



Sher-e-Kashmir
University of Agricultural Sciences & Technology of Jammu
Head Office, Admn. Block Main Campus Chatha,
Jammu (J&K)- 180009

NIT FOR PROCUREMENT OF LAB. EQUIPMENTS AND FARM MACHINERY

Dated:18-01-2012

For and on behalf of Vice-chancellor, SKUAST-J sealed tenders on prescribed tender form affixed with revenue stamps worth Rs. 5/- (Rupees five only) are invited from the reputed original manufacturers / Authorized Dealers for supply / installation/ commissioning of Laboratory Equipments and Farm Machinery as per given in the Annexure-“II”

The tender documents shall be issued against payment of non-refundable / non-transferable **tender fee of Rs. 1,000/- (Rupees Two Thousand Only)**. The tenders shall be submitted along with earnest money deposit @2% of the quoted cost of the laboratory Equipments and Farm Machinery.

The detailed tender documents containing specifications, terms and conditions etc. can be obtained from the office of the Comptroller, SKUAST-J, Main Campus Chatha, Jammu against payment of tender fee as per the following schedule.

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| Date of Sale of Tender documents | 18.01.2012 |
| Last Date of submission of tender | 07.02.2012 upto 1.00 PM |
| Data of Opening of tenders | 07.02.2012 at 2.00 PM |

The tender fee is to be furnished in the shape of Bank Draft of any nationalized / scheduled bank favouring “**Comptroller, SKUAST-Jammu**” payable at Jammu and the earnest money deposit is to be furnished in the shape of CDR / FDR pledged in favour “**Comptroller, SKUAST-Jammu**”.

The intending tenderers may download the tender document along with terms and conditions from the University Website : www.skuast.org and in that event, they will have to enclose the tender fee with the tender.

The tenders shall be submitted in two separate envelopes i.e. Pre-eligibility Bid and Technical-cum-Financial Bid. The Technical-cum-Financial Bid shall be opened in respect of those tenderers who will qualify the Pre-eligibility conditions.

Pre-eligibility Conditions:-

The Pre-eligibility Bid should be submitted in separate sealed envelope duly superscribed as **Pre-eligibility bid** which should contain the following documents:

1. The Annual turnover of the Tenderer / Principal Manufacturer of the Lab. Equipments should be Rs. 1.00 Crore and for Farm Machinery Rs. 50.00 Lacs, during the last 3 years. This should be supported by duly authenticated Annual Statements by Chartered Accountant.
2. Relevant ISO Certified Company Certificate or equivalent.
3. Copy of valid PAN Card.
4. VAT Registration Certificate.
5. Manufacturer's Registration Certificate with Appropriate Authority.
6. Undertaking to the effect that the Manufacture / Authorized Dealer has never been blacklisted.
7. List of Prominent User's

Terms & Conditions

1. The tenders shall only be entertained on the prescribed form of the University. The tender shall be liable to be rejected if it contains mutilation, overwriting and corrections without due attestation by the tenderer.
2. The tender must be accompanied with earnest money deposit amounting to 2% of the quoted price for Laboratory Equipments and Farm Machinery in the form of CDR/ FDR pledged in favour of the **Comptroller, SKUAST-J of Jammu**. No tender without CDR shall be entertained. The CDR of unsuccessful tenderers shall be released within one month after the contract is finalized and CDR of successful tenderers shall be released within one month after completion of the contract.
3. Conditional tenders shall be rejected out rightly.
4. The envelope in which tender is submitted must be superscribed as "**Procurement of Laboratory Equipments and Farm Machinery**".
5. The specifications of the Laboratory Equipments and Farm Machinery should conform to highest standards as per relevant ISO specifications.
6. Tenderers must state categorically whether or not their offer is exact to tender specifications and indicate deviations, if any, failing which their offer will be ignored.
7. Tenderers shall enumerate the operational experience in similar environment of the equipment offered along with the names, addresses and order references of user's installations.
8. The competent authority i.e., SKUAST - Jammu reserves the right to revise or alter the specifications of the equipment before the acceptance of the tender.
9. Late, delayed, incomplete tenders and amendments and additions to the tender after opening of the same will not be accepted.

