Section 6: Schedule of Supply

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1. List of (Equipment) Goods and Related Services

Package No. G-14			
Package Name: G-14 Procurement of Lab Equipment RDTC Horticulture and Seed Technology			
Item No.	Description	Unit	Qty
1	Broad-fork	No.	3
2	Seed Bed Roller	No.	1
3	Snap-in dibbler for seed bed roller	Set	1
4	Row marker for Seed Bed roller	Pack	1
5	Row marker wheel	No.	1
6	Tilther	No.	1
7	Seed & Fertilizer Spreader	No.	1
8	Manual mulch layer	No.	1
9	Soil auger with bit	No.	1
10	Manual hole digger	No.	2
11	Nursery tray precision drop seeder	No.	2
12	Seed Germinator	No.	1
13	Precision Push Seeder	No.	1
14	Earthway Seeder	No.	1
15	Stirrup/Hula Hoe	No.	5
16	Paper Pot Transplanter	No.	1
17	Paper pot chains	Box	3
18	Manual weed puller	No.	3
19	Greenhouse inflater/blower kit	No.	2
20	Coolbot	No.	2
21	Tripod harvesting & pruning ladder	No.	2
22	Hydraulic lifting trolley	No.	1
23	Hydroponic system	Set	1
24	Carbon-dioxide controller	No.	1

25	Misting & Fogging system	No.	2
26	Tensiometer	No.	2
27	Substrate mixer	No.	1
28	Humidifier	No.	4
29	Incubation rack	No.	4
30	Power tiller	No.	2
31	Laminar Flow	No.	2
32	Magnetic stirrer	No.	2
33	Vibrating plate compactor	No.	1
34	Manual Earth Tamper	No.	3
35	Grain Moisture Meter	No.	2
36	Altimeter	No.	2
37	Clinometer	No.	2
38	High-Performance CAD/3D Workstation Desktop Computer	No.	20
39	Lawn Aerator	No.	1
40	EC and pH Meter	No.	1
41	Tree digger	No.	1
42	Chaff Cutter	No.	1
43	Mini Concrete Mixer	No.	1
44	Stereo microscope	No.	1
45	pH meters	No.	1
46	Weighing balances	No.	2
47	Aspirator/vacuum pump	No.	1
48	Digital colony counter	No.	3
49	Compound Light Microscope	No.	1
50	Micropipettes	Sets.	10
51	Vortex mixers	No.	2
52	UV-Vis Spectrophotometer	No.	2
53	Microbiological incubator	No.	2
54	High-performance liquid chromatography system	No.	1
55	Digital seed counter	No.	2

56	Seed precision divider	No.	2
57	Oven dryer	No.	2
58	Trinocular microscope	No.	2
59	Table-top Centrifuge	No.	2
60	Seed winnowing machine	No.	1

2. Delivery and Completion Schedule

The delivery period shall start as of the date of supply order (Equipment).

Item No.	Description	Location	Required Arrival Date of Goods or Completion Date for Related Services
1	Broad-fork	RDTC, Zhemgang	The goods should be delivered to RDTC-Zhemgang within 120 days from the date of supply order.
2	Seed Bed Roller		
3	Snap-in dibbler for seed bed roller		
4	Row marker for Seed Bed roller		
5	Row marker wheel		
6	Tilther		
7	Seed & Fertilizer Spreader		
8	Manual mulch layer		
9	Soil auger with bit		
10	Manual hole digger		
11	Nursery tray precision drop seeder		
12	Seed Germinator		
13	Precision Push Seeder		
14	Earthway Seeder		
15	Stirrup/Hula Hoe		
16	Paper Pot Transplanter		
17	Paper pot chains		
18	Manual weed puller		
19	Greenhouse inflater/blower kit		
20	Coolbot		
21	Tripod harvesting & pruning ladder		
22	Hydraulic lifting trolley		
23	Hydroponic system		
24	Carbon-dioxide controller		
25	Misting & Fogging system		

26	Tensiometer		
27	Substrate mixer		
28	Humidifier		
29	Incubation rack		
30	Power tiller		
31	Laminar Flow		
32	Magnetic stirrer		
33	Vibrating plate compactor		
34	Manual Earth Tamper		
35	Grain Moisture Meter		
36	Altimeter		
37	Clinometer		
38	High-Performance CAD/3D Workstation Desktop Computer		
39	Lawn Aerator		
40	EC and pH Meter		
41	Tree digger		
42	Chaff Cutter		
43	Mini Concrete Mixer		
44	Stereo microscope		
45	pH meters		
46	Weighing balances		
47	Aspirator/vacuum pump		
48	Digital colony counter		
49	Compound Light Microscope		
50	Micropipettes		
51	Vortex mixers		
52	UV-Vis Spectrophotometer		
53	Microbiological incubator		
54	High-performance liquid chromatography system		
55	Digital seed counter		

56	Seed precision divider		
57	Oven dryer		
58	Trinocular microscope		
59	Table-top Centrifuge		
60	Seed winnowing machine		

3. Technical Specifications for Equipment

1. Broad-fork

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			
Specification	Tines: Typically forged from 1/4-inch to thicker alloy steel or reclaimed rebar to resist bending under body weight. Seven (7) Tines; around 30-inch-wide; Crossbar / Frame: Built using strong rectangular or square structural steel tubing (often 1.5 to 2 inches wide) that doubles as a tread bar to step on. Handles: Made from thin-wall steel for lightweight durability or fiberglass. Minimum of 12 months warranty.  		

