

TENDER DOCUMENT

(FOR PROCUREMENT OF Equipments)

2018-19

CENTRAL INSTITUTE FOR COTTON ESEARCH

(INDIAN COUNCIL OF AGRICULTURE RESEARCH)

REGIONAL STATION, SIRSA-125055(HARYANA)

(Phone No.01666-220428, Fax: 01666-230271)



केकअनुस
CICR
HEAD

भ. कृ. अनु. प.- केन्द्रीय कपास अनुसंधान संस्थान
(भारतीय कृषि अनुसंधान परिषद)
क्षेत्रीय स्टेशन, सिरसा - 125055 (हरियाणा) भारत
ICAR-CENTRAL INSTITUTE FOR COTTON RESEARCH
(Indian Council of Agricultural Research)
Regional Station, Sirsa - 12500 (Haryana) INDIA
Phone No.: 01666-220428; Fax No.: 01666-230271; Email ID: cicrsirsa@yahoo.co.in



F. NO. Store/Tender/2018-19

Date: 29/10/2018

FOR PROCUREMENT OF EQUIPMENTS

Sealed tenders are invited from reputed authorized firms on behalf of the Director, ICAR-Central Institute for Cotton Research, Nagpur at ICAR-CICR, Regional Station, Sirsa for the procurement of Equipments as per **Annexure I & II** under two Bid Systems.

Description of Tender :-

A. Cost of Tender Form	NIL
B. Earnest Money Deposit	Rs.10,000/- per Tender
C. Last date for receipt of Tenders	14.11.2018 up to 10:00 AM
D. Tenders(Technical Bid) to be opened on	14.11.2018 up to 11:30 AM
E. The Tender documents is available at website	:www.eprocure.gov.in,www.cicr.org.in

Tenders/Quotations received after due date will not be entertained in any case.

To
M/S.....
.....
.....

Sub: Tender for the procurement of Equipments- reg.

Dear Sirs,

Sealed quotations are invited from reputed authorized firms on behalf of the Director, ICAR-Central Institute for Cotton Research, Nagpur at ICAR-CICR, Regional Station, Sirsa for the procurement of Equipments under two Bid Systems in the prescribed format as per **Annexure I & II**.

Terms & Conditions:

1. **The rates quoted shall be for free delivery & installation at ICAR-CICR, R.S., SIRSA** including everything except ST/VAT/GST, which may be shown separately.
2. **An amount of Rs. 10,000/-** as earnest money per Tender in the form of D.D. in favor of HEAD, ICAR-CICR, RS, Sirsa payable at Sirsa should be enclosed separately with their Tender/quotation. However, no interest will be paid on earnest money.
3. The price should be inclusive of transportation cost, loading ,uploading charges, labour cost, installation cost etc for **ICAR-CICR, Regional Station, Sirsa**
4. Sealed Tender/quotation along with the literature and pamphlets should reach this office on or before **14.11.2018 by 10 AM Sharp** at Head's Room at **ICAR-CICR, Regional Station, Sirsa**
5. Original tender document should be duly stamped and signed on each page as token of acceptance of all the terms and conditions laid down in tender document.
6. Tenders/Quotations received after due date will not be entertained in any case.

7. As the **equipments** is urgently needed for our research work, the firms who will be able to make immediate supply at ICAR-Central Institute for Cotton Research, Regional Station, Sirsa should only quote the desired rates.
8. Instruments indigenous or imported will be purchased from only those parties, who can ensure and undertake to provide the satisfactory after-sales-service within the country. The supplier should also ensure to offer a complete detailed package on back up support, prompt commissioning, after-sales-service including workshop backup, timely supply of **equipments** to Scientists/ Technicians on use.
9. Guarantee/Warranty period offered and after sales service available should be clearly mentioned.
10. The Tenders/quotations should be quoted by solely local authorized stockiest Service distributor against these equipments, who has necessary service backup facility.
11. Authorization certificate should invariably be enclosed with the quotation for these equipments.
12. The make, quality, and specifications may be stated in detail/must be as per details given by this office along with documentary evidences. In case supply is not made within a fixed period the office reserves the right to cancel the supply order.
13. The payment will be made only after completing delivery according to the specifications, quality, and quantity given in the quotation/purchase order or through opening of LC as the case may be.
14. Other terms and conditions of supply if any may also be stated.
15. **Equipment** will be accepted only after giving satisfactory demonstrations.
16. The Director, ICAR-CICR, Nagpur reserves the right to accept or reject one or all quotations without assigning any reason thereof.
17. The tender shall have furnish the offer in two separate envelopes clearly mentioning Envelop No 1 “**Technical bid for (name of equipment)**” and Envelop No 2 “**Financial bid for (name of equipment)**” (i.e. both envelopes to be enclosed in one sealed envelope duly super-scribed with the word “**Tender for _____ (name of equipment)**”).
18. Each envelope may please be super-scribed with the word “**Tender/Quotation for procurement of Equipments**”.
19. The Tenders/quotations, without the desired specifications/ literature/ pamphlets received after the due date is liable to be rejected.
20. The price of respective equipments and any optional accessories required with the equipment should be quoted separately for fair evaluation.
21. The bid will be finalized on the basis of Technical Competence & availability of fund. The Director, ICAR-CICR, Nagpur reserves the right to purchase only some Equipments or all equipments & their accessories as per Fund availability & functional requirement keeping in view of objectives.
22. If the last date of receipt of tender is declared to be a holiday the next working day shall remain valid for the purpose.
23. Only Bids qualifying technically (in all respect) shall be considered for financial aspects.
24. The rates quoted should be valid for Ninety days(90) days from the date of opening tender.
25. There should be no cutting /over writing in tender documents. The cutting, if any should be duly attested. Un-attested amended/overwritten figures would not be considered.
26. While submitting tender GST,PAN/GSTIN No. Sales Tax No. Must be indicated in the tender letter and certified copy enclosed.
27. In all matters of disputes, the decision of the Director of this Institute shall be final and binding on either side.

Yours faithfully,

Head of Station

ANNEXURE - I

TECHNICAL BID FOR PROCUREMENT OF EQUIPMENTS

(To be kept in separate envelop)

1.	Name of the Firm/Agency	
2.	Full address with Tele. / Mob. No., Fax No., e-mail	
3.	EMD of required amount (DD / No., date, Name of the Bank / Branch)	
4.	Registration Certificate of the Firm / Company	
5.	Service Tax Registration No /GSTN	
6.	Sales Tax / Value Added Tax Registration Certificate	
7.	I.T.PAN No. / TIN No.	
8.	Proprietary Certificate / Authorized dealer certificate	
9.	Bank details for E-payment	
	a. Name of the Account holder / firm / Company (Payee's Account Name)	
	b. Nature of Account (saving / current)	
	c. Name of the Bank	
	d. Bank Account No.	
	e. Branch Address	
	f. IFSC Code of Bank / Branch	
10.	Specifications Check List (Enclosed)	
11.	Documentary proof for having experience in dealing with Government Institutions may be attached	

1. I/We accept all terms and conditions and instructions given in this tender form issued by ICAR-CICR, Coimbatore
2. The words "TECHNICAL BID" for supply of "**EQUIPMENTS**" should be written clearly and prominently on this envelop along with tender.