10. The Tenderers should include in their tender, provision for tools and initial stock of maintenance spares as are essential for proper operation and maintenance of the equipment. Full particulars of the spare parts should be provided separately.
11. The successful tenderer shall be responsible for erection and installation of the equipment at destination sites and for making it fully operational.
12. The tenderers must provide complete details of space and all infrastructural needs of the equipment which SKUAST-J should arrange before the arrival of the equipment in SKUAST-J to ensure its early installation and smooth operation thereafter.
13. The tenderer shall be fully responsible for the manufacture's warranty in respect of proper design, quality and workmanship of all the equipment accessories etc. covered by the tender for a period of 12 months from the date of satisfactory installation/commissioning of the system. The provision for extended warranty with terms and conditions thereof, if any, may also be specifically mentioned.
14. The tenderers shall make provision for imparting training to our scientists/maintenance staff on operation and use of Laboratory Equipments and Farm Machinery, its accessories and trouble shooting repair and maintenance. Cost, if any, of such training and the details regarding the course covered and its duration should be specified.
15. The tenderer should enclose a certificate with the tender stating that
 - (a) The equipment is of latest technology.
 - (b) The equipment may be upgraded as and when required by SKUAST-J and
 - (c) The equipment shall be promptly and properly serviced by them whenever desired and such service will remain available to SKUAST-J for 05 years from the date of its installation.
16. Prices should be quoted in the Format as per Annexure – I and must be firm inclusive of transit insurance, freight, installation and commissioning at destination sites. Discount, if any, should be shown separately. Additional charges on account of Excise Duty, VAT or any other charge / levy must be specifically quoted. The State entry tax component will not form part of comparison of rates.
17. The offer should be valid for a period of 180 days from the specified date of opening of the tenders.
18. 100% payment shall be made on installation and commissioning of the equipments. However, the tenderer shall have to furnish a bank guarantee equal to 10% of the total cost of the equipment/ machinery towards performance guarantee for one year which shall be released on successful completion of the warranty period.
19. The Tenders must reach in the office of the Purchase Officer, SKUAST-Jammu, Head Office, Main Campus, Chatha, Jammu not later than the specified time as stipulated in the NIT, if the date on which the tender are to be received /

opened is declared as a public holiday, the tenders shall be received and opened on the next working day.

20. The tenderers and their authorized representatives are at liberty to be present at the time of opening of the tenders.

21. The competent authority of SKUAST-J does not bind itself/himself to accept the lowest or any tender & reserve the right of accepting the whole or any part of the tender or portion of the quantity offered and the bidders shall supply the same at the rate quoted.

22. Property to be supplied shall not pass to the SKUAST-J unless and until the equipment has been delivered, installed / commissioned and accepted, in accordance with the conditions of the contract and to the entire satisfaction of the competent authority of SKUAST-J.

23. The successful tenderer shall not in any case sublet the contract in full or any part thereof to third party except authorized dealer.

24. The University shall not be responsible for any theft or loss sustained by the tenderer during the period of commissioning/installation. In the event of injury or mishap or illness to any of his worker, the University will not be responsible for any compensation.

25. The tenderer shall be fully responsible for any damage to the University property/ furniture, if any provided to them by the University.

26. The successful tenderer shall have to execute an agreement with the University within 15 days of the allotment of the contract.

27. All questions, disputes, or difference arising under and out of, in connection with the contract shall be subject to the Courts at Jammu (J&K).

28. The contract can be terminated at any time during the currency of the contract if any of the aforesaid conditions of the contract are violated by the tenderer.

Sd/-

Purchase Co-ordinator

No. AU/Acctts/IDC/PW/11-12/F-14/2635-36

Dated 18 .01.2012



Sher-e-Kashmir
University of Agricultural Sciences & Technology of Jammu
Head Office, Admn. Block Main Campus Chatha,
Jammu (J&K)- 180009

TENDER FORM

Cost of tender document received vide Bank Draft / Cash Receipt No. _____

Dated _____ for Rs. 1,000/-

Tender for: - Procurement of Laboratory Equipments and Farm Machinery

Earnest Money amounting to Rs. _____ in the shape of Bank
CDR / FDR No. _____ Dated _____ of
_____ Bank enclosed.

To,

The Comptroller
SKUAST of Jammu
Main Campus Chatha.