2. Seed Bed Roller

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Country of origin			
Specification	24 to 30-inch width; Made of heavy-duty lobster trap wire mesh (with a 1-inch square pattern) wrapped around cylindrical metal drums, featuring zinc-coated steel frames & powder-coated links with Snap in Dibble & Row Markers Purpose: of Seed bed roller is to level, firm, and smooth cultivated soil before planting or transplanting. Minimum of 12 months warranty.  		

3. Snap-in dibbler for seed bed roller

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Purpose of snap in dibbler (interchangeable accessory to be fitted on seed bed roller to create precise, evenly spaced holes in the soil for transplanting seedlings or planting bulbs/large seeds) 20 total dibbles. Minimum of 12 months warranty. 		

4. Row marker for Seed Bed roller

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	6 piece equals to 1 pack Material: Durable 5/16-inch polyethylene tubing Feature: Plastic quick disconnects snap directly onto the 1-inch wire mesh of the roller. Function: They mark evenly spaced parallel lines in the soil while you roll and compact the bed for direct seeding. Minimum of 12 months warranty. 		

5. Row marker wheel

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Lays out 4 rows at 6" spacing with 6" between rows; made of durable steel/cast iron Function: specialized gardening or farming tool used to score parallel lines or punch uniform spacing intervals into soil or seedbeds for accurate planting. Minimum of 12 months warranty. 		

6. Tilther

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Working Width: 15 inches, perfectly sized for two passes on standard 30-inch garden beds. Working Depth: 1/2 inch to 2 inches of the soil surface. Weight: Approximately 10 kgs Materials: Aluminum alloy castings, heavy-duty steel Drive System: Direct gear drive fitted with chargeable Drill (18V or 20V battery-powered drill); Function: mix compost and soil amendments into the top 1 to 2 inches of soil. Minimum of 12 months warranty.  		

7. Seed & Fertilizer Spreader

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Capacity: Holds enough product to cover up to 5,000 sq. ft. Spread Pattern: Broadcast spreading with a side-blocking Edge Guard lever to keep product off non-lawn areas. Rate Dial: Features an adjustable rate control dial. Application Pace: Recommended walking speed about 4 ft. per second while squeezing the trigger Function: versatile tool used to distribute grass seed, fertilizers and granular pesticides evenly across lawns, gardens, or agricultural fields. Minimum of 12 months warranty. 		

8. Manual mulch layer

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Laying out Black plastic mulch Main Frame: Built from 2 mm thick mild steel hollow square bars that adjust from 70 cm to 180 cm wide. Mulch Roll Holder: A rotating spindle or cylinder made of metal or low-friction Teflon to hold rolls of plastic or biodegradable mulch up to 5 feet wide. Press/Transport Wheels: Rubber or metal wheels that roll on the edges of the plastic to create tension and drive the rotation. Minimum of 12 months warranty. 		

9. Soil auger with bit

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	41.5 cc 2-stroke petrol engine delivering 1.47 kW output power. Weight: Approximately 10 kg (without the auger bit). Transmission: Fully sealed design, making it safe to operate in wet environments. Minimum of 12 months warranty. 		

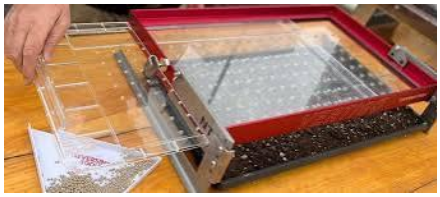
10. Manual hole digger

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Handle Length: around 50 inches to reduce bending, made of fiberglass, or steel-reinforced composite. Blade/Head Material: Heavy-duty carbon steel or forged steel. Blade Width/Spread: Approx. 5 to 6 inches across per blade, with a clamshell or scissor-hinged action. Hole Diameter Capacity: Approx 4 to 6 inches wide, reaching depths up to 2.5 to 3 feet efficiently in loose or cultivable soil. Types: Clamshell/hinged (pincer style for lifting loose dirt). Minimum of 12 months warranty. 		

11. Nursery tray precision drop seeder

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Direct vertical release: Gravity pull through bottom-aligned drop holes or orifices directly onto the soil or tray below. Adjustable shutters: Sliding mechanisms or shutters control the size of the drop holes to accommodate various seed sizes like grass, cover crops, or lettuce. Minimum of 12 months warranty.  		