Date: _____

Place: _____

AUTHORISED SIGNATORY (TENDERER)

FORMAT OF QUOTATION (Annexure II) (Financial Bid)**Company Letter Head**

Sr. No.	Particulars	Quantity	Amount in Rs. (Inclusive of all Taxes)
1.	<p><u>Inclined Plate Planter (Multi Crop Planter with Inclined plates/ Rotating discs):</u></p> <p><u>Specifications:</u></p> <ul style="list-style-type: none">(i) No. of Rows: 3(ii) Tractor required (Power in HP): 25-45 HP(iii) Seed Metering Mechanism: Rotating Disc with cells on its periphery (a set of Rotating Discs with cells on its periphery to be provided separately as accessories for different seed rates.(iv) Fertilizer Metering Mechanism: Agitator & Sliding Orifice.(v) Type & Hitching: Tractor mounted with 3 point Linkage.(vi) Frame: Strong and Robust (Iron Frame).(vii) Row Space: 36" Max. & adjustable with ' U ' Clamps.(viii) Drive: Ground Wheel driven. Drive Wheel with lugs.(ix) Sowing Depth: Adjustable (Depth Control Wheels to be provided on both sides of Planter).(x) Furrow Openers: Detachable [Shovels for sowing in tilled / prepared field and Double Disc Coulters (Row openers) for Zero tilled / untilled field and inverted ' T ' Type] – to be provided separately as accessories.(xi) Alternate gear/sprockets to change the seed rate.(xii) Separate seed and fertilizer boxes with detachable lids.(xiii) Detachable line markers, for next row sowing.(xiv) Plant to plant spacing: Adjustable (a set of rotating Discs with cells on its periphery to be provided separately as accessories for different seed rates.(xv) Shaper: Plane shaper is to be provided for seed covering.	1No.	

2.	<p><u>Chisel plough / Sub- Soiler:</u></p> <p><u>Specifications:</u></p> <ul style="list-style-type: none"> (i) Number of Tynes: 1 (ii) Tractor required (Power in HP): 45 – 55 HP. (iii) Type & Hitching: 3 Point Linkage (Cat. II). (iv) Frame: Strong and Robust Heavy Duty (Iron Frame). (v) Number of shank positions: 1 (vi) Tyne size: 152 X 36 mm (approximately). 	1No.	
3.	<p><u>Tractor operated Rotary Mulcher (Tractor Mounted Straw Chopper cum Spreader):</u></p> <p><u>Specifications:</u></p> <ul style="list-style-type: none"> (i) Drive Transmission Type; Belt Drive. (ii) Tractor Power Transmission: Shaft Type. (iii) Over Running Clutch Type: P.T.O. (iv) Tractor required (Power in HP): 45 – 60 HP. (v) Operating Mechanism: PTO operated (Including all accessories related to PTO operations). (vi) PTO rpm: > 500. (vii) Working Width (mm / Inch): At least 1650 / 65 or more. (viii) Frame: Strong and Robust (Iron Frame). (ix) Fitted with “ Y ” blades ’ (at least 32 number of blades or more) and Straight blades (at least 16 number of blades or more). (x) Fitted with ‘ Hammer type blades for hard crop residues (At least 16 number of blades or more). (xi) 3 Point linkage – suitable for cat I & II. (xii) Side Drive Belts – Side Drive; Transmission belts: 4 nos. (xiii) Rear Roller with height adjustment. (xiv) Fitted with hydraulic side shift mechanism. (xv) Tractor mounted type. 	1No.	
4.	<p><u>Chopper and spreader (Tractor mounted Cotton Stalk Shredder/ Tractor mounted Mobile Shredder) :</u></p> <p><u>Specifications:</u></p> <ul style="list-style-type: none"> (i) Number of Rows : 1. (ii) Wheel type: Metal Wheel and Rubber Tyre (both) - Detachable. (iii) Disc Cutter (no.) :2 (iv) Shredding Knife (no.): 12. (v) Tractor required (power in HP): 40-50 HP. (vi) Operating Mechanism: PTO operated (including all accessories related to PTO operations). 	1No.	

	<ul style="list-style-type: none"> (vii) Exhaust Direction: Adjustable. (viii) Type & Hitching: 3 Point Linkage (Cat. II). (ix) Frame: Strong and Robust (Iron Frame). (x) Central and Side Casting Wheels. (xi) Adjustable Guides- To ensure high efficiency feeding of lower portion of plant stems. (xii) Hopper- For manual feeding. (xiii) Trolley hitch behind the main frame- To attach trolley to collect shredded material. (xiv) Tungsten coated Boron steel blades and disk cutter. (xv) Foldable frame-for easy transportation. (xvi) Chute/Exhaust system: Both Small Chute (To throw shredded material in field) as well as Long Chute (To divert shredded material in trolley)- removable, with adjustable exhaust direction. (xvii) PTO (rpm): > 500 (max. up to 1500). <p>5. <u>Lawn mower (Tractor operated lawn mower / Tractor mounted straw chopper and spreader / Tractor operated Rotary Slasher):</u></p> <p>Specifications:</p> <ul style="list-style-type: none"> (i) Working Width (mm / inch): 1500 / 59.1 (approximately). (ii) Number of blades: 2-3. (iii) Cutting Length (mm / inch): 25 to 150 / 1 to 5.9. (iv) Rear side Protection: Iron chains or rubber flaps. (v) Tractor required (power in HP): 35-60 HP. (vi) Operating Mechanism: PTO operated (including all accessories related to PTO operations) (vii) PTO rpm: > 500. (viii) Blade Speed (rpm): > 1000. (ix) Frame: Strong and Robust (Iron Frame). (x) Adjustable cutting height up to 25 mm. (xi) 3 point linkage - suitable for cat. II. (xii) Tractor mounted type. 	1No.	
6.	<p><u>Raised bed planter (Narrow bed with bed shaper arrangement):</u></p>	1No.	

7.	<p>Specifications:</p> <ul style="list-style-type: none"> (i) No. of Rows: 3. (ii) Tractor required (power in HP): 25-45 HP. (iii) Seed Metering Mechanism: Rotating Disc with cells on its periphery (a set of rotating Discs with cells on its periphery to be provided separately as accessories for different seed rates. (iv) Fertilizer Metering Mechanism: Agitator & Sliding Orifice. (v) Type & Hitching: Tractor mounted with 3 Point Linkage. (vi) Frame: Strong and Robust (Iron Frame). (vii) Row Space: 36” Max. & adjustable with ‘U’ Clamps. (viii) Drive: Ground Wheel driven. Drive wheel with lugs. (ix) Sowing Depth: Adjustable (Depth Control Wheels to be provided on both sides of Planter). (x) Furrow Openers: Detachable [Shovels for sowing in tilled / prepared field and Double Disc Coulters (Row openers) for Zero tilled / untilled field and inverted ‘T’ Type] – to be provided separately as accessories. (xi) Alternate gear/sprocket to change the seed rate. (xii) Separate seed and fertilizer boxes with detachable lids. (xiii) Detachable line markers, for next row sowing. (xiv) Shaper: Bed shaper is to be provided for seed covering. 	1No.	
	<p><u>Zero till ferti-seed drill:</u></p> <p>Specifications:</p> <ul style="list-style-type: none"> (i) No. of Rows: 9. (ii) Tractor required (power in HP): 35-45 HP. (iii) Seed Metering Mechanism: Fluted 		

8.	<p>Roller.</p> <ul style="list-style-type: none"> (iv) Fertilizer Metering Mechanism: Agitator & Sliding Orifice. (v) Type & Hitching: Tractor mounted with 3 Point Linkage. (vi) Frame: Strong and Robust (Iron Frame). (vii) Row Space: 6” Std. & adjustable with ‘U’ Clamps. (viii) Drive: Ground Wheel driven. Drive wheel with lugs. (ix) Sowing Depth: Adjustable (Depth Control Wheels to be provided on both sides of the drill). (x) Furrow Openers: Detachable [Double Disc Coulters (Row openers) and inverted ‘T’ Type / blade type openers for sowing in un-prepared / zero tillage fields.] – to be provided separately as accessories. (xi) Separate seed and fertilizer boxes with detachable lids. <p><u>Multi-crop ridge/bed planter with bed shaper:</u></p> <p>Specifications:</p> <ul style="list-style-type: none"> (i) No. of ridges/beds and seed rows: 2 ridges/beds and seed rows and 1-2 adjustable seed rows per bed. (ii) No. of furrows: 3. (iii) Tractor Required (power in HP): 35-60 HP. (iv) Seed Metering Mechanism: Rotating Disc with cells on its periphery (a set of rotating Discs with cells on its periphery to be provided separately as accessories for different seed rates. (v) Fertilizer Metering Mechanism: Agitator & Sliding Orifice. (vi) Type & Hitching: Tractor mounted with 3 Point Linkage. (vii) Frame: Strong and Robust (Iron Frame). (viii) Row Space: 36” Max. & adjustable with ‘U’ Clamps. (ix) Drive: Ground Wheel driven. Drive 	1No.	
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<p>9.</p>	<p>wheel with lugs.</p> <p>(x) Sowing Depth: Adjustable (Depth Control Wheels to be provided on both sides of Planter).</p> <p>(xi) Furrow Openers: Detachable [Shovels for sowing in tilled / prepared field and Double Disc Coulters (Row openers) for Zero tilled / untilled field and inverted 'T' Type] – to be provided separately as accessories.</p> <p>(xii) Bed shaper: Detachable.</p> <p>(xiii) Seed Sowing / Seed dropping system: Adjustable, Seed Sowing / Seed dropping on/in beds, seed sowing system fitted after bed shaper attachment. Seed boot and fertilizer boot fitted after bed shaper attachment.</p> <p>(xiv) Alternate gear/sprocket to change the seed rate.</p> <p>(xv) Separate seed and fertilizer boxes with detachable lids.</p> <p>(xvi) Double Disc Coulters (for crop residue / soil cutting) for Zero tilled / untilled field fitted in front of furrow making blades / Shovels - Detachable.</p> <p>(xvii) Detachable line markers, for next row sowing.</p> <p><u>Hot Air Oven:</u></p> <p>Specification:</p> <ol style="list-style-type: none"> 1. Sturdy double walled units outer chamber made of M.S. Sheet duly powder coated. 2. Inner chamber made of S.S. Sheet (SS- 304 grade). 3. Beaded heating elements are placed in ribs, at bottom and sides. 4. Synthetic door gasket made of neoprene rubber is fitted to all units instead of asbestos. 5. Air ventilators are also provided on the sides of the units. 6. Working under 220 - 230 volts, single phase AC supply. 7. Working chamber size (W x D x H): 605 x 	<p>3No.</p>	
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<p>10.</p>	<p>605 x 910 mm or more.</p> <ol style="list-style-type: none"> 8. Capacity: approximately 250 litres. 9. No of Shelves: At least 4 (or more). 10. Digitally controlled: Temperature is controlled through a microprocessor based digital temperature indicator cum controller or through a profile digital microcontroller having 4 programmes each of 16 steps. 11. From ambient to 250 degree C with an accuracy of + 1 degree C. Digitally controlled oven, fitted with air circulation fan. 12. Communication port for pc interface. 13. Temperature Range: 5°C above ambient to 250°C maximum. 14. Temperature Accuracy: + / - 2°C. 15. Temperature Uniformity: + / - 1°C. 16. Controls: PID Controller. 17. Temp Display: LED Display. 18. Safety devices: Over temperature protection; Electric leakage breaker; Temperature safety as per DIN 12880 Class 3.1. 19. Exterior Chamber: MS powder coated. 20. Interior Chamber: 304 stainless steel. 21. Doors: Solid doors with silicone rubber gasket & lock. 22. Air Circulation: Forced air circulation. 23. Printer interface. 24. Temperature chart recorder. 25. Extra shelves (2 Nos). 26. Heating Thermostat. 27. Standard wheel (which can be locked) for easy movement. 28. Consistent air circulation and heat uniformity. 29. Low noise during operation. 30. Adjustable fan speed and air exchange rates. 31. With clean room design. <p><u>Stainless steel sample grinder (Wiley mill):</u></p> <p>Specification:</p> <ol style="list-style-type: none"> 1. Stainless steel body. 2. Rust free Epoxy coated body. 3. Size: 200 & 75 mm. 	<p>1No.</p>	
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	<ol style="list-style-type: none"> 4. Heavy duty Single phase Brushless Motor. 5. Voltage: 220-240 V, single phase AC supply. 6. Two stationary blades and rotor with four cutting edges made of Alloy Steel. 7. Removable Perspex plate forms the face of the chamber and permits observations during operation. 8. All accessories including Jars for sample collection. 9. Sieve top of 20, 40 and 60 mesh with receiver. 10. Cast-iron base with rubber feet. 11. Motor Capacity: 1.00 H.P. (at least) heavy duty single phase AC motor. 12. 1 to 50 g sample volume with variable speeds-860, 1700 and 3700 rpm or better, stainless steel construction. 13. Removable safety glass plate for viewing sample during milling and allows easy access to interior for cleaning with steel hopper with cover, wooden plunger, delivery tubes with metal sieve tops of 20, 40 and 60-mesh, each with receiver, tow extra tool steel stationary blades, extra glass front plate sample grinding without moisture loss. 14. The Chamber is to be Fitted with a Hopper provided with a cover. 15. Three delivery S.S. Sieves, brush, L-n Key & Plastic receiver are to be supplied. 16. Fitted with aue/ge/crompton/equivalent Motor. 17. Automatic 0-60 minute “German” Timer. 18. Arthur H. Thomas type. 		
11.	<p><u>Power operated lawn mower (with petrol engine):</u></p> <p>Specification:</p> <ol style="list-style-type: none"> 1. Honda Petrol Engine Lawn Mower- 	1No.	

<p>12.</p> <p>13.</p>	<p>with petrol engine / Honda Type Petrol Engine Lawn Mower- with petrol engine.</p> <ol style="list-style-type: none"> 2. Heavy Duty 5.5 HP, OHV Engine. 3. Rotary Cutting Width: 480mm (approximately). 4. Cutting Height 16-79 mm (approximately). 5. II Stage-Wheel. 200mm. 6. Grass Cutter 54Ltr (or more). 7. Blade Type: Swing Back Blades. 8. Weight 30-35Kg (approximately). 9. Self propelled. 10. Fitted with Grass Catcher Dust Direction Technology. 11. No. of Possible Height Adjustments Single Lever. 12. Tank Capacity:1.5 Ltr (approximately). 13. Heavy duty petrol engine. <p><u>Power operated Brush Cutter (Grass cutter) - with petrol engine:</u></p> <p>Specification:</p> <ol style="list-style-type: none"> 1. Over Head Camshaft - 360 degree operation. 2. Honda Brush Cutter / Honda Type Brush Cutter. 3. Equipped with Honda high efficiency, mini 4-stroke engine. 4. Shaft Type: Straight Shaft. 5. Cutter – Type: 2-blade Cutter. 6. Cutter – Diameter: 305mm or more. 7. Cutter – RPM: 5250 rpm (7,000 rpm) at least. 8. Dimension (L x W x H): 1928 x 441 x 299 (mm) approximately. 9. Throttle Type: Trigger Throttle. 10. Type: Silinder tunggal OHC, 4-Tak. 11. Ignition system: Transistorized Magneto Ignition. 12. Air cleaner: semi-dry 13. Oil Capacity: approximately 0.10 liter. 14. Starting System: Recoil Starter. 15. Fuel tank capacity: 0.65 liter approximately <p><u>Horizontal / Rotary Orbital shaker (power operated):</u></p> <p>Specification:</p>	<p>1No.</p> <p>1No.</p>	
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<p>14.</p>	<ol style="list-style-type: none"> 1. Fixed Eccentricity: 7 mm. 2. Throw: 14 mm Circular. 3. Motor: Brushless heavy duty induction motor. 4. RPM: Continuous variable max. up to 300. (50 to 250/300 RPM). 5. Capacity: 49 Flask of 250/500ml. 6. With Timer. 7. Sturdy Construction, Working on Single/Set of Eccentric, Smooth & Perfect throw, Brushless induction motor. 8. Electronic Digital RPM Indicator. 9. Smooth and Jerk less shaking system. 10. Shock absorbers PAD to withstand vibration. 11. AC frequency Drive. 12. Variable Speed Control. 13. Heavy duty Single phase Brushless Motor with Variable Frequency Drive (VFD). 14. Voltage: 220-240 V, single phase, AC supply. <p><u>Hot plate:</u></p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Uniform Heating. 2. Sturdy Construction. 3. Air Ventilation. 4. Insulated Heating Portion. 5. 3 Heat Control Switch. 6. Thermostatic Control. 7. Construction: Mild Steel Body & Mild Steel Top OR Stainless Steel Body & S.S. Top. 8. Max. Surface Temperature: 300/350 Deg. C. (Continuous heating upto 350°C). 9. Voltage: 220-240 V, single phase, AC supply. 10. Rectangular model. 11. Top 200 mm size each (two heating plates per unit). 12. Digitally controlled. 13. With two hot plates of 2500 watts or more. 14. Voltage: 220-240 V, single phase, AC supply. 	<p>1No.</p>	
<p>15.</p>		<p>1No.</p>	

16.	<p><u>Water bath:</u></p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Double walled inside, Space between the walls should be filled with special grade mineral wool. 2. Drain plug, Inner bath chamber and lid made of Stainless Steel (SS-304 grade), Outer chamber should be made of M.S. sheet duly powder coated, Concentric rings can be removed to accommodate containers of various sizes. 3. Temperature ambient to 100 degree C. 4. Thermostatic. 5. Internal Dimensions (L x W x D): 355 x 405 x 100 mm or more. 1. Voltage: 220-240 V, single phase, AC supply. 6. The equipment is to be provided with a panel having a thermostat control Knob. 7. No. of Holes: 12 Holes of 75 mm Dia. 8. Capacity: 15 ltrs or more. 9. Heating Load: 2.0 KW. 10. Temperature Controller: Hydraulic Type Capillary Thermostat. 11. Temperature Range: From ambient to 100 °C + 0.5°C. 12. Stirring Device: Stirring arrangement with the help of FHP stirrer. 13. Temperature Display: Thru L-shaped prismatic thermometer. 14. Diffuser Shelf: Heater protective perforated cover made of Stainless Steel. 15. High speed stirrer with FHP motor, SS rod and stirring blade. 	1No.	
	<p><u>Double distillation unit:</u></p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Horizontal type, Quartz Double Distillation unit. 2. Automatic Electrically Heated All Glass Double Distillation Apparatus. Complete with glass fitting, metallic stand, rings 		

<p>17.</p>	<p>clamps and electrical fittings etc.,</p> <ol style="list-style-type: none"> 3. Double Stage: Flask of cap. 10 Liter. 4. Capacity: to produce 2.5 L/hr. 5. Made of high quality heat resistant glass cylinders and tubes and also resistant to minor damages. 6. Boiler portion made of high purity and good quality borosilicate material along with water level indicator. 7. Borosilicate condenser, high quality condenser. 8. Heater is of high purity electronic grade transparent quartz type. Should avoid contact of embedded boiler with water. 9. Provision for easy cleaning and general maintenance of boiler. 10. The resultant distillate obtained should be of high quality ultra pure water that is suitable for laboratory use including the HPLC operations. 11. Distillate should be free from organic, inorganic and colloidal solids, constituents, metallic ions including heavy metals and also pyrogen free. 12. Distillation stand should be of high quality rust free metal with embedded clamps for perfect holding. 13. Apparatus compatible with single phase electrical supply within 220-240 volts range, AC supply. 14. Energy efficient. 15. Provided with safety cut off device. 16. Parts should be replaceable. 17. ISO accredited. 18. Spare Flask; Spare Condenser is to be provided as accessories. 19. Quartz heater. <p><u>Happy Seeder</u></p> <p>Quantity: 1 No.</p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Row to row distance (Tine Spacing): 15-30 cm should be adjustable. 	<p>1No.</p>	
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<p>18.</p>	<ol style="list-style-type: none"> 2. No. of row (Tines): 9. 3. Hopper - Seed & fertilizer (separate) with 50 to 100 kg capacity each with detachable metallic lid. 4. Gear box: single (PTO operated 540 / 1000 rpm). 5. No. of rotating blades: 36. 6. Extra attachments, if any – inclined plate plant metering mechanism. 7. Fertilizer metering (separate) Fluted roller (Aluminium- Nylon type) & average depth of = 5-10 cm. 8. Seed dropping (separate hopper) fluted roller (Aluminium type) & average depth of seed =5-10 cm. 9. Back side wheel (press wheel) arrangement - detachable. 10. Power requirement: 45-55 HP tractors. 11. Rotor Diameter: > 14 cm. 12. Rotor drum diameter: > 72 cm. 13. Type of furrow openers: Inverted ‘T’ Type. 14. No. of depth wheels: Two nos. with adjustable depths. 15. Frame structure: Should be corrosion resistant and of robust design. 16. Tyne thickness: > 1.2 cm. 17. Depth wheel width: > 10 cm. 18. Depth wheel diameter: > 30 cm. 19. Rotor rpm: 1360 rpm at 540 rpm of tractor PTO. 20. Implement should be able to sow crops under residue retained no tillage condition and complete with all accessories and attachments. 21. Latest model. <p><u>Soil Penetrometer</u></p> <p>Quantity: 1 unit (along with accessories).</p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Cone Penetrometer (Digital recording type). 2. Measurement depth range: minimum 80 cm. 3. Parameter to be measured: Depth, penetrator resistance force. 4. Measuring accuracy: ±1%. 	<p>1 NO.</p>	
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<p>19.</p>	<p>5. Required all Accessories and software. Equipment should be provided with all the standard accessories.</p> <p>6. Latest model; Reputed make; Portable (easy to carry model).</p> <p>7. Warranty: minimum 2 years;</p> <p>8. Necessary spare parts to maintain the equipment for at least two years.</p> <p>9. Waterproof / water resistant model.</p> <p>10. Should be properly calibrated and standardized.</p> <p><u>Soil Auger kit / Tube Auger</u></p> <p>Quantity: 1 unit (along with accessories).</p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Soil sampling tube of 1.5m length, welded head with an internal diameter of approximately 2-3 cm for sampling. 2. Tube should be fabricated from high quality absorption resistant with high tension strength steel, sampling tube should be marked either at 5cm and 10 cm interval for depth identification. <p>Specifications of Accessory items:</p> <ol style="list-style-type: none"> 1. Drop hammer (01 no.): It should be compatible with the tube auger and work properly for driving the sampling tube into the soil. 2. Replaceable compatible point/cutting edge (04); Cutting point and head machined from stress proof steel, threaded for easy replacement. Cutting edge should be made of steel and should not bend when comes in contact with hard object. 3. Puller jack (01 no.): Complete set with accessory like handle, gripper jaw and base to aid in removing the auger from the soil. 	<p>1No.</p>	
<p>20.</p>	<p><u>SPAD Meter / SPAD Chlorophyll Meter</u></p> <p>Quantity: 1 unit (along with accessories).</p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Equipment should be suitable for the measurement of chlorophyll content or 	<p>1No.</p>	

<p>21.</p>	<p>greenness of plant leaves.</p> <ol style="list-style-type: none"> 2. Type: Hand held Chlorophyll meter SPAD 502 plus. 3. Measurement method: Optical density difference at two wavelengths. 4. Measurement area: 2mm X 2mm or more (Up to 6 mm²). 5. It should be suitable for leaves having thickness of 0.8-1.0 mm or greater range. 6. Accuracy: ±3% within 0-100 SPAD units. 7. Display: LCD panel with minimum 4-digit measurement value. 8. Display range: 0-199 SPAD units or more. 9. Light Source: LED. 10. Operating temperature: 10 to 55 degree Celsius or greater range. 11. Humidity: 10% to 80%. 12. With warring buzzer or alternative warning indicator. 13. A standard factory calibration certificate should be provided. 14. The firm shall submit necessary catalogues and product data sheets along with the offer. 15. Equipment should be provided with all the standard accessories, optional quote for accessories may be provided if required. 16. Warranty: minimum 2 years. 17. Optional: data logger facility to store at least 10,000 measurements. Memory capacity to store at least 10,000 measurements. 18. Accuracy: ± 1.0 SPAD unit. 19. Repeatability: ±3.0 SPAD units. 20. With good battery backup to record at least 1,000 measurements at time with all standard accessories to operate under field condition. 21. Necessary spare parts to maintain the equipment for at least two years. <p><u>Digital Soil Thermometer (Microprocessor Based)</u></p> <p>Quantity: 1 unit (along with accessories).</p> <p>Specifications:</p>	<p>1No.</p>	
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<p>22.</p>	<ol style="list-style-type: none"> 1. Microprocessor based model. 2. With simultaneous display of all 6 to 8 Channels with Channel Indication. 3. LCD / LED Model with 16 x 2 line alphanumeric digital LCD / LED display. 4. Resolution of 0.1 °C. 5. Accuracy of +1% FS +1 digit. 6. Should be able to measure temperature range from 0 °C to 100 °C. 7. With PT-100 platinum sensor. 8. High quality and heavy duty rechargeable battery. 9. Soil Probe(s) should be able to measure the soil temperature at various soil depths [i.e., from Soil surface (0 cm, 5 cm , 10 cm, 15, cm and so on up to 100 cm (1 meter) soil depths]. 10. Cable length: At least 3 meters or more. 11. Portable (easy to carry model). 12. Reputed make. 13. Warranty: minimum 2 years. 14. Necessary spare parts to maintain the equipment for at least two years. 15. Waterproof / water resistant model. 16. Battery life: 1600 hours or more. <p><u>Par shall flume</u></p> <p>Quantity: 1 unit (along with accessories).</p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Should be made of Fiberglass reinforced plastic (FRP). 2. Should be able to accurately and precisely measure water flowing through open channels for irrigation (for experimental / Laboratory / research purpose). 3. Prefabricated fiberglass lining. 4. Moulded engraved gauge marking in lit/sec. and also in centimeter including discharge table, capacity marking, flow direction, pipe stiffeners, hold fasts, sand reatment on the backside of flume. 5. Model should be as per IS standards 14371:1996. 6. Should be properly calibrated and standardized. 	<p>1No.</p>	
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<p>23.</p>	<p>7. Water discharge rate = 0.33 cusec to 1 cusec.</p> <p>8. Throat width = from 0.0762 meter (3") to 0.152 meter (6").</p> <p>9. Should be provided with all accessories and fittings.</p> <p>10. Installation and testing at ICAR-CICR, Regional Station, Sirsa, Haryana 125 055.</p> <p>11. User manual must be provided along with.</p> <p>12. Reputed make.</p> <p><u>Electronic / Electromagnetic Water Meter</u></p> <p>Quantity: 1 unit (along with accessories).</p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Brass / stainless steel / corrosion resistant metallic body. 2. Should be properly calibrated and standardized. 3. Should be able to accurately and precisely measure water flowing through Pipe line (4" diameter) for irrigation (for experimental / Laboratory / research purpose). 4. Liner Material: Hard Rubber. 5. Electrode Material: SS316L. 6. Process Connection: DIN Flange Connection. 7. Flange Material: CS Flange. 8. Power Supply: 85-440 V AC. 9. Output: 4-20 mA. 10. Display: 3 or 4 line display. 11. Flow Rate: 0.20 m³/hr to 250.00 m³/hr. 12. Sensor Protection Class: IP 68 (at least). 13. Should be provided with all accessories and fittings. 14. Pipe line diameter: 4". 15. Accuracy: +/- 0.5% of measured value. 16. DN 100 (4" line size). 17. Installation and testing at ICAR-CICR, Regional Station, Sirsa, Haryana 125 055. 18. User List / User manual must be provided along with. 19. Reputed make. 	<p>1No.</p> <p>1No.</p>	
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24.	<p>NOTE: ORIGINAL PRINTED CATALOGUE/LEAFLETS ARE TO BE ENCLOSED ALONG WITH THE TENDER FOR THE ABOVE MENTIONED ITEMS. THE SERIAL NOS. OF THE ABOVE MENTIONED SPECIFICATIONS MIGHT BE INDICATED/ UNDERLINED/ HIGHLIGHTED WHERE THE ABOVE POINTS ARE MEETING/ MATCHING OR OTHERWISE.</p> <p><u>Minor equipments:</u></p> <p><u>Mini Thresher (Pullman type Plot Thresher / Bundle thresher)</u></p> <p>Quantity: 1 No.</p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Pullman type Plot Thresher. 2. Diesel engine operated (8 HP Field Marshal Air Cooled Diesel Engine ISI Mark and 6.00 X 19 Pneumatic Wheel. 3. Installation and testing at ICAR-CICR, Regional Station, Sirsa, Haryana 125 055. 4. User manual must be provided along with. 	1 No.	
25.	<p><u>Refrigerator</u></p> <p>Quantity: 1 No.</p> <p>Specifications:</p> <ol style="list-style-type: none"> 1. Capacity: 300 litres. 2. Double door. 3. Reputed make. 4. Warranty: minimum 2 years. 5. Necessary spare parts to maintain the equipment for at least two years. 6. Uniform precise cooling. 7. High quality refrigerator stand (made of high quality wood / high quality plastic must be provided along with it). 8. High quality, heavy duty and reputed make 'Voltage Stabilizer' must be provided with it. 	1No.	

26.	<p><u>Tender Specifications for gel documentation system</u></p> <p><u>Gel Doc Tender specifications</u></p> <ol style="list-style-type: none"> 1. Gel documentation system for imaging DNA, RNA and colorimetric protein gels with in-built high contrast medical grade touch screen computer display with magnesium reinforced glass for robustness 2. Should have motorized zoom lens with automatic control of the camera, lens and lighting for an unrivalled ease of use. 3. Dark room with full slide out UV transilluminator on pull-out rails for comfortable work 4. UV safety shutoff with widely accessible door to handling gels while placing or moving gels on transilluminator table 5. Transilluminator should have Superbright technology so as to have publication quality gel image with no UV tube background noise 6. Scientific grade, zero defect CX5 camera is must with native resolution of 5 megapixels extendable to 20 megapixels 7. System should be capable of producing images of 16-bit – 65,536 grey levels 8. USB 3.0 interface for faster image transfer 9. Maximum field of view must be at least 26 x 21 cms 10. System should have 10-position filter wheel with F-590 emission filter for ethidium bromide, Gel Red, Gel Green, Lumitein, SYPRO Ruby, etc. 11. System should have option for future upgrade for blue conversion screen 12. System should be supplied with multi user licensed analysis software for image enhancement, image analysis includes molecular weight calculation, band quantification, distance calculation. 13. Software should have Apps Studio, a complete library of applications to ensure reproducibility and ease of use. 14. 3D Dynamic Scan feature to understand saturation and to rule out artifacts is a must 	1No.	
27.	<p><u>Tender Specifications for Ice Flaking Machine</u></p> <p>Ice Flaking made of SS Body with attach control board for display Fully Automatic microprocessor control</p>	1No.	

