

website: <http://HortiKashmir.gov.in>

e-Nit No-15 of 2017-18 e-Tendering Dated:-07-09-2017

Note - All bidding process will be done on [www.jktenders.gov.in](http://www.jktenders.gov.in)

**Notice inviting e-Tender**

Department of Horticulture, Government of Jammu and Kashmir, invites electronic bids in two bid system, for establishment of Center of Excellence on Horticulture under the scheme (MIDH) at Udheywalla, Jammu on Indo-Dutch Technology. The detailed terms and conditions and technical offer for bidders shall be available on the website [jktenders.gov.in](http://jktenders.gov.in).

**The details of tender document are as below:-**

- Publish Date 08-09-2017.
- Document Download/Sale start date 08-09-2017.
- Clarification start date 08-09-2017 after 2.00 PM.
- Bid submission start date 09-09-2017.
- Document end date/Sale end date 25-09-2017
- Clarification end date 26-09-2017.
- Bid submission end date 28-09-2017.
- Bid opening date 03-10-2017
- Post Bid Technical Presentation 05-10-2017.
- Tender fee (Non refundable) Rs 5000/- (five thousand only) in the form of demand draft in favour of Accounts Officer, Directorate of Horticulture Kashmir. In case of non-submission of tender fee, the tender is liable to be rejected.
- Earnest Money (refundable) Rs.150000/- (one lac fifty thousand only) in the form of CDR, in favour of Accounts Officer, Directorate of Horticulture Kashmir. In case of non submission of EMD, the bid will be rejected.

The tender document may be downloaded from the Govt e-procurement website [www.jktenders.gov.in](http://www.jktenders.gov.in) or obtained from Directorate of Horticulture, in both the cases tender fee is to be paid.

  
(Mathora Masoom)KAS  
DIRECTOR

No.DHK/Pur/2017/ 9470-80  
Dated:- 07/09/2017.

Copy to the:-

1. Horticulture Commissioner, Govt. of India Deptt. of Agriculture and Co-operation.
2. Secretary to Government Horticulture Department J&K Govt. Srinagar, for favour of information.
3. Director Information, J&K Government Srinagar for information. The abbreviated tender notice may be got published on National Level and in 2-3 local newspapers in Srinagar and Jammu.
4. Director Research SKUAST (K)/SKUAST (J) for information.
5. Director Finance, Horticulture Department, Civil Secretariat, Srinagar.
6. Director Horticulture, Jammu for information.
7. Director, Industries & Commerce J&K, for information.
8. Secretary to Vice Chancellor SKUAST (K) for information of Hon'ble Vice Chancellor SKUAST (K) Shalimar.
9. Private Secretary to Hon'ble Minister for Horticulture for information to the Hon'ble Minister.
10. Horticulture Information and Publication Officer, Srinagar for follow-up action.

# Tender Document

**Subject:- Establishment of center of Excellence at Udheywalla, Jammu**

## Eligibility Criteria:-

*The pre qualifications of bidders are as under:-*

- I. Bidder should be a reputed organization having experience of establishing projects like Centre of Excellence related to Horticulture, preferably in subtropical climate
- II. Annual turnover of the firm should not be less than 2000.00 lacs.
- III. The bidder should attach copy of work order confirming its execution of similar nature of work for not less than Rs.3 crore.
- IV. The bidder shall not have abandoned any work of Government of India /any State government or any organization during last three years.
- V. The bidders should have a valid import license and should submit self attested copy of the same.
- VI. In respect of Indian Agent/Distributor of a foreign manufacturer, registration with DGS &D of that agent/distributor is compulsory as per compulsory enlistment scheme of department of expenditure, Ministry of Finance, Government of India.
- VII. The firm has to apply directly and execute the work by itself without subletting the work for execution.
- VIII. Before submission of the bid, the bidders must verify the eligibility criteria and ensure fulfillment of all the terms and conditions. In absence of scanned copies of documents/certificates under eligibility criteria above, the bid is liable to be rejected.

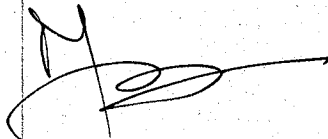
## **A. Bid Submission:-**

Bids must be uploaded on e-tender site [jktenders.gov.in](http://jktenders.gov.in) along with scanned copies of other related documents.

The bid must be uploaded in two parts as under:-

### **PART I (Technical Bid) shall contain:-**

- i. Tender fee of Rs. 5000(five thousand only) in the form of demand draft and refundable EMD of Rs. 150000/- in form of CDR favouring Accounts Officer, Directorate of Horticulture Kashmir. The scanned copy of DD & CDR should be uploaded with the technical bid .In case of Non submission of tender fee and EMD the tender will be considered invalid and is liable to be rejected. The original DD and CDR in sealed cover super scribing tender no. with work detail, date of opening, name and address of bidder, must reach before due date and time of bid opening to Directorate of Horticulture, Rajbagh Kashmir. The name of the bidder and tender number should be clearly written on the back of CDR/DD to avoid mixing /loss of instrument.
- ii. Technical bid with full details for technical assessment of the proposal.