12. Seed Germinator

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Stainless steel; single phase; Around 550 x 900 x 600 mm dimension Maintains steady temperature between 21°C and 32°C and a relative humidity of 80% to 85% or higher Use: Is a warm, enclosed, high-humidity environment designed to rapidly and uniformly sprout seeds. Minimum of 12 months warranty. 		

13. Precision Push Seeder

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Single Row manual push model Interchangeable Rollers & Sprockets: Uses specific seed rollers (matched to seed size via letter codes) and gear sprockets (to control in-row drop rates/spacing). Minimum of 12 months warranty. 		

14. Earthway Seeder

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Weight: 5 kg Dimensions: approx. 76 cm x 26 cm x 85 cm Materials: Rustproof, rugged aircraft aluminium frame and durable plastic/metal components Chassis Travel: 36 inches of travel per single seed plate revolution Row Marker: 30-inch adjustable metal row marker Adjustable Ground Opener: Tool-free depth adjustment via a wedge-shaped plow with clear metric graduations. Minimum of 12 months warranty. 		

15. Stirrup/Hula Hoe

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Double-sided oscillating blade; high-tempered spring steel to stay sharp. Functions primarily as a fast, surface-level weeding tool that slices weed roots just beneath the soil. Minimum of 12 months warranty. 		

16. Paper Pot Transplanter

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Weight: 10 to 15 kg Dimensions: 340 mm (W) × 990 mm (L main frame approx) / Adjustable length: 1,995 to 2,063 mm Width: 315 mm Height (Adjustable): 879 to 1,056 mm Operation: Manual Compatibility: Works with all standard paper chain pot spacings (2-inch, 4-inch, and 6-inch) Standard Furrow Depth: 53 mm Main Frame & Handle: Fabricated from full steel construction featuring heavy-duty, commercial-grade welds instead of screws and nuts at critical joints to handle tension and rugged field environments. Minimum of 12 months warranty. 		

17. Paper pot chains

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Cells per Sheet (Standard): 264 interconnected honeycomb-shaped cells. Cell Dimensions: 3.0 cm in diameter and 3.0 cm in height/depth. Material: Certified organic, biodegradable craft paper held together with water-soluble glue. Compatibility: Designed for use with manual Paperpot Transplanters and specialized nursery flats. 150 paper chains (sheets) per carton/box. Minimum of 12 months warranty.  			

18. Manual weed puller

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	No written technical specification was supplied. Confirm the minimum requirements before procurement. Minimum of 12 months warranty. 		

19. Greenhouse inflater/blower kit

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	A greenhouse inflator (or inflation blower fan) functions by continuously pumping outside air between two layers of polyethylene plastic film to create a pressurized, insulating air cushion Air Flow Capacity: Large structures (over 1,500 sq. ft. or longer than 60 ft.) Electrical Ratings: single phase Amperage Draw: Typically ranges from 0.15A to 0.42A (approx.). Minimum of 12 months warranty.  		

20. Coolbot

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Function: Wi-Fi-enabled temperature controller designed to turn a standard, digitally controlled window or mini-split air conditioner into an economical walk-in cooler for cheaper storage of flowers and horticultural crops Temperature Setting Range: 0°C to 18°C. Power Requirements: 5V DC, <15W, Class 2. Dimensions: 6" L x 3.4" W x 1.1" Connections: 2.5mm jacks for sensors and heater cable; RJ11 port for Wi-Fi Jumper module. Minimum of 12 months warranty. 		

21. Tripod harvesting & pruning ladder

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Three-Point Contact: Three legs for all feet firmly touch the ground on uneven earth, slopes, or steps without rocking like a wobbly four-legged table. Adjustable Legs: One or more independent adjustable legs for users to lengthen or shorten individual sides to match steep inclines or dips. Single Rear Leg: The narrow, single back leg slips deep into thick hedges, tight corners, or branches to allow working close to the project without overreaching. Minimum of 12 months warranty. 		

22. Hydraulic lifting trolley

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	1 ton, mild steel, manual, height 1500 mm; 4 wheels. Minimum of 12 months warranty. 		

23. Hydroponic system

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Deep Water Culture (DWC) / Floating Raft System. Aeration and Plumbing Equipment Commercial Air Pumps: High-output air pumps or compressed oxygen systems to maintain dissolved oxygen levels. Air Stones / Diffusers: Heavy-duty stones or micro-pore tubing placed at the bottom of the basin to distribute oxygen evenly. Airline Tubing & Check Valves: Silicone or poly tubing with one-way check valves to connect pumps safely and prevent backflow. Minimum of 12 months warranty. 		

24. Carbon-dioxide controller

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Non-Dispersive Infrared (NDIR) sensor and an IP54-rated or moisture-tolerant enclosure. Minimum of 12 months warranty. 		

25. Misting & Fogging system

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	High-Pressure Pump Module Operating Pressure Range: 1,000 PSI to 2,000 PSI (70 bar to 140 bar). Pump Mechanics: Continuous-duty industrