Metric) 0° to 40°C ▪ Orbit 1.9cm (0.75 in.) ▪ Hertz 50/60Hz ▪ Humidity Range 20 to 80% ▪ Load Bearing Capacity 35 lb. (15.9 kg) ▪ Motor Type Triple eccentric drive ▪ Voltage 220-240V ▪ Electrical Requirements 240V 50/60Hz 	<p>M/s Biogen Scientific, 3rd Floor, Krishna Plaza, Tej Garhi Crossing, Shastri Nagar, Meerut-250 005 (U.P.)</p>	<p>Two options Rs. 103300/- (Biogen) Rs. 333000/- (Imported)</p>	<p>Extra</p>	

9.	<p>Micropipettes</p> <ol style="list-style-type: none"> 1. Research plus, adjustable, 0.1-2.5µl, 2. Research plus, adjustable, 0.5-10µl, 3. Research plus, adjustable, 2-20µl, Yellow, 4. Research plus, adjustable, 10-100µl, 5. Research plus, adjustable, 20-200µl, 6. Research plus, adjustable, 30-300µl, 7. Research plus, adjustable, 100-1000µl, 8. Research plus, adjustable, 0.5-5ml, 9. Research plus, adjustable, 1-10ml, 	<p>M/s Biogen Scientific, 3rd Floor, Krishna Plaza, Tej Garhi Crossing, Shastri Nagar, Meerut-250 005 (U.P.)</p>	<p>1) Rs. 6500/- (2) Rs. 7500/- (3) Rs. 8500/-</p>	<p>Extra</p>	
10.	<p>PCR</p> <p>Technical Specifications</p> <ul style="list-style-type: none"> • The system should be a 96 well Thermal Cycler with 6 separate peltier blocks to provide independent temperature zones to run – six different assays with varying annealing temperatures at the same time. • Each block to accommodate 16 wells and having the ability to set up PCR with a specific temperature differential of up to 5 degree centigrade between blocks. • Run up to 6 separate temperatures in the same plate with user defined time to determine the optimal annealing temperatures. • Gradient technology should ensure identical ramp rates in both gradient and normal operation • Gradient temperature range from 30 – 99°C • Gradient optimization should be possible in 0.1 mL / 0.2 mL / 0.5 mL PCR tube formats. • Should use patented Triple Circuit Technology ensuring precise control of temperature • Block temperature control range must be 4°C to 99°C • ‘Fast, Standard and Safe’ temperature control modes are must • Lid Temperature range: 37 - 110 °C • Block Temperature Accuracy: ± 0.2°C 	<p>M/s Biogen Scientific, 3rd Floor, Krishna Plaza, Tej Garhi Crossing, Shastri Nagar, Meerut-250 005 (U.P.)</p>	<p>Rs. 239300/-</p>	<p>Extra</p>	

	<p>Should have large display with Intuitive Graphic programming</p> <ul style="list-style-type: none"> • Should have Time or Temperature increment with cycles in PCR program • Adjustable ramp rate is must to meet critical amplification conditions • Customized programming allows a maximum of 20 steps and 99 cycles • Auto Restart facility with user defined time interval when power fails and resumes <p>Along with an additional system should be provided for running of non optimizing samples with below specification:</p> <ul style="list-style-type: none"> • Self-contained four Peltier based PCR heating/cooling system. • Aluminium 96 well block for 96 x 0.2ml reaction tubes or 96 well reaction plate • Temperature range: 4.0-99.9°C • Static temperature uniformity +/- 0.5°C, 30 Seconds after clock start over 35⁰-100⁰C • Temperature accuracy (+/-) 0.5°C over range of 35⁰-100⁰C 				
11.	<p>Poly house Super Structure Module Aluminium Covering strips infra structure GI STEEL FRAME :-</p> <p>DESCRIPTION :- -Anti-corrosive, Humidity resistant GI pipe. WIND LOAD STRENGTH :- 160 km/HR GALVANIZED COAT :- ISI standard Thickness :- 2mm ± 20% Weight :- 47 mm x 47 mm Trusses: - 47 mm x 47 mm. Vertical Supports: - 47 mm x 47 mm. Purline: - 47 mm x 47 mm.</p>	<p>M/s Rajdeep Agri Products Pvt. Ltd., 3279/1, Ranjit Nagar, New Delhi-110 008 (India)</p>	<p>Rs. 780000/- Installation charges: Rs. 48000/- Fan 54": 21000/-</p>		

<p>Runners: - 47 mm x 47 mm. (As per DBT guide lines) Doors :- Anodised Aluminium , Door Size :- 6'3" x 3' Lock :- Brass (RAMSON)</p> <p>Glazing with multiwall 6MM POLYCARBONATE sheets :- ROOF COVERING:- 6 mm Multiwalled poly carbonate sheets . SIDE WALL COVERING: - 6 mm Multiwalled poly carbonate sheets. OPP SIDE WALL COVERING :- 6 mm Multiwalled poly carbonate sheets END WALL COVERING :- 6 mm. poly carbonate sheets OPP. END WALL COVERING :- 6 mm. poly carbonate sheets</p> <p>POLYCARBONATE SHEET SPECIFICATION :-</p> <p>Thickness :- 6mm multiwalled. Sound insulation dB:- 18 Make :- LEXAN / Bayer Clear code : 112 Warrantee :- 10 years. Impact Performance : -40°C to +120°C UV:- Both side. Std lengths : 2.1 m x 11.8 m Sheet Structure :- 6/2 RS Approx. weight g/m² 1300 U.L Temperature Rating :100°C K.value W/m²K 3, 5 Sound Insulation DIN52210:-18db Multiwalled: - Impact resistant, Energy saving. Impact Resistant: - 200 times of GLASS LIGHT TRANSMISSION: - 82 – 84% . Excellent Thermal Insulation: 3.5 down. Safe Fire Performance: Self-extinguishing and difficult to ignite Light Weight: Weight ranging from 1.3 Kgs/ Sqms for 6mm.</p>				
---	--	--	--	--

Thermal conductivity :DIN52612W/2°C -0.21

Polycarbonate Sheet Fixing: - Anodized Aluminum Profile.

Specification :-

Size :- 2" inch

Weight :- 1.25 Kg / 12 feet

Perforated Anti tape. :-with proper sealing facility to sustain 160km/HR.

Length :- 12 feet

Screw :- SS non Magnetic

Thermal safety :- Silicon

Fixing :- Double side tape.

Perforated Antidust Aluminium Tape

1. COOLING SYSTEM:- (One Chamber)

ECS Construction MATERIAL:-. Eco friendly.

Technical Specifications Cellulose Pad:

Evaporative cellulose pads are made from a specially formulated cellulose paper impregnated with special compounds to prevent rot, early moss formation and ensure a long service life.

Size:- 1200 x 600 x 100 mm (H x W x T)

Paper ambient condition ; - 25°C - 45 °C

Nominal Efficiency :- 88%

Estimated cooling load : 101,520 BTUs/ Hrs.

Water Flow : 9.56LPM

Bleed : 10%

Temperature :- 8 to 10°C Below. ambient.@ 45% RH.

Self cleaning feature. High saturation efficiency

Pad covered out side by the 40 x 40 Nylon Mesh.

Cooling Pad Assembly:-With Top & Sides GI Gutter 1 MM Thick ISI Mark. Mono block water pump 1 No. This system uses less water I,e;

	<p>recycling water System. This is very long life and new Technology for Assembling cooling Pad. with all necessary plumbing ,hard ware material complete finish. PVC Water Tank 1000 Ltr. AC Cooling System:- (One Chamber) We are providing cooling through Compressor (ACS) with technical support to provided Temperature 28 °C to 35 °C ± 2° C (THROUGH OUT THE YEAR). One unit 2 Ton capacity.</p> <ul style="list-style-type: none"> • BL 4-P Air-Conditioned and HEPA filter, negative pressure is closely monitored, no roof or side vent is allowed. AC controls air temperature and humidity. Air is passed through a cooling unit, where heat is absorbed by a liquid refrigerant evaporating in a cooling pipe. <p>2. Humidification System :- (One Chamber) This is very important feature of the Green house for growing of plants. It creates fine mist inside the chamber and increases the RH. Manufactured of high quality plastic material, resistant to chemicals Humidity Range :- 60 % to 95 % Fogger discharge range:-7.0 LPH, Operating Pressure:-4.0 bar, Density of one fogger:-4.0 m, Mister /Fogger Make :- Netafim (Israel) <u>Head Control Unit-</u> The same head control to be used for humidity & irrigation. Microfogging / Micromisting :- Installation with leakage prevention device (LPD) fogger does not drip during the function. Working pressure: - 4 bar at this pressure, the average droplet size :- 50 to 100 µm. Density: - One fogger to 0.3 m – 0.4 m² for propagation. Patten: - four way nozzle ,hanging type. Fogger discharge range:-7.0 LPH</p>				
--	---	--	--	--	--

<p>Pipe Imported; - 16 mm LLDPE (10 kg/cm²) colour BLACK . Motor:- 1 HP monoblock pump (Crompton/Kirloskar) :- 1 No. Filter (Screen) :- 10 kg Kelba (ISI) PVC Water Tank :- 1000 lts PVC pipe :- 32 mm/ 25mm</p> <p>3. Fan:- 54” Fans with Auto opening system Aluminium shutters and SS Blades with 415V, 50 HZ, 1.5 HP, 3 ph motor with electrical cables, safety grills necessary fitting ,complete finish.</p> <p>4. ROOF SCREEN :- Shading: Overhead shading arrangements with manually rolling Agro shading Nets Energy saving :- 60 % Shade percentage 50-75% Shade Colour Green / Black / White Make :- Tuflex Material :- UV resistant material Specification:- protects against frost radiation, provides uniform shade and reduced day temperature.</p> <p>7. CONROL PANEL:- :- Microprocessor Photosynthesis control Panel :- (User friendly) a) Microclimatic Temperature Controller b) Microclimatic Humidity Controller c) Main Switch (Rotory) L&T make. f) Individual Indicator. Temperature Controller: - Real time microprocessor based user programmable PID Controller. 4 digit LED display for displaying measured values and another 4-digit LED display for displaying settings.Feather touch operation. Set point lock within the setting panel to protect setting changes. Level lock to ensure that the parameter can be read but cannot be changed. Sensor failure indication. Selection of</p>				
---	--	--	--	--

unit °C, °F .Display resolution 0.1°.Accuracy ± 0.1°C. Automatic hysteresis control. Wide selectable temperature range, ranges from 0° to 100°C. 4 KVA load can be directly connected to the powered out put. **Input-** 200-240 VAC, 50 Hz. Single phase. , Ambient 5°-50°C, RH upto 90%.

Sensor :-Platinum sensor **probe Pt- 100** (class A, SI sensor, cable 5 m, max var ± 0.20° C, resistance standard 100 ohms, self heating error in 0 c/mW. 0.6 in flowing air V-1 m/s and o.24 in still air
Response time in moving air 50 % response in 6 sec. And 80 % response in 5 sec.

Humidity Controller:-Real Time microprocessor based. On/Off control for Humidifying/ Dehumidifying. Hysteresis / Differential 1% - 9%.Delay timer 0-240 sec. Direct / Reverse selectable Lock functions to prevent miss operating. Feather touch operation.

Plitz Timer/ cyclic Timer for Humidity: Specific for fogging, misting system, controlled by timer. To avoid the water logging condition in the Glass House.

Specification: -

0-999 Min/sec On, 0-999 Min/sec OFF

automatic cycling. Accuracy quartz

Power output can be directly drive misting unit load upto 4.4 KVA.

Input 200 V to 240 VA.C, Phase-Single, 50 Hz.

Ambient 4°C to 50°C, RH upto 90%.

8. CONSTRUCTION;_ IS- 2645 Civil construction Standard .

CC foundation (1:3:6) , Plastering :- 1: 6

Digging :- 2' x 1'6"

BAES :- PCC 2" thick WIDE :- 16"

FIRST BASE LINE :- 13"

SECOND BASE LINE :- 9"

Frame Base Block :- 2' x 9" x 9".

Curtain wall 2' above the ground level and 2' below the ground level.

	<p>Floor :- floor is natural Soil.</p> <p>10. Electrical Wiring :-Lights Fluorescent Tube light 1 no. will be provided in Buffer room compartment .</p> <p>Electrical Device: High quality ISI approved fittings with copper multi strand twisted FR Grade cable and rigid Stds of safety with proper M.C.B . with appropriate electrical points of 5 Amp & 15 Amps Copper Cable Make :- Plaza . MCB Make :- Hager Switch & Socket Make :-Anchor Fluorescent Tube Make :- Osram Conduite Make : Plaza</p> <p>11. Plumbing:- Water connection with one tap in Green House chamber/ compartment with elbow operated tap, distributed through corrosion free pre coated PVC pipe of appropriate diameter (3/4" or 1/2") will be provided. 1/2 "& 3/4" PVC Pipe :- ISI make L-bow & T :- ISI Make</p>				
12.	<p>Deep Freezer</p> <p>Specification:</p> <ul style="list-style-type: none"> ➤ Upright with single exterior door ➤ Capacity: 440-550 litres ➤ Temperature range: -50⁰ C to -80⁰ C ➤ With two independent compressors ➤ Good quality VIP insulation on all walls ➤ Central LCD display ➤ Provision of maintenance of temperature of -65⁰ C for indefinite time in case one compressor fails ➤ Minimum 4 stainless steel shelves ➤ To be supplied with all essential accessories like voltage stabilizer, additional racks ➤ Voltage = 220 	<p>M/s Eppendorf India Limited, New Delhi</p>	<p>Rs. 612500/- Discount: Rs. 122500/- Rs. 490000/- FOR Destination</p>	<p>Extra</p>	

13.	<p>FLUORESCENCE MICROSCOPE WITH CAMERA AND OTHER ACCESSORIES</p> <ul style="list-style-type: none"> • Should be suitable for excitation of blue region dyes (wavelength 470 - 490 nm) • It should have a separate light source for excitation of Green region dyes (wavelength 525 - 550nm) Optional • Light source: based on high brightness LEDs based on transmitted/EPI LED light type, long life (about 25000 hrs or longer) • No need for changing the bulb. Light source: environmental friendly, free from any toxic material like Mercury, Cadmium, Lead, etc • Instant start and shut down without any warm up or shut down time. • System should allow functioning of 2 or more fluorescent channels and bright field operation without interchanging filters • Systems should have <ul style="list-style-type: none"> ○ Option of intensity control of fluorescent signal ○ Option of battery operation for field use. • Infinity corrected plan objectives 4X, 10X, 40X & 100X • Quadruple nosepiece (with inward tilt), Tropicalized, anti-fungus treated optics, Seidentopf observation head , Field-of-view 20 • Bright & uniform illumination covering entire field-of-view 6V30W Halogen light illumination with built -in transmitted Koehler illuminator. Stage size 188(W) X 134(D)mm with good movement range in X-direction and Y-direction, Double slide holder, System should have Bright field • COLOR IMAGING SYSTEM UHCCD-USB2 1.4 mega pixel Camera (for Tr) (for BF / Fluorescence Microscopy) with in Built 1/2" Sony CCD Sensor, 15fps@ Resolution 1360x1024, Binning 1x1 , White balance adjustment , ultrafine colour engine, Power supply DC5V over PC USB port , Support windows 7/8 (32 & 64 Bit) and 	<p>M/s Ultimed Solutions, Plot No. 64. First Floor, Industrial Area, Phase-2, Chandigarh-160 002</p>	Rs. 310000/-	Extra	
-----	---	---	--------------	-------	--

	<p>Supplied with 0.5X C -Mount Tr-adapter</p> <ul style="list-style-type: none"> • Image Analysis software for measuring and arranging captured images, creating databases and preparing reports. Counting, measurement & calibration option • Computer Dual core (With 320GB HDD, 2GB RAM, 17 inch color monitor, mouse, keyboard, 56x CD writer • Produced in an ISO 9001:2000 (TUV) & ISO 14001 certified manufacturing facility <p>CE certification</p>				
14.	<p>Horizontal autoclave</p> <ul style="list-style-type: none"> • Inner dimension (500 x 1200 mm) • Capacity of 221 L. • Load of 9.0 KW. • Outer wall with tubular stand and ring made of stainless steel. • Digital temperature indicator. • Microprocessor based semi automatic digital controller with auto time control system. • POP type safety valve. • Extra injector in addition to vaccum dry for better drying. 	<p>M/s Biogen Scientific, 3rd Floor, Krishna Plaza, Tej Garhi Crossing, Shastri Nagar, Meerut-250 005 (U.P.)</p>	Rs. 186300/-	Extra	
15.	<p>Vertical autoclave</p> <ul style="list-style-type: none"> • Inner Dimension (550 x 750 mm) • Capacity of 187 L. • Load of 4.0 KW • Inner and outer wall both made of stainless steel. • Lid of thick stainless steel plate. • Gasket of silicone rubber. • Semi automatic digital controller with auto time control system • Fitted with low water cut off for general safety of heating elements. 	<p>M/s Sandeep Instruments & Chemicals, 3229, Ranjeet Nagar, New Delhi-110 008 (India)</p>	Rs. 98000/- (187 L)	Extra	

16.	<p>Laminar flow</p> <ul style="list-style-type: none"> • Internal work size dimensions of 2400 x 600 x 600 mm • Vertical unit supplied with stainless steel working bench • Front door made of toughened glass • Magnehelic guage to track filter pressure • UV germicidal tube and one cock for gas, air or vaccum line • Fitted with pre filter and HEPA filter confirming to ISO • Body made of stainless steel • Interlocking of UV germicidal tube and fluorescent light with auto switch off / on mode for blower when the door is closed / open. • Solid side walls and transparent front door. 	<p>M/s Biogen Scientific, 3rd Floor, Krishna Plaza, Tej Garhi Crossing, Shastri Nagar, Meerut-250 005 (U.P.)</p>	Rs. 157300/-	Extra	
17.	<p>BOD incubator</p> <ul style="list-style-type: none"> • Inner dimensions of 700 x 700 x 100 mm • Capacity of 560 L and volume of 20 Cuft • Four shelves inside • Microprocessor digital controller with LED display • Outer chamber of CBC sheet duly powder coated and inner chamber and trays made of stainless steel. • Triple walled back fitted with air circulation fans. • Gap between inner and outer wall filled with foam • Fitted with door open inner view lamp. • Transparent acrylic door for inner view • Temperature range from 5 to 60⁰C controlled through microprocessor based digital temperature indicator cum controller with an accuracy of $\pm 0.1^{\circ}\text{C}$. • Works on 220 volts with AC supply. 	<p>M/s Biogen Scientific, 3rd Floor, Krishna Plaza, Tej Garhi Crossing, Shastri Nagar, Meerut-250 005 (U.P.)</p>	Rs. 103300/-	Extra	

18.	<p>Vertical Electrophoresis with and without Power Supply Specifications:</p> <p>A. Vertical Electrophoresis (Medium)</p> <ul style="list-style-type: none"> • Dual gel electrophoresis unit • Gel size 16 x 14 cm • Max no. of samples 48 • Gel casting directly in the chamber assembly on casting base with silicone mats for agarose-free sealing • The unit comes with buffer chamber, safety lid with cables, Two alumina notched plates • Robust construction through the use of 6 mm acrylic glass. • Corrosion-free gold-plated banana plugs • Two combs each of 20 and 15 wells with 1 mm thickness, 4 spacers of 1 mm thickness and dual gel caster • Manufactured in concordance with CE guidelines • The quoted tenders must be accompanied with proper product brochures/catalogues for validation of the specifications <p>B. Vertical Electrophoresis (Small)</p> <ul style="list-style-type: none"> • Dual gel electrophoresis unit • Gel size 10 x 10 cm with casting base • Max no. of samples 24 • Gel casting directly in the chamber assembly on casting base with silicone mats for agarose-free sealing • The unit comes with buffer chamber, safety lid with cables, Two alumina notched plates • Two combs each of 8 and 10 wells with 1 mm thickness, 4 spacers of 1 mm thickness and dual gel caster 	<p>M/s Biogen Scientific, 3rd Floor, Krishna Plaza, Tej Garhi Crossing, Shastri Nagar, Meerut-250 005 (U.P.)</p>	<p>Option I Rs. 108300/- Option II Rs. 73300/- (Imported) Power supply Rs. 63300/-</p>	<p>Extra</p>	
-----	---	--	--	--------------	--

	<ul style="list-style-type: none"> • Robust construction through the use of 6 mm acrylic glass. • Corrosion-free gold-plated banana plugs • Manufactured in concordance with CE guidelines • The quoted tenders must be accompanied with proper product brochures/catalogues for validation of the specifications <p>C. Power Supply</p> <ul style="list-style-type: none"> • With 4 outputs for different applications • Big LCD displays and folding legs for convenient viewing of parameters • Lightweight, compact and also stackable, they give you back more of your benchspace • Manual programming option with the last parameters automatically stored. • Input Power: 230V AC, 50-60 Hz • Timer: 0-99:59 h • Voltage: 2-300 V • Current: 4-500 mA • Power: 0-90 W • 4 outputs in parallel, 4 mm sockets • Min. load resistance: 1 ohm • Display: 2x15 characters, LCD • Dimension: 20 x 8.5 x 30.5 cm 				
19.	<p>Automatic Absorption Spectrophotometer Hardware:</p> <ul style="list-style-type: none"> • Optics: Double Beam, Optics should be fully sealed and mirrors quartz overcoated. • Wavelength range: 190-900 nm 	<p>M/s Labindia Instruments Pvt. Ltd., Plot No. 372, Udyog Vihar, Phase-II, Gurgaon-122016</p>	<p>Rs. 1791000/- (Two years warranty) Rs. 1845000/- (Three years warranty)</p>	<p>Extra</p>	

<ul style="list-style-type: none"> • Monochromator: Czerny-Turner or equivalent monochromator with computer controlled wavelength selection and peaking. • Slits: Automated slit selection. Settings: 0.2-2.0 nm plus one reduced height slit of 0.5 nm • Grating: Holographic diffraction grating with line density of 1200 lines/mm or more. • Photomultiplier Selected wide range Photomultiplier covering full wavelength range or Solid State Detector • Background corrector High intensity deuterium background corrector. Easily aligned and replaced by the user. • Lamp System: 4 or more lamp positions and lamp selection using mirror. Automatic operation. Lamps should automatically switch off at the end of analysis. • Gas control: Fully Programmable gas control system with automatic setting of gas flows. Automatic oxidant changeover. Should have fast response solenoid valve for rapid regulation and setting of selected gas flow. • Safety system: There should be adequate safety measurement such as separate ignite/flame-off buttons, internal gas connections made automatically, flame shields and protection against heat and UV radiation. External adjustment of all burner and spray chamber controls. Violation of any safety interlock should prevent flame ignition or should extinguish existing flame. • Spray chamber should be fluorinated high-density polyethylene for aqueous and organic solutions. • Impact beads should be externally adjustable. Option for inert impact bead for samples with HF. • Nebulizer: Adjustable nebulizer with inert platinum/iridium capillary 				
--	--	--	--	--

	<p>and PEEK venturi for corrosion resistance.</p> <ul style="list-style-type: none"> • Burners should be Air/acetylene burner with Teflon corrosion shield. Should provide external burner rotation. Nitrous Oxide to be quoted also and imported pre heated N₂O regulator also to be quoted. • Typical performance >0.9 absorbance with precision of <0.5% RSD from ten 5 sec. integrations for 5 mg/L Cu solution. • Computer Controlled Hydride Generation Accessory: It should be continuous flow Vapor Generation Accessory for determination of Hg, As, Se,Sb, Te, Bi and Sn at µg/L concentrations. Typical precision should be 1-2% RSD with sample throughput of 60-70 samples/hour determined in triplicate. • Computer & Printer: Pentium Core i5 Processor with 17" TFT Colourmonitor, windows 7 32 bit, 4GB RAM, 320 GB HDD, DVD writer andColourDesk Jet printer. • Should be quoted with necessarygas cylinders, regulators, exhaust hood, oil free air compressor etc for the smooth functioning of machine. <p>Software: Windows 7 based 'worksheet' layout running on external PC with mouse or keyboard control.</p> <ul style="list-style-type: none"> • Measurement modes: Absorption or flame emission using PROMT, Pre-read delay variable from 0-999 secs. Up to 20 replicates with read time from 0.1-30 secs. Minimum Signal Facility skips to the next sample if the first measurement is less than the specified minimum reading. Different number of replicates can be selected for samples and standards. • On-line cookbook: Analytical methods 'cookbook' information should display for each method in the Method window. Should 				
--	--	--	--	--	--