- iii. All the supporting documents as given in Eligibility criteria.
- iv. The compliance statement by the bidder to the technical specifications (as per annexure A) along with technical documents etc. Bids without proper compliance statement will be rejected.
- v. Tender acceptance letter (annexure-C) in token of acceptance to terms and conditions laid down in tender document.

**Important note:-**

- a. A hard copy of technical bid in sealed cover shall be submitted in the Directorate of Horticulture before bid opening date.
- b. If the bid is incomplete and/or non-responsive, it is liable to be rejected during technical evaluation, so bidders are requested to ensure that they provide all necessary details in submitted bids.
- c. If any price details are found in technical bid, the offer will be summarily rejected.

**Part II (Price Bid)/financial bid.**

- i. The price bid (BOQ) in excel sheet format shall be filled online only. Price bid should not be manually submitted in a sealed envelope.
- ii. The price part shall contain only schedule of rates duly filled in. No stipulation, deviations, terms and conditions, presumptions etc. is permissible in price part of the bid. Directorate shall not take any cognizance of any such conditions and may at its discretion reject such price bids.
- iii. Prices should be given in INR in figures only.
- iv. Bidders are advised to fill the BOQ file as per following instructions.
  - a. Bidder to note that there are grey cells in BOQ file, which should not be modified by the bidder. Bidders are advised to fill the white cells meant for the rates, which are to be entered by the bidders.
  - b. Bidders are strictly advised, not to alter or change the BOQ format /contents. Bidders are also advised not to paste any image file on BOQ.
  - c. The bidder shall submit the tender online on e-tendering site [jktenders.gov.in](http://jktenders.gov.in) on or before the due date and time of bid submission. Tender submitted by any other procedure will not be accepted.
  - d. Price offered by the bidder shall not appear anywhere in any manner in the technical bid.
  - e.

**Opening of Technical and Price Bid:-**

Only the technical bids shall be opened on 03-10-2017. Price bids of short listed/technically qualified bids would be opened on a later date & time under intimation to all successful bidders. The bids complete in all respects should be uploaded at the site [jktenders.gov.in](http://jktenders.gov.in), by due date and time.



## Instructions for the Bidder

1. Earnest money is liable to be forfeited and bid liable to be rejected, if the bidder withdraws amends, impairs or derogates from the tender in any respect.
2. Earnest money of all the unsuccessful bidders shall be returned as early as possible but not before 30 days from the date of purchase order. No interest shall be paid by the Directorate on EMD. EMD of successful bidder be returned after successful completion of entire work.
3. The successful Bidder has to provide Bank Guarantee amounting to 10% of the Bid amount as performance security.
4. The rates should be quoted in INR in figures only. All the quoted prices shall be firm /fixed and shall not be subject to escalation of any description.
5. Directorate reserves the right to accept/reject offers or cancel the whole tendering proceedings without assigning any reason whatsoever.
6. Any attempt of direct or indirect negotiations on part of the bidder with the authority to whom the bid has been submitted or the authority who is financially competent to accept/reject the same after the tender has been submitted or any endeavor to secure any interest for an actual or prospective bidder or to influence by any means the acceptance of particular tender will render, tender liable to be rejected.
7. Unsatisfactory performance:- the parties herein agree that Directorate shall have the sole and discretionary right to assess the performance(s) of bidders components either primary or final and Directorate without any liability whatsoever, either direct or indirect, may reject the system(s) components provided by the bidder, in part or in its entirety, without any explanation to the bidder.
8. If the components provided by the bidder are found unsatisfactory, either in pre or post test period, the bidder be bound by the decision of Directorate, without any demur in such an eventuality.
9. Disclaimer: - This tender is not an offer by the Directorate but an invitation for bidder's response. No contractual obligations whatsoever shall arise from the tender process.
10. The successful bidder has to sign a statement of agreement (contract) wherein the terms and conditions shall be binding on the successful bidder.
11. If at any point of time issue of force majeure arises, the decision of the Secretary to Government Horticulture Department shall be final. The bidder would be required to give a certificate as below:-
12. Declaration:-  
"I/We understand that the quantity provided in the BOQ is subject to change. I/We agree that in case of any change in the quantities required, I/We agree to adhere to the price given in the financial bid even if quantities undergo a change.