I/We _____ S/o.Sh. _____
R/o _____ Prop.M/s _____

_____ hereby tender for Fabrication of Polyhouses at SKUAST-Jammu Main
Campus Chatha and declare as under : -

1. That I/We have sufficient experience for supply of laboratory equipments etc .
2. That I/We have carefully gone through the terms and conditions of the NIT and bind myself/ourselves to adhere to the quality and quantity parameters and rates.
3. That the rates quoted in the enclosed tender form have been written by me / us under my/our personal supervision and are firm.
4. That I/We shall be bound by the SKUAST of Jammu's instructions regarding quality and quantity of materials and other condiments.
5. That the revenue stamps worth Rs. 5/- have been affixed by me/us.
6. The rates quoted for each Laboratory Equipment and Farm Machinery with following specifications are:

Name and address of the tenderer

Annexure –I
FORMAT FOR QUOTING OF PRICES TO VARIOUS EQUIPMENTS
NAME OF THE EQUIPMENT _____

| S.No | Specification As per NIT | Specification of Quoting Firm | Names of the firms with complete Address/Pho ne/Fax No etc. | Unit Price (Rs / € / £ / \$) | Terms & Conditions |
|------|-----------------------------|---|--|--|---|
| | | Deviation if any between the Specification as per NIT and specification of quoting firm _____ _____ _____ _____ | | a) cost of total Unit____ b) Taxes____ c) carrying forwarding ,air ,freight ,insurance ,transportation charges etc(item wise) _____ d) Training cost if any_____ Total cost at Jammu _____ e) State Entry tax as applicable under rules | FOR Mode of payment Delivery Period Warranty |

The prices to be quoted should be equipment wise and separate page should be used for every equipment .In addition to hard copies ,tenderer should enclosed one CD(Soft Copy)

**Signature of the tenderer
(with company seal)**

List of equipments /requisitions (2011-12) (ANNEXURE –II)

| S.NO | Name of the equipment with specifications |
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| 1. | Automatic N Analyzer (with distillation and digestion units) Macro block digestion system, Micro-processor, Scrubber system with Automatic distillation unit |
| 2. | Auto inverter For regular supply to the laboratory (10 KV) |
| 3. | Tensiometer For moisture estimation |
| 4. | Seed cabinet 27"x30"x14" (10 trays) |
| 5. | Refrigerator (310 Lt.) Double door, |
| 6. | Raised bed planter No. of ridges 3, No. of raised bed 2, No. of Tynes-2, row to row and plant to plant adjustable, Seed Mechanism Nylon type inclined plates / aluminum types fluted roller |
| 7. | Multi-crop Plot thresher Suitable for threshing various types of pulses, 6 mm, 10 mm, 18 mm Graepel sieves and adjustable corn sieve, 9HP diesel engine |
| 8. | Ice Flaking Machine Capacity : 179kg/24hrs Mounting : Floor standing Refrigerant: R404 (Eco friendly gas) Ice Storage Bin: Built in 26 kg. Granular Flakes: Provided Should be supplied with suitable servo voltage stabilizer |
| 9. | Deep Freezer (-20 °C) Vertical model Fully automatic defrost function in the fridge, adjustable bottle shelf, 'A' energy rating, Visual and acoustic alarm Super freeze function for large amounts of biochemical and plant samples Net capacity Fridge/Freezer 225-300 / 100-150 litres High freezing capacity, Min 12 kg Freezing holdover time (without power) upto 20 hrs Minimum noise level (upto 40 DBA) |
| 10. | Mechanical Rotary Shaker Heavy and sturdy iron frame, should have mechanical speed controller, RPM range :20 to 300 Compatible with 220/230 volt AC supply, RPM with digital display. |
| 11. | Microwave oven Volume 22-25 litres, stainless steel body, auto cook menu, key pad type controls, with intellowave technology |
| 12. | Refrigerated water bath Bath capacity should be 25-30 litres Temperature range between -20°C to 105 °C Temperature accuracy high (+ 1°C) Temperature sensor pt RTD, digital LCD display |

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| | Over temperature cutoff Pressure pump should have maximum head flow |
| 13. | pH Meter (Digital) Range of pH: - 0 to 14.0 Operational temperature range:5°C to 105°C Multipoint calibrations Very High accuracy (0.01 pH) Automatic detection for temperature fluctuation with ATC probe, Non-glass solid state FET pH electrode Microprocessor based with auto-buffer recognitions for calibrations With Extra pH electrode, pH buffers |
| 14. | Magnetic stirrer with hot plate Temp. range: above ambient to 160°C, speed:200-2000 rpm, heating coil be strip heater, controller digital/analogue, capacity: 2-5 lit. |
| 15. | Vortex mixer Should have 100 to 3200 rpm speed, to be supplied with cup attachment, one hand attachment, one hand insert and micro tube insert, manual and touch mode operation |
| 16. | Tissue culture castor racks Having 5 Shelves,lightening facility in 4 shelves, Frame made up of 25x25 mm Mild steel power coated. Shelves made up of glass/ polymer sheet with size of 50-55 x 20-25 inches Shelf to shelf distance 15-16 inches ", fitted with fluorescent tubes electronic chokes, fitted with on / off switches (individual for each tube) Light intensity 1.5-3 K lux at 5-6 cm above shelf surface and 8-10 K lux at 15-17 cm above shelf level, Electronic blast Mobile rack With 4 castor wheels Input 200 -220 V AC single phase |
| 17. | Laminar Flow bench (Horizontal) Double filtration air pre-filters retaining 75% particulates & biological contaminants large tha 0.2 to 0.3 microns. Made of 18mm water proof duro board all exterior with thick mica sheet and Stainless Steel of table top. Working area (4'x2'x2), HEPA filter (4'x2'x6'), No. of pre filters 2, , Built in UV tubes, Motor blower, Static pressure manometer, Castor wheel, Transparent front 5 mm acrylic door, side panels with transparent glass or Perspex sheet. |
| 18. | Tissue culture trolley for the stands Working Shelves two Made up of stainless Steel |
| 19. | Autoclave Vertical Capacity (20-25 ltr) Double walled, Inner chamber, Boiler, and outer chamber made of stainless steel Size dia x Depth (250 x 450 mm) Electronic load (1.5 -2 KW) Fitted with pressure gauge |
| 20. | Digital Electronic balance Calibration: Built-in with automatic internal calibration adjustment for ambient temperature Capacity: 220g, Readability:0.1mg, Repeatability: ±0.1mg Linearity: ± 0.2mg, RS232 output |
| 21. | Air conditioners with stabilizers for tissue culture labs Split type, Capacity: 2 tons each with suitable copper winded transformers, copper ducts, insulations. |
| 22. | Work stations |

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| | <p>Software Compatibility: Windows® XP and Vista™ (32 bit)</p> <p>Note: The system should come with branded desktop computer with the following specifications: core 2 duo, 6GB RAM, 500 GB HDD, DVD Writer , with 17" TFT Monitor, Windows XP, laser jet printer , UPS with 1 hr. backup</p> |
| 23. | <p>Rotary vacuum Evaporator(digital)</p> <p>Heating bath with adjustable safety circuit with pivoting safety hood</p> <p>Motorized lift with safety stop function</p> <p>Speed range:20-270rpm, digital speed display</p> <p>Timer function for time lapse control</p> <p>Water oil heating bath with integrated carry handles</p> <p>Cooling space 1200 cm²</p> <p>Double safety radial locking arrangement. Push-oo mechanism to loosen tightly fitting pistons.</p> <p>Capacity : 1000mL</p> <p>Vacuum Pump:</p> <p>With heavy duty electric motor</p> <p>Air displacement 50 -100 lt/ min</p> <p>Beltless motor</p> <p>Motor power 0.5 HP</p> <p>Vacuum < 0.001 mbar</p> |
| 24. | <p>Liquid Nitrogen Can</p> <p>25 lit capacity</p> <p>Sealed vacuum space contain inner & outer shells, outer shell with neck 1D-6.4 cm</p> <p>Static holding capacity - 152 days.</p> <p>Durable light weight</p> <p>4 lit capacity</p> <p>Transportable flask made of galvanized steel plate with enamel finish sealable lid with locks.</p> |
| 25. | <p>Horizontal Electrophoresis unit with suitable basic power supply (imported)</p> <p>Gel Electrophoresis Unit:</p> <p>Gel/tray size: 7 x 10 cm,</p> <p>Gel Tray:UV transparent with integrated fluorescent ruler</p> <p>Comb: (1) 8 wells of fixed height with minimum thickness of 0.75mm, width of 5.5mm, length of teeth 11mm with sample loading capacity of 20 microlitre per well. (2) 15 wells of fixed height with a minimum thickness of 0.75mm, width of 3.0mm, length of teeth 10mm with sample loading capacity of 11.25 microlitre per well</p> <p>Electrodes: should be fixed to the lid and colour coded at the base.</p> <p>Gel caster: should have movable wall with cam lever to accommodate gels of different sizes</p> <p>Electrode assembly: Replaceable electrode cassette/assembly</p> <p>Power supply specification:</p> <p>Volts output: 10-300 volt, Current output: 4-300mA</p> <p>Power output: Max75 W, Timer: 1-999mins</p> <p>With pause/resume function, LED Display, Automatic recovery after power failure, Stackable</p> <p>No. of output ports: 4 sets in parallel</p> <p>Safety: sudden load change detection, short-circuit detection, over voltage protection</p> |
| 26. | <p>Horizontal Gel Electrophoresis unit</p> <p>Gel electrophoresis Unit:</p> <p>Gel/tray size: 15 x 10 cm</p> <p>Comb: (1) 15 wells of fixed height with a minimum thickness of 0.75mm, width of 6.0 mm, length of teeth 15mm with sample loading capacity of 20 microlitre per well (2) 30 wells of fixed height with a minimum thickness of 1.5mm, width of 2.7mm, length of teeth 14mm with sample loading capacity of 20 microlitre per well</p> |