	<p>include typical calibration graph and list of alternative wavelengths with comparative sensitivities and any other analytical recommendations.</p> <ul style="list-style-type: none"> • Data handling: All raw data, signals (when selected), method and sequence parameters stored in the worksheet Database. Editing of results by masking replicate or solution results and post run modification of peak measurement mode with automatic recalculation of edited result. Calibration data can also be edited by masking standards. Post-run application of alternative algorithm. • Data import/export: Facility to transfer current data can be transferred directly into third party software using Microsoft ActiveX technology. In addition, data can be exported during run or post-run in ASCII and PRN file formats. • Help system: Context sensitive help with extensive index, graphics, videos and cross referencing should be available <p>Accessories:</p> <ul style="list-style-type: none"> • Hollow cathode lamps: Coded single /EDL/Ultra lamps for analysis of various elements. The lamps should have guaranteed 5000 mA hour of usage time. Coded HCL Ba, Cu, Pb, Sb, Sn and Zn • 5KVA UPS with 30 min back up <p>Warranty: 3 Years on site COST: FOR Chatha</p>				
20.	<p>Seed Counter Specification:- Measuring range: 1-99999 Application scope: Small sample: 0.7-4mm x 0.7-12mm Big sample: 3-10mm x 3-12mm Time for test: more than 1000/3minute</p>	<p>M/s Sandeep Instruments & Chemicals, 3229, Ranjeet Nagar, New Delhi-110 008 (India)</p>	<p>Rs. 69800/-</p>	<p>Extra</p>	

	<p>Precision: big sample: 2/1000 Small sample: 4/1000 Power: 220V 50HZ Continuous working time: More than 5 hours</p>				
21.	<p>Seed Germinator Double walled wheel mounted Stainless Steel chamber with Reservoir (304 Grade), 90% to 95% \pm), outside mild steel powder coated, temperature range from 5°C to 60°C Digitally controlled with variation of \pm 1°C by Electronic Digital Temperature Indicator Cum Controller fitted with indicating lamps. Supplied complete with 14 Aluminium perforated trays: workable on Single Phase 220 / 230 volts A.C. supply. Complete with exterior lighting arrangement with battery backup, 0-24 hour Timer & Stabilizer.</p>	<p>M/s Sandeep Instruments & Chemicals, 3229, Ranjeet Nagar, New Delhi-110 008 (India)</p>	Rs. 89800/-	Extra	
22.	<p>Water Purification System Microprocessor controlled single integrated system with Type 1 and Type 2 Water producing capability and should dispense water directly from system to avoid remote dispenser which may be added cost and avoid risk of stagnant water with below specification:</p> <ol style="list-style-type: none"> 2. ASTM Type I Ultrapure water. for: AA, IC, ICP, Standard buffers, Inorganic and organic trace analysis, HPLC, ICP-MS, IC, TOC Analysis, Molecular biology, PCR, DNA, Monoclonal antibodies, cell culture media. 3. Permeate performance at 15°C: 6 L/H 4. Flow rate:1 L/min 5. Operating pressure in bar, min/max: 1 - 6 bar 6. ASTM I conductivity:0.055μS/cm 7. Resistance at 25°C: 18.2 MΩ.cm 8. TOC Value: 1-5 ppb 9. Bacterial content in CFU/ml: <1 10. Particle content: < 1 	<p>M/s Ultimed Solutions, Plot No. 64. First Floor, Industrial Area, Phase-2, Chandigarh-160 002</p>	Rs. 250000/-	Extra	

	<p>11. Endotoxins :<0.001EU/ml 12. RNase :<0.003ng/ml 13. DNase :<0.4pg/μl 14. ASTM II conductivity: 0.067 – 0.1 μS/cm 15. Resistance at 25°C clearly 15 – 10 MΩ.cm(“typically” or “may be” will not be accepted) 16. Supply voltage: Automatic voltage regulation to 230 V 17. Power consumption: 0.06 kW 18. Connector size: R 3/4";RS:232 interface 19. System should be capable of validation and qualification as per international norms.</p>				
--	--	--	--	--	--