**Sign/Stamp of bidder.**

## ANNEXURE-A

### Activities that will be undertaken by the Agency/Firm:

**A) Establishment of the following infrastructures with successful installations under the prevalent climatic conditions on site.**

	<b>Intervention Structure</b>	<b>Component</b>	<b>Quantity</b>
1.	Uprooting of existing plantation from project site		10 ha
2.	Land Development with laser leveling, Preparation of blocks etc for plantation of Fruit plants, roads & paths & development of irrigation facilities		10 ha
3.	Laying out an orchard of sub-tropical fruits like guava, mango & citrus in a high density/moderate density format(Approx.6.0 ha aprox. for medium density & 6000sq m high density)		6.5 ha
4.	Hi-Tech Green House with boom irrigation system (for Nursery raising) various varieties/cultivars of Fruits	1000 Sq mt.	1no
5.	Hi-tech greenhouse with fan and pad system	2x2000 sqm	2no
6.	Screen house covered with 40 mesh.	2x1000 sqm	2no
7.	Insect proof house for citrus - virus free planting material production.	2x1000 sqm	2no
8.	Naturally ventilated poly net house	2x2500 sqm	2no
9.	Pro Trays/ seedling trays/Plastic Bags/ Benches	As per requirement	
10.	Potting Mixture (Cocoa-peat, vermiculite, perlite)	As per requirement	
11.	Fertiliser, chemical, insecticide, pesticide etc	As per requirement	
12.	Post Harvest management – grading, sorting, packaging room with washing facilities etc		
13.	DG set-Electric transformer	3 phase-100KV	1no
14.	<b>Automatic weather station</b> Display : 16 character x 2 lines LCD, Measured Parameter- date, time, air temperature, Max Air Temperature, Min Air Temperature, RH, Max RH, Min RH, Wind speed, wind direction rainfall, dew points. Air Temperature & Relative Humidity sensor: Type : Digital. Sensor; Temperature range: -40 to 123deg. C, Accuracy :± 0.5 deg C @ 5 to 40 deg. C. Resolution : 0.01 deg. C Typical : RH range : 0 to 100%. Resolution : 0.5% RH Typical :Accuracy :± 2% @ 20 to 80%.Long term Stability: Type <RH / Year. Repeatability :±0.1%; output : Digital (2 wire communication) Wind speed sensor : Sensor : 3 cup anemometer. Sensing : Opto conpler : input : 5v DC, Range: 0 to 67 m/s; Accuracy : Bette than 0.5 M/s, Wind direction sensor; sensing: smart position pot. Range : 0 to 360 deg; Resolution : 1 deg; input : 0 to 5v,Accuracy :± 3 deg; current consumption: 0.5 amp @ 5VDC.	1no	1no

15.	IT lab (02 No. Computers with accessories, 02 Nos. of laptops ,printer, double battery UPS, Photocopier)		
16.	Energy backup with online UPS	20KV	1no
17.	Canopy Management & micro-irrigation with fertigation for covering major Crops (Automation)		6.5 hectares
18.	Import of Planting material and its plantation		
19.	<p><b>Machinery/Equipment</b></p> <ul style="list-style-type: none"> <li>i. Orchard tractor (1 No. &gt; 35 HP)</li> <li>ii. Weeder(1No. 8 BHP)</li> <li>iii. Tiller(1No. &gt; 8 BHP)</li> <li>iv. Tractor mounted spray gun. (1No.)</li> <li>v. Power sprayers -2 No.),</li> <li>vi. Mist blower-2 Nos.).</li> <li>vii. Knapsack sprayer -3 Nos.).</li> <li>viii. Plant canopy Analyzer(1 No.)</li> </ul> <p><b>Specifications:</b> Sensor Inputs: Two 6-pin connectors for LAI-2250 Optical Sensors. 2 BNC connectors for LI-COR Light Sensors. Data Storage Capacity: 128 MB of FAT16 memory. Keypad: 22 button tactile response keypad. Display: 128x64 graphics display. Communications: USB (as mass storage device).Global Positioning System (GPS RADIONOVA® RF Antenna Module): Horizontal position accuracy: 2.5 m CEP (50% Circular Error Probability, Open-Sky, 24hr Static, good view of the sky)Maximum position update rate: 1 Hz.GPS receiver sensitivity, autonomous acquisition: -148dBm.WAAS enabled receiver Time to first fix (TTFF), hot start: 1 second. TTFF, warm start: 6s (typical).TTFF, cold start (with good view of the sky): 37 seconds at 90% probability. Clock: Year, Month, Day, Hour, Minute. Accuracy of ±3 minutes per month. Power Requirements: 4 "AA" alkaline, NIMH, lithium batteries. Battery Life:90 hours based on 4 "AA" alkaline batteries without optical sensor attached and without GPS enabled.60 hours based on 4 "AA" alkaline batteries with optical sensor attached and without GPS enabled.40 hours based on 4 "AA" alkaline batteries without optical sensor attached and with GPS enabled. Low Battery Warning: Display indicates when battery power is &lt;15%.Size: 20.9 x 9.8 x 3.5 cm (8.2" x 3.9" x 1.4").</p> <ul style="list-style-type: none"> <li>ix. Automatic budding/grafting machine(1no)</li> <li>x. Pneumatic Scissors -6nos.</li> <li>xi. Deep Freezer – 300lit. (1no)</li> <li>xii. Walk in cold room : 10ftx10ftx8ft(1no)</li> <li>xiii. Pneumatic Pruning Installation(1no)</li> </ul>	As per requirement	

20.	Water tank with cement, Brick pitching	4lakh liter Capacity	
21.	Training Hall : i. Furniture & Fixtures for 100 seater/furnishings/false ceiling/Air conditioners ( 1.5 ton capacity each) as per requirement for training hall, chairs& tables, Audio-Video system, LED display screen, LED Projector, Laptop etc.	1000 Sq.ft area	
22.	Fabrication/construction of display laboratory (approx. 950 to 1000 sq ft.) with the exhibits of various horticultural models of proven technologies for trainees(approx.100 Nos.)	AC fitted 4 Nos. @ 1.5 ton capacity , falls ceiling furniture/fixtures	
23.	Equipments/machinery for setting up of : i. Plant Health Clinic ii. Soil Tissue/Leaf Testing Laboratory iii. Virus Detection Laboratory iv. Quality Control Laboratory (Fruits)		

### **i. Plant Health Clinic**

a	<b>Centrifuge with refrigeration</b> Swing-bucket rotors and adapters accommodate tubes and bottles from 0.2 mL to 1,000 mL, Temperature range from -11 °C to 40 °C, automatic precooling based on pre-programmable time and date	1no	
b	<b>Nano-Drop</b> Combining the patented sample retention system with cuvette capability accommodates low and high concentrations , Pedestal measurements that require only 0.5 – 2 µL of your sample and do not require sample dilution, even for highly concentrated samples.	1no	
c	<b>Thermocycler</b> Ability to run two totally independent protocols at the same time, Universal block for strips, 0.1 mL, 0.2 mL and 0.5 mL PCR tubes with gradient temperature range 30–99 °C.	1no	
d	<b>Gel documentation system</b> Trans-UV, Trans-White UV tray: 280-400 max 300 nm Blue tray: 430-460, max 440 nm White tray: visible spectra with software's	1no	

## ii. Soil/plant tissue/leaf analysis laboratory

a	<b>Digital pH meter</b> Pen type pH meter uses combined pH electrode of high sensitivity, fast response, and good repetition as probe. Measuring range 0.00~14.00PH, Accuracy $\pm 0.1$ PH, Resolution 0.01PH	1no	
b	<b>Electrical conductivity meter</b> (Microprocessor / Microcontroller Based) <ul style="list-style-type: none"> <li>• Range : 0 <math>\mu</math>S – 200 mS</li> <li>• Resolution : 0.1<math>\mu</math>S</li> <li>• Temperature : 0<sup>0</sup> C – 100<sup>0</sup> C (Manual)</li> <li>• Readout : 3 digits LED</li> </ul>	1no	
c	<b>Mechanical Shaker</b> Tilt angle : 9 degree; Maximum Load Capacity with platform : 10kg; Speed Range : 10-70rpm; Time setting range : 1~1200min.; Dimension (mm) : 355 (W) x 420 (L) x 180(H); Weight : 10kg; Power supply : 100~250 V AC, 50/60 Hz, 50 Watt	1no	
d	<b>Hot Plate</b> Hot Plate, Plate Length 7-1/2 In., Plate Width 7-1/2 In., Plate Material Ceramic, Overall Width 8 In., Overall Length 9 In., Overall Height 4-1/2 In., Temp. Range 50 to 380 Degrees C, Includes Instruction Manual, Voltage Rating 115V.	1no	
e	<b>Willy grinding Mill</b> Electrically operated to work on 220 Volts A.C Recommended for grinding of dry plant samples.	1no	
f	<b>Soil Sieve set-</b> (8 sieves - brass)	1no	
g	<b>Flame Photometer (Microprocessor based)</b> <ul style="list-style-type: none"> <li>• Microprocessor based flame photometer with printer interface, air compressor with automatic ignition</li> <li>• Flame system- LPG or oil free dry air, Detector - Photodiodes</li> <li>• Readout – 2 lines, 24 characters, dot-matrix backlight LCD module</li> <li>• Hard copy - Parallel centronic printer</li> <li>• Power requirement: 110V/220V <math>\pm</math> 50Hz/60Hz 10 max. 35 VA</li> <li>• Na, K, Li, Ca filter (each one) Air compressor</li> </ul>	1no	
h	<b>Atomic Absorption Spectrometer</b> Analyst 700, Littrow design with motorized drive for automatic wavelength selection. Low-noise CMOS charge, 8-Lamp holder, computer control lamp selection. Gas control: Fully computer-controlled with oxidant and fuel monitoring. Acetylene flow automatic adjusted. Complete PC control using Winlab32 Software. Dimensions: 110cm wide x 65 cm high x 70 cm deep, Dimensions weight 147 Kg. Ambient Temperature: +15oC to +35 oC, RH: 20% to 80%.	1no	



i	<p><b>Uv Double beam Spectrophotometer</b></p> <ul style="list-style-type: none"> <li>• wavelength range: 190-1100nm</li> <li>• True double beam &amp; of a double-beam, 50/50 beam-splitter design.</li> <li>• PC Controlled</li> <li>• Variable bandwidth from 0.6 nm – 4 nm or better with resolution 0.6 nm or better.</li> <li>• Optics: Double Beam, Sealed, Quartz coated mirrors.</li> <li>• Voltage- 220-230v</li> </ul>	1no	
j	<p><b>Automatic Nitrogen Estimation System</b></p> <ul style="list-style-type: none"> <li>• Automatic Macro Block PC Compatible Digestion System with Auto-lift Facility</li> <li>• Four Stage Fully Automatic 2.Microprocessor based acid neutralization scrubber</li> <li>• Automatic Distillation System</li> <li>• Fully Automatic Titration System</li> </ul>	1no	
k	<p><b>Soil Auger post hole</b></p> <p>Very low weight, easy to operate, Ergonomically designed handles ,Enclosed, vibration damped handle frame, very low vibrations at handles ,Sampling up-to depth of 1m</p>	1no	
l	<p><b>Core Sampler</b></p> <p>carbon steel or stainless steel, and are sized by the outside diameter of the liner. Complete Soil Core Samplers Includes: Slide hammer, core cup and cap, 2 plastic end caps, and plastic liner</p>	1no	
m	<p><b>Soil Auger screw type</b></p> <p>Very low weight, easy to operate, Ergonomically designed handles, Enclosed, vibration damped handle frame, very low vibrations at handles Sampling up-to depth of 1m</p>	1no	
n	<p><b>Water Bath</b></p> <p>Electrically heated, Thermostatically controlled, Temperature control within +. 2<sup>o</sup> C. Double wall chambers made of stainless steel Nickel coated cover has holes of 3” diameter</p>	1no	
o	<p><b>Analytical Balance (4 digit)</b></p> <p>Sensitivity 0.1mg Capacity 300 gm Weighing Pan Dia- 80-150mm Operating Temp.-5-40° C Power Supply-220 Volts, Monolithic Block Approved calibration certificates. 10.</p>	1no	
p	<p><b>Hot air Oven</b></p> <p>Double walled oven with inside made of stainless steel. Outside is of mild steel finished in white enamel. Gap between inside &amp; outside should be 75 mm .Automatic timer and air circulating fan should be fitted. It should be suitable for operation on 220/ 230 V, 50Hz. Single phase supply size of oven- with Digital Display and with ¾ or more chambers. (300 x 300 x 300 mm)</p>	1no	

q	<b>Portable Kit (PUSA STFR Meter)</b> 1. Input Voltage-85V to 265V AC 2. Load- 27VA 3. Battery Backup 4. Charge from solar panel also(10 W Solar Panel) 5. Wide Blue LCD Display 6. Micro controller based technology 7. Tackle back switches for easy operation 8. Deep Discharge / Over charge protection 9. Port for Computer Connectivity	1no	
r	<b>Air conditioner</b> – Split ,2.0 Ton Capacity with stabilizer		

### iii. Virus Detection Laboratory

a	<b>Pegstar96X universal</b> Universal block for 96 x 0.2 ml tubes, 96 well PCR plates or 48 x 0.5 ml tubes with flat lid. Max. heating and cooling rate: 5 °C/s Block uniformity (72 °C): ± 0.20 °C Temperature range block: 4 °C - 105 °C Temperature range lid: 40 °C - 120 °C Standard lid with automatic height adjustment	1no	
b	<b>Elisa Microplate Reader</b> ELISA Reader & Washer Microplate able to read up to 96 wells, wavelength range 400-750 nm with absorbance range 0-3.0 abs, accuracy and linearity 1%, tungsten halogen lamp, fove filter capacity with interference of 405, 450, 490, & 630 on filter wheel, display 2x24 digit LCD, extensive on-board data analysis, curve fitting options as linear, cubic, quadratic, cubic spine, point to point assay & control validation, data transformation formulas, cut off & call criteria, memory, parallel centronics for printer, power supply 230 VAC.	1no	
c	<b>Gel electrophoresis system</b> GT base Molded clear plastic Gel casting gates Aluminum Safety lid Molded clear plastic Banana plug/electrode cassette Molded polycarbonate Banana plugs Gold-plated brass, 4.4 cm length Electrodes Platinum, 0.25 mm diameter Electrical cables Dual, 20 AWG, tinned copper wire cable Flame-retardant polyurethane insulation jacket Electrical leads Nickel silver Gel tray UV-transparent acrylic plastic (UVTP) Combs Molded plastic and machined acrylic Gel casting device Polycarbonate 0.64 cm silicon foam	1no	
d	<b>pH Meter</b> Pen type pH meter uses combined pH electrode of high sensitivity, fast response, and good repetition as probe. Measuring range 0.00~14.00PH Accuracy ±0.1PH Resolution 0.01PH	1no	

#### iv. Quality Control Laboratory

a	<p><b>Viscometer</b>            Range:10mPa.s~1x100000mPa.s            Rotor speed:6/12/30/60            Basic error:± 1% Newtonian liquids            Repeatability:± 5%            Temperature control:RT~100°C            Water temperature uniformity:≤ 0.1 ° C            circulating pump:6L/min            groove depth:180mm            Working tank capacity:240 mm</p>	1no	
b	<p><b>Hot plate</b>            Hot Plate, Plate Length 7-1/2 In., Plate Width 7-1/2 In., Plate Material Ceramic, Overall Width 8 In., Overall Length 9 In., Overall Height 4-1/2 In., Temp. Range 50 to 380 Degrees C, Includes Instruction Manual, Voltage Rating 115V.</p>	1no	
c	<p><b>Electronic balance</b>            Capacity (Max) 180 g            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>	1no	
d	<p><b>Texture analyzer</b>            Force Range <math>\hat{A}</math>±2500 N (562 lbf, 255 kgf); Force Resolution 0.015% of load cell - 15 gf (0.5 ozf) for a 1000 Newton load cell; Travel Range 300 mm (12 in); Position Resolution 32 cm (12.5 in.) of travel with 2.5 micron resolution; Speed Range 1 - 500 mm/min (0.04-20 in/min) ; Data Acquisition Rate 16000 readings/sec ; Data Display/Output Rate: Selectable from 1000, 500, 100, 50, 10 Hz</p>	1no	
e	<p><b>Amino acid analyser</b>            Column: 4.6 mm I.D. × 60 mm L. *1 ; Pump: Max. discharge pressure; 30 MPa (306 kgf/cm<sup>2</sup>)            Flow rate range; 0.005 to 0.999 mL/min; Autosampler: Sample vial capacity; 1,500 µL            No. of vials accommodated; 200 (200 when optional cooler installed) Sample injection volume; 1 to 100 µL;            Column oven: System; Peltier, Temperature setting range; 20 to 85°C (in 1 °C steps); Reaction unit: System;            Electronic heating(reaction column)Temperature setting; 50 to 140°C (in 1°C steps); Photometer: Spectrophotometer; Aplanatic concave diffraction grating, Wave length; 570 nm, 440 nm Analyzer; CPU: Windows®7 SP1 (32/64 bit); CRT: 43.2 cm color display;</p>	1no	

f	<p><b>Hunter lab equipment</b>  Measurement Principle: Tristimulus colorimeter ;  Observer Function: 2° standard observer ; Illuminant:  Illuminant C ; Geometry: 45° circumferential  illumination/0° viewing ;Sample Port Orientation: Up  for port-up model, down for port-down model; Sample  Measurement: Port Diameter: 9.5cm (3.75 inch);  Measured Diameter: 8.9cm (3.50 inch); Specular  Component: Excluded ;Photometric Range: 0 to 125%;  Light Source: Continuous tungsten-halogen lamp ;Lamp  Life: Approximately 1,000 hours ;Measurement Time:  &lt;1 second, Software: Color Scales: CIE L*a*b*, Hunter  Lab, CIE LCh, Rdab, CIE Yxy, CIE XYZ; Color  Difference Scales: XYZρYxy, ρRdab, ρLCh, ρLab,  ρL*a*b*, ρ; Display: 26.4cm (10.4 inch) color LCD  with touch screen ; Printer: Built-in 40-column thermal  dot matrix, Dimensions: Height: 71.1cm (28.0 inches);  Width: 40.6cm (16.0 inches); Depth:</p>	1no	
g	<p><b>BOD incubator</b>  Width x Dia x Height (455 x 410 x 610 mm) capacity 4  cubic ft. volume 112 ltrs. Micro-processor based digital  temperature- controller with an accuracy +- 0.5 °C  temperature range 5- 60 ° C interior illumination with  three nos florescent tube ( temperature 10- 50 ° C )  automatic cyclic timer, incubation Co<sub>2</sub> / AL mixture  arrangement, Co<sub>2</sub> cylinder, air compressor, shaking  machine inside the chamber, humidity control  arrangement 55 % to 95 % RH.</p>	1no	
h	<p><b>Deep freezer</b>  Double walled with inner chamber made with SS and  outer of thick PCRC, temp range from ambient to -700  C, hermetically sealed compressor, microprocessor  based temp indicator cum controller, vertical model with  access storage shelves having capacity 3.4 Cu ft, vol-95  litres</p>	1no	
i	<p><b>Hot air oven</b>  Double walled, inner chamber made of SS Sheet  adjustable SS perforated shelves, microprocessor based  digital temperature indicator cum controller from  ambient to 250 degree Celsius with air circulation fan  capacity 336 lit</p>	1no	
j	<p><b>Cabinet dryer</b>  Double walled mounted on sturdy angle iron  frame, Inner and Outer chamber made of MS  sheet, Outer must be finished with hammer tone  paint and inner painted with AL paint, Gap  between both the chamber filled with high  efficiency mineral wool, Hot air circulation in the  chamber through blowers, SS tubular air heater  fitted in the path, provision of brackets provided  at the different height for trays.  Controlled temperature ranging between 50-250  deg C.</p>	1no	

	<p>Size: W x H x D = 915 x 840 x 915mm.  Tray capacity = 24  Load = 6KW  Accessories: Air circulating fan, digital temperature indicator cum controller, timer 0-2hrs, Cyclic digital timer 0-24 hrs, alarm</p>		
k	<p><b>Moisture analyser</b>  Measuring method: Infrared heat drying mass measurement; Sample pan size: ø130 mm; Minimum display in weighing: 0.001g; Measurement range of moisture content: 0.01% to 100.00%; Maximum sample capacity: 120 g; Measurement mode: Automatic or Timed halting modes, Rapid, Slow and Step drying modes, Predictive Measuring mode; Drying heater: Mid-wave infrared quartz heater; Setting temperature range: 30°C to 180 °C (by 1°C increments); Dimensions &amp; weight: W220xD415xH190 (mm), 4.5 kg; Operational temperature and humidity range: 5 °C to 40°C, 85% RH maximum; Power requirements: 100 V to 127 V/220 V to 240 V AC, 640 W maximum; Standard accessories: Sample pan 2 pcs, sample pan stop, windbreak case, sample pan, handler 2 pcs, aluminum sheet 20 pcs, spoon, spatula</p>	1no	
l	<p><b>Muffel furnace</b>  Max. Temperature: 1800°C; Working Temperature: 1700°C; Heating Element: Molybdenum Silicide (MoSi<sub>2</sub>); Temperature Accuracy: +/- 1°C (+/- 1.8°F); Temperature Controller: PID controller; Display: LED / LCD Display; External Chamber Construction: MS w/ Powder Coating / 304 Grade Stainless Steel (Optional); Internal Chamber Construction: Ceramic Board &amp; Grooved Refractory Chamber; Insulation: Ceramic wool insulation; Alarm: Audible &amp; Visual type; Power Supply: 220 / 440 Volts; Certification: ISO, CE &amp; GMP ; Stabilizer: As standard; Accessories: Provision for Printer, Data logger, Safety switch on door, Temperature Chart Recorder, Inner Chamber sizes: Dimension: 18X 18 inches; Volume (Liter): 96</p>	1no	
m	<p><b>Digital pH Meter</b>  Measure range: 0.00pH-14.0 pH; Resolution: 0.01ph; Accuracy: +/-0.01ph; Power supply: 2*1.5V; Operating temperature: 0°C--80°C; Calibration: two points automatic calibration; Weight: 52g</p>	1no	

n	<p><b>Refractometer digital(1no) &amp; hand refractometer (3no)</b></p> <p>Refractometer Digital:          Sugar Content Range: 0 to 85% Brix; Sugar Content Resolution: 0.1% Brix; Sugar Content Accuracy (@25°C/77°F): ±0.2% Brix; Temperature Range: 0 to 80°C (32 to 176°F); Temperature Resolution: 0.1°C (0.1°F); Temperature Accuracy: ±0.3 °C (±0.5 °F); Temperature Compensation: automatic between 10 and 40°C (50 to 104°F); Measurement Time: approximately 1.5 seconds; Minimum Sample Volume: 100 µL (to cover prism totally); Light Source: yellow LED; Sample Cell: stainless steel ring and flint glass prism;; Enclosure Rating: IP65; Battery Type / Life: 9V / approximately 5000 readings; Dimensions / Weight: 192 x 102 x 67 mm (7.6 x 4.01 x 2.6") / 420 g (14.8 oz.);</p> <p>Hand Refractometer: Pocket sized for determination for soluble solid contents of fruit juices and various food stuffs. Should give clear demarcation of bright and dark field (a)0-35° Brix (b) 35° 70° Brix</p>	1no & 3no	
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***B) Three years hand holding support for the management of the orchards and other installation in the project structures.***

## Annexure B

### General Particulars of the Bidders

S.No	Particulars	To be filled by the bidder
01	Name of Bidding Agency	
02	Date of establishment of agency (attach copy of registration certificate)	
03	Address of Agency/Office ,telephone No. e-mail ID, Mobile No, and name of the contact person	
04	PAN/TAN Number (copy to be enclosed)	
05	Details of GST in (copy enclosed)	
06	Whether a copy of Audited Annual turnover Certificate & ITR copies for past 3 years (copy enclosed).	
07	Whether all certificates & documentary proof for technical specification given in annexure A has been provided.	

***Seal of the Bidder***

***signature***  
(Authorized signature of the bidder)

# **Annexure 'C'**

## **Tender acceptance letter** **To be given on company Letter Head**

Director  
Department of Horticulture,  
Kashmir.

**Subject: - Acceptance of terms and conditions**

**Tender Reference No.** \_\_\_\_\_

Name of Tender:- Establishment of Centre for Excellence at Udheywalla Jammu.

Sir/Madam,

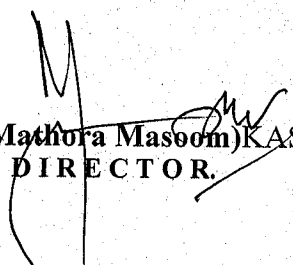
01. I/We have downloaded/obtained tender documents for above mentioned tender/work from website namely [jktenders.gov.in](http://jktenders.gov.in).
02. I/We certify that I/We have read the entire terms and conditions of tender documents including annexures, we shall abide by the terms & conditions/clauses contained therein.
03. I/We hereby unconditionally accept the tender conditions of above mentioned tender documents totality /entirely.
04. I/We hereby declare that our firm has not been blacklisted/ debarred by Govt. Department /public sector /any other institution undertakings.
05. I/We verify all information furnished by our firm is true & correct and in the event that the information is found incorrect /untrue ,then the department /organization shall without giving any notice or reason therefore, summarily reject the bid or terminate the contract, without prejudice to any rights or remedy including the forfeiture of fully said earnest money deposit.

Yours faithfully  
Authorized Signatory  
(Sign. of the bidder with full seal)



## Check List for Submission of Tender

S.No	List of Documents	Please Tick Mark	Proof of Documents vide page No.
01	Hard copies to be submitted in one envelope before 1.00 P.M on 28-09-2017 (scanned copies to be uploaded, No financial bid shall be submitted manually)		
02	Demand Draft for tender fee of Rs.5000		
03	CDR for EMD Rs 150000		
04	Documentary proof of conditions in eligibility criteria		
04	Registration certificate of GSTin		
05	General Particulars of Bidders as per Annexure 'B'		
06	Audited balance sheet copies for last three years		
07	Copy of PAN/TAN		
08	Copy of Import License		
09	Copies of ITR for last three years		
10	Copy of GSTin No.		
11	Compliance Statement (Annexure A)		
12	Copy of Tender Acceptance letter		

  
(Mathura Masoom) KAS  
DIRECTOR.

No.DHK/Pur/2017/ 9470-80

Dated:- 7/09/2017.

Copy to the:-

11. Horticulture Commissioner, Govt. of India Deptt. of Agriculture and Co-operation.
12. Secretary to Government Horticulture Department J&K Govt. Srinagar, for favour of information.
13. Director Information, J&K Government Srinagar for information. The abbreviated tender notice may be got published on National Level and in 2-3 local newspapers in Srinagar and Jammu.
14. Director Research SKUAST (K)/SKUAST (J) for information.
15. Director Finance, Horticulture Department, Civil Secretariat, Srinagar.
16. Director Horticulture, Jammu for information.
17. Director, Industries & Commerce J&K, for information.
18. Secretary to Vice Chancellor SKUAST (K) for information of Hon'ble Vice Chancellor SKUAST (K) Shalimar.
19. Private Secretary to Hon'ble Minister for Horticulture for information to the Hon'ble Minister.
20. Horticulture Information and Publication Officer, Srinagar for follow-up action.