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| | <p>Gel tray: UV transparent with integrated fluorescent ruler</p> <p>Electrodes: should be fixed to the lid and colour coded at the base.</p> <p>Gel caster: should have movable wall with cam lever to accommodate gels of different sizes</p> <p>Electrode assembly: Replaceable electrode cassette/assembly</p> |
| 27. | <p>15 KVA online UPS with servo stabilizer</p> <p>15 KVA online UPS with 4-6 hrs of backup having acid batteries; should also include compatible servo stabilizer (25KVA);</p> <p>Note: The installation charges should be included in the quotation</p> |
| 28. | <p>UV-vis Spectrophotometer (pedestal sample loading)</p> <p>Sample loading: Pedestal</p> <p>Minimum Sample Size: 0.5 μl</p> <p>Sample Number: 1</p> <p>Path Length: 1 mm (auto-ranging to 0.05mm)</p> <p>Light Source: Xenon flash lamp</p> <p>Detector: 2048-element linear silicon CCD array</p> <p>Wavelength Range: 190 - 840 nm</p> <p>Wavelength Accuracy: 1 nm</p> <p>Spectral Resolution: <1.8 nm (FWHM at Hg 253.7 nm)</p> <p>Absorbance Precision: 0.002 (1 mm path)</p> <p>Absorbance Accuracy: 2% (at 0.76 at 257nm)</p> <p>Absorbance Range: 0.02 - 300 (10 mm equivalent)</p> <p>Detection Limit: 2 ng/μl (dsDNA)</p> <p>Max. Concentration: 15,000 ng/μl(dsDNA)</p> <p>Measurement Time: < 5 seconds</p> <p>Sample Pedestal Material of Construction: 303 stainless steel and quartz fiber</p> <p>Software Compatibility: Windows® XP and Vista™ (32 bit)</p> <p>Note: The system should come with branded desktop computer with the following specifications: 2GB RAM, 500 GB HDD, DVD Writer , with 17" TFT Monitor, Windows XP Pro</p> |
| 29. | <p>Incubator Shaker</p> <p>Temp. Range: 100C to 600C</p> <p>Speed: 20 to 350 rpm</p> <p>Display: Digital</p> <p>Flask Sizes: 50-100ul= 30 200-300ul=16 500-1000ul=12</p> |
| 30. | <p>Deep Freezer (-80 °C)</p> <p>Upright model Capacity: about 400-550 litres</p> <p>Temperature range: -50° C to -85° C</p> <p>With two independent compressors,</p> <p>Good quality VIP insulation on all walls, central LCD display</p> <p>Provision of maintenance of temperature of - 65° C for indefinite time in case one compressor fails with minimum 3 stainless steel shelves</p> <p>To be supplied with all essential accessories like voltage stabilizer, additional racks</p> |
| 31. | <p>Lyophilizer</p> <p>lit freeze dry nylon</p> <p>Capacity to remove 2 lit. of water in 24 hr. System with alarms & programmed protocols with ability to cool the collection chamber to 50 0 C.</p> <p>Chambers with PTFE coating for corrosive samples. Provision for correctively upto samples. Glass</p> |

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| | vessels: borosilicate |
| 32. | <p>Gradient Thermal Cycler /PCR Block : Universal Sample capacity : 96x0.2 ml or 77x 0.5 ml or 1x 96 well PCR plate Temperature capacity : 4-990C Accuracy : ± 0.2 0C Block ramp speed : 30 C/s (heat : 20C/s (cooling) Auto restart after power failure Price should include onsite warranty for 3 years</p> |
| 33. | <p>Combine Harvesting Machine Combine Harvester Machine</p> <p>Designed especially to suit the field conditions of small ladhholdings .Multicrop harvesting ability to harvest crops like paddy wheat ,soybean,pulses ,mustard and gram. With its ease of operation in dry and semi wet fields.</p> <p>Specifications:- Engine:- The fuel efficient 60-65 hp @ 2300-2500 rpm,4 stroke ,4 cylinder water cooled engine with fuel gauge ,engine temperature gauge ,oil pressure guage etc.</p> <p>Cutter bar:- The cutting width of 2.5-3.0 met ideal for big and small fields.</p> <p>Multicrop Threshing mechanism: Equipped with revolutionary Tangential Axil Flow (TAF) threshing and separation mechanism. Capability of having grain quality with minimum losses. Having excellent threshing efficiency and negligible grain breakage.</p> <p>Other:- Wheel Base : 3170 mm Wheel Track (Front) 2190 mm Wheel Track (Rear) 1400 mm Length of Machine 6500-7500mm (with crop dividers) Width of machine 3000-3500 mm Height : 3500-4000 mm Weight : 4500-5000 Kg(grain tank empty) Ground Clearance : 300-400 mm Power Steering Grain tank Capacity : 1300-1700 ltrs.</p> |
| 34. | <p>Trinocular Microscope B Eyepiece : Focusable 10x/22mm B Objective : 4x, 10x, 40x (spring loaded), 100x (spring loaded, oil) B Universal input 100V - 240V AC, 50/60 Hz. Built in voltage stabilizer.</p> |
| 35. | <p>Poly House</p> <p>Area : 12' X 8' = 96 feet² with two separate chamber of 6 X 8 feet each Height : 8 feet:10 (Side:centre) Structure : Made of ISI marked galvanized square pipe of 47mm x 47mm, 38mm x 38mm, 32mm x 32mm complete as per requirements. Brick work upto 5 feet from outside (2feet 6 inches plinth level/floor level and 2feet 6 inches from inner floor level). Covering : With UV stabilized polycarbonate sheets with 6mm thick to be fixed on top & on all side above brick work. Entry area : Two Separate for each chamber with two doors each (in opposite direction) fitted</p> |