<p>28.</p>	<p>Auto cut of when the Bin is full Crusher assembly fitted with inbuilt water collection tank fitted with a float valve for regulating water supply Capacity should be around 20 kg in 24 hrs with bin capacity around 5 kg should be flake type and minimum warranty of 2 Years CFC free compressor Noiseless operation Overload protection Low water level detection</p> <p><u>Tender Specifications Horizontal Gel Electrophoresis with power supply</u></p> <ol style="list-style-type: none"> 1. A Maxi type system: should be able to analyze DNA samples by horizontal submarine electrophoresis. 2. It should be single mould cast apparatus made of acrylic or better material. 3. Should be corrosion free and leak proof and should be provided with a lid. 4. Should be able to run approx 44 samples at a time. 5. Approx Gel size : Gel size 20x20 , 20x12.5 , 20x6.25 Cm 6. Should be provided with power supply to run three units at constant voltage with an output around 350V, 350ma and 130w. 7. Time should be set in 1 min increment or continuous mode 8. System should be quoted with 2 years warranty and below accessories. 9. Company should have a office located in Delhi/Chandigarh for smooth servicing of the system 10. User list and compliance statement should be provided along with the quotation <p>Accessories GEL TRAY 25X20CM, 1/pk GEL CASTER, 1/PK COMB 24 WELL 1MM, 2/PK COMB 36WELL 1MM, 2/PK COMB 22 WELL 1.5MM, 2/PK COMB 44WELL 1.5MM, 2/PK COMB 24WELL 2MM, 2/PK COMB 36WELL 2MM, 2/PK GEL CLAP BOARD, 3/PK RACK FOR COMBS, 4/PK PLATINUM ELECTRODE RED & BLACK, 1 PAIR</p>	<p>1No.</p>	
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<p>29.</p>	<p>VERTICAL 100 LITER AUTOCLAVE</p> <ul style="list-style-type: none"> • Fully automatic, User friendly control panel, Microcomputer control system • Automatic water feeding, Fast cooling fan • Automatic sterilization according to preset time • Six sterilization modes • Waste sterilization mode and drying function • Automatic opening of the vent valve to discharge steam on completion of sterilization procedure • Stainless steel chamber, • Sterilization Temperature 105- 135°C • Sterilization Time 1-300 min • Warming Temperature 45-60°C • Warming Time 1---9999 min • Melting Temperature 60-100 • Melting Time 1-300 min • Steam Exhausting Temperature 73--104°C • Humidity Range 10%-85% RH • Working Pressure 0-0.6 Mpa • Maximum Working Pressure 0.27 Mpa • Timer Range 0 minute-6 days • Chamber Dimension 400X895 mm • Overall Dimension (L×W×H) 660×644×1180 mm • Weight 125/170 kg • Power Supply 220 V, 60 HZ • ACCESSORIES Standard accessories like Stainless steel baskets etc. • Approval CE, ISO 	<p>1No.</p>	
<p>30.</p>	<p>BOD incubator Volume (L) 270</p> <ul style="list-style-type: none"> • P.I.D microprocessor ensures the precision of temperature control under both fixed value mode and program mode. • Large blue LCD display for temperature diagram , easy readout for program control. λ three-dimensional heating system ensures fast response, and high uniformity of ±1.0°C@37°C. • Door Type Outer door with observation window, and heat resistance glass inner door: Standard configurations; a double layer tempered glass observe window in outer door, an inner glass door , forced air circulation, a fluorescent lamp, 50 mm test port and 2 grids • Sound cooling system with CFC free refrigerant. • Real- time electronic timer from 0 to 999 minutes. • Password protection of all parameters against unauthorized access. • Non-volatile memory retains pre-set parameters 	<p>2No.</p>	

in case of power interruption.

- Triple safety protections for samples, incubator and environment.
- Independent device for over temperature, high current flow and electric leakage.
- Temperature Range (°C) 4 to 65
- Temperature accuracy (°C) 0.1 Temperature Uniformity (°C)±1.0@37°C
- Cooling system automated, with R134a Refrigerant
- Alarm Enabled Timer (min) 0-999
- Setting Digital Display LCD
- Net/Gross Weight (kg) 130/180
- Inner Dimensions (mm) (W×D×H) 600×600×750
- Exterior Dimensions (mm) (W×D×H) 750×840×1480
- Standard Configuration Fluorescent lamp, 50 mm test port
- Options Built-in printer, UV lamp, Rs-232 interface
- Electricity 220-240v 50/60 Hz
- Approval CE,ISO

31.

Binocular Microscope with LCD screen and software for measurement and microphotography

1No.

Viewing Head	Binocular or Trinocular, 30° inclined and rotatable 360°
Eyepieces	HWF Plan 10x eyepiece, 20mm field of view with built-in diopter adjustment; a pointer is standard in one eyepiece; eyepieces are locked-in to prevent classroom tampering. Eyepiece accepts a Ø21mm reticle
Nosepiece	Reversed, quadruple, ball bearing with wide rubber grip for easy rotation
Objectives	Infinity Plan 4x, 10x, 40xR* (*spring-loaded) (A3000-3-LED) Infinity Plan 4x, 10x, 40xR*, 100xR oil* (*spring-loaded)
Condenser	N.A. 1.25 Abbe condenser with options for phase and darkfield sliders

Stage	Mechanical stage, 140 x 132mm with X-Y movement range of 76 x 50mm		
Illumination	3 watt LED with variable intensity control		
Focusing	Coaxial focusing system with an adjustable tension control and upper limit stop to prevent accidental damage to slides; all metal gears, brass fine focus gear		
Miscellaneous	Universal power supply for 110v-240v		
Accessories	Dust cover, immersion oil & instruction manual included		
Dimensions	15.2(L) x 7.2(W) x 15.4(H) in. — 38.7(L) x 19.6(W) x 39.1(H) cm.		
Warranty	Minimum 5 year limited warranty for parts, labor and electronic components.		
HDS Camera & Monitor System	<ul style="list-style-type: none"> • 11.6" or more HD display live video preview without any lag time or compression • HDMI & USB 2.0 output for video and images • Built-in mouse control software for HDMI viewing/recording without a computer • Simultaneous live image output to an HD monitor to a computer via USB 2.0 • On-board camera software with basic image controls: auto/manual exposure time, 3D noise reduction, 1080p video recording, magnify (ROI), rotate, flip images, side by side comparison, browse images/video playback from SD card (PC & Mac compatible) • PC imaging software for more advanced image control, annotation & analysis 		

<p>32.</p>	<p>Gel electrophoresis (Horizontal) system</p> <p>DNA Electrophoresis system Single cast mould to prevent leakage</p> <p>Mini-7x10cm gel tray UV transparent, 1.5mm and 1.0mm thick, 10x15 well comb, (2pairs) detachable electrodes, 15x15cm UV Transparent gel tray, tape free gel caster alongwith casting gates. Optional preparative combs.</p> <p>Large: 15x25cm gel tray UV transparent gel Tray, 15, x20x30well 1.5x1.0mm thick combs (2each) Detachable electrodes, 15x15cm UV Transparent gel tray, tape free gel caster alongwith casting gates, optional preparative combs.</p> <p>Power Supply: 5-200 V in I V step 200W maximum Type of output: constant voltage or current with automatic crossover Output terminals: 4 recessed sets in parallel Timer: 0.999 minutes Safety features: No load detection, ground leak detection, sudden load change detection, overload/short circuit detection, auto power up after power failure</p>	<p>1No.</p>	
<p>33.</p>	<p>Laboratory Bioreactor 5 lit capacity Total volume 5L / Single wall / Jacketed</p> <ul style="list-style-type: none"> • Autoclavable type • Working min. Working vol. 1,0 4,0 with Aspect ratio H/D* 2:1 • Agitation system Direct drive, mechanical or magnetically coupled drive • Stirrer speed (rpm) Standard range is 1 – 2000 rpm adjustable according to r • Impellers Rushton, Marine, Pitched Blade, adjustable and removable type impellers. Special impellers are also available. • Gas sparger Por Gas overlay Included as standard feature • Gas mixing Standard set-up include and Air ,O2,CO2 N2 gas mixing station, our unit can hold up to 8 gasses. Standard set-up include Flowmeters with on/off automatic and data recording 	<p>1No.</p>	

	<ul style="list-style-type: none"> • Exhaust gas Water cooled exhaust gas Condenser • Sampling Sanitary sampling system with Fixed height or Height adjustable sampling pipe including contained sample bottles available with various volumes • Harvesting Sanitary Drain pipe or Dip tube Fixed height or Height adjustable • Liquid additions Triple or single inlet ports for chemicals additions (optional micro liquid injectors) • pH Optical or classic pH sensor, 12mm, 19mm or 25mm Ingold connectors, (various length). PLC and SCADA Software Control: via acid pump or CO2 gas (Flowmeter or MFC) in combination with alkali pump and/or other actuators. • DO2 Optical or classic DO sensor, 12mm, 19mm or 25mm Ingold connectors, (various length). PLC and SCADA Software Control: via or in combination with N2,Air, O2 (Flowmeter or automation MFC) and agitation or nutrient addition pump or other actuators Temperature Pt-100 sensor in thermo well in top plate. PLC and SCADA Software Control: cooling and/or heating jacket via bioreactor wall or via internal heat exchanger, cooling via tap water or chilled water • Foam Height adjustable conductivity based foam and level sensor, High/Low foam sensors are also available. PLC and SCADA Software Control: Anti foam addition pump or other actuators. • Level Height adjustable conductivity based level sensor. PLC and SCADA Software Control: pump for liquid addition or removal • Pressure Pressure sensor top plate mounted. PLC and SCADA Software Control: modulated pressure valve, combined with air inlet, Flowmeters/MFC, agitation and other actuators • Weight Load cells and balances are available. PLC and SCADA Software Control: pump for liquid addition or removal • Probes and sensors Online Biomass probes, optical density sensors, CO2/O2/NH4/SO2 gas analyser, pCO2 sensor, conductivity, methanol/ethanol analyzers, Automatesamplers PLC and SCADA Software Control integrations, OPC 	1 No.	
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	<p>compliance.</p> <ul style="list-style-type: none">• Photo-Bioreactors Special accessories for photo syntetic and photo trophic microorganisms, variable LED light set and other .• Approval CE, ISO		
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Authorised Signatory with seal/stamp

Address:

Contact No.-

E_mail Id:

LIST OF DETAILS OF EQUIPMENTS FOR EARNEST MONEY

S. No.	Particulars/Name of Equipment	Number of Units	Estimated Cost (Rs.)	Earnest Money
1.	Inclined plate planter(Multi Crop Planter with Inclined plates/ Rotating discs)	01 (along with accessories)	2,50,000	12500/-
2.	Chisel plough / Sub-soiler	01 (along with accessories)	85,000/-	4250/-
3.	Tractor operated Rotary Mulcher (Tractor Mounted Straw Chopper cum Spreader)	01 (along with accessories)	1,50,000/-	7500/-
4.	Chopper and spreader (Tractor mounted Cotton Stalk Shredder / Tractor mounted Mobile Shredder)	01 (along with accessories)	2,50,000/-	12500/-
5.	Lawn mower (Tractor operated lawn mower / Tractor mounted straw chopper and spreader / Tractor operated Rotary Slasher)	01 (along with accessories)	1,20,000/-	6000/-
6.	Raised bed planter (Narrow bed with bed shaper arrangement)	01 (along with accessories)	2,50,000/-	12500/-
7.	Zero till ferti-seed drill	01 (along with accessories)	1,50,000/-	7500/-
8.	Multi-crop ridge/bed planter with bed shaper	01 (along with accessories)	2,50,000/-	12500/-
9.	Hot Air Oven	03 (along with accessories)	1,50,000/-	7500/-
10.	Stainless steel sample grinder (Wiley mill):	01 (along with accessories)	55,000/-	2750/-
11.	Power operated lawn mower (with petrol engine)	01 (along with accessories)	1,00,000/-	5000/-
12.	Power operated Brush Cutter (Grass cutter) - with petrol engine	01 (along with accessories)	1,00,000/-	5000/-
13.	Horizontal / Rotary Orbital shaker (power operated)	01 (along with accessories)	1,00,000/-	5000/-
14.	Hot plate	01 (along with accessories)	25,000/-	1250/-
15.	Water bath	01 (along with accessories)	30,000/-	1500/-
16.	Double distillation unit	01 (along with accessories)	50,000/-	2500/-
17.	Happy Seeder	01 (along with accessories)	1,75,000/-	8750/-
18.	Soil Penetrometer	01 (along with accessories)	2,50,000/-	12500/-
19.	Soil Auger kit / Tube Auger	01 (along with accessories)	1,00,000/-	5000/-
20.	SPAD Meter / SPAD Chlorophyll Meter	01 (along with accessories)	1,50,000/-	7500/-
21.	Digital Soil Thermometer (Microprocessor Based)	01 (along with accessories)	1,00,000/-	5000/-
22.	Parshall flume	01 (along with accessories)	25,000/-	1250/-

		accessories)		
23.	Electronic / Electromagnetic Water Meter	01 (along with accessories)	50,000/-	2500/-
24.	Mini Thresher (Pullman type Plot Thresher / Bundle thresher)	01 (along with accessories)	85,000/-	4250/-
25.	Refrigerator	01 (along with accessories)	50,000/-	2500/-
26.	Gel Documentation system	1No.	7,00000/-	35000/-
27.	Horizontal Gel Electrophoresis	1 No.	1,50,000/-	7500/-
28.	Ice Flaking Machine	1 No.	2,00,000/-	10000/-
29.	Automated Autoclave	01 (along with accessories)	2,00,000/-	10000/-
30.	BOD Incubator	02 (along with accessories)	1,50,000/-	7500/-
31.	Binocular Microscope with LCD screen and software for measurement and microphotography	01 (along with accessories)	2,50,000/-	12500/-
32.	Gel electrophoresis (Horizontal)	01 (along with accessories)	2,00,000/-	10000/-
33.	Laboratory Bioreactor (5 lit. capacity)	01 (along with accessories)	7,00,000/-	35000/-

Head of the Station