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| | <p>& gate with door closers. Chamber : 6 X 8 feet</p> <p>Water supply : By GI pipe, one connection in each chamber with elbow tape and one steel wash basin with drainage system Fan : One nos. 24" exhaust fan in each chamber Electric Fitting : With ISI mark copper wire & fitting complete with 2 tubes, 15 amp. power points Cooler : 2 (one in each chamber) Foundation : Grouting of side pole in cement concrete 1:2:4 below GL Slab : Each chamber has three side concrete working table at least 3 inches thick with glazed tiles. Flooring : Concert flooring covered with polished surface.</p> |
| 36. | <p>Plot Thresher Single Plot Thresher having Cylinder type 10-13" x 30-35", both side cylinder and upper cover with 1" cross flat, Peg chisel, Fitted with air cold Engine 5 HP to 6 HP heavy-duty. Above thresher and engine fitted on angle iron 50 x 50 x 6 mm. The unit should be mounted on four nos rubber tyre No. 619 and 4.5 mm sq axle.</p> |
| 37. | <p>Glasshouse Area 12 X 8 = 96 feet² with two separate chamber of 6 X 8 feet each Height : 8 feet Structure : Made of ISI marked galvanized square pipe of 47mm x 47mm, 38mm x 38mm. 32mm x 32mm complete as per requirements. Covering : With UV stabilized polycarbonate sheets with 6mm thick to be fixed on top & all side above brick work. Entry gate : Two (in opposite direction) Chamber : 6 X 8 feet Water storage PVC tank 500 It Pump Mono block of V2 HP Water supply : By GI pipe Fan : One nos. exhaust fan in each chamber Size : 36" a weep Speed : Slow 500 RPM Electric Fitting : With ISI mark copper wire & fitting complete with light/ power points of pumps, fan and other miscellaneous use as per requirement Side exhaust Fan : 2 (one in each chamber) Cooler : 2 (one in each chamber) Foundation : Grouting of side pole in cement concrete 1:2:4 below GL Slab : Each chamber has two side slab at 0.75 m height Plumbing : One connection in each chamber with elbo tape and one steel wash basin with drainage system Flooring : Concert flooring covered with glazed floor tiles</p> |
| 38. | <p>Trinocular Microscope B Eyepiece : Focusable 10x/22mm B Objective : 4x, 10x, 40x (spring loaded), 100x (spring loaded, oil) B Universal input 100V - 240V AC, 50/60 Hz. Built in voltage stabilizer.</p> |
| 39. | <p>15 KVA online UPS with servo stabilizer 15 KVA online UPS with 4-6 hrs of backup having acid batteries; should also include compatible servo stabilizer (25KVA);</p> |

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| | <p>burner for Nitrous Oxide- Acetylene (N₂O- C₂H₂), Auto burner alignment</p> <p>FUEL-Acetylene (C₂H₂)</p> <p>OXIDANT- Air/ NitrousOxide(N₂O)</p> <p>FLOW CONTROL- Optional: Integral auto gas control system with LCD display nd panel flow meters, Automatic flame change over</p> <p>NEBULIZER- Pneumatic with 90% Platinum and 10% iridium alloy capillary</p> <p>Smple feed rate- 3 to 8 ml/min (adjustable)</p> <p>DATA PROCESSING-</p> <p>Microprocessor Mode- 1.Absorbance,2.Emission,3.Quantitative Curve fit (Quadratic least squares), 4. Concentration of Standard and smples graph on LCD</p> <p>PC MODE</p> <p>Operating Software, Windows XP, 1. Absorbance, 2. Concentraion (standard addition and Calibration), 3.Curve Fit Quadratic and least sqare),4 Energy profile, 5. Emission</p> <p>MONOCHROMTOR</p> <p>Czerney Turner 1/3m with 1800 lines/nm holographic diffrction grting and hard coated optics wuth full temperature compensation. Reciprocal , linear, dispersion is 1.5 to.2.0 nm/mm</p> <p>DETECTOR</p> <p>Wide range Photo Multiplier Tube (PMT)</p> <p>READ OUT</p> <p>4*20LCD dot matrix alpha numeric back light display</p> <p>POWER SUPPLY</p> <p>HC Lamp-0 to 30 mA modulted</p> <p>D2 Lamp-15 to 300 mA modulated</p> <p>PMT_-200 to -1000V</p> <p>POWER REQUIREMENT- 230v +_ 10% 50Hz, Max.200VA</p> <p>Temperature Control Unit</p> |
| 47. | <p>Saturated Soil Permeability System</p> <p>Complete,33”Lx26”Wx52” H(84x62x130cm) Weight 77 Lbs. (35kg). 230V AC – 50 Hz.</p> |
| 48. | <p>Semi automatic protein analyzer</p> <p>Result compatible with computer, automatic distillation and titration unit, complete set including water tab pump</p> |
| 49. | <p>Chlorophyll meter</p> <p>Digital display screen</p> |
| 50. | <p>Electronic balanceRange 100 kg</p> |
| 51. | <p>Hot air oven</p> |
| 52. | <p>Seed cabinet</p> <p>Multiple cabinet (40 nos selves each capacity 15-20 kg seeds)</p> |
| 53. | <p>Power Rotary Tiller</p> <p>Compatible for inter-culturing in maize field</p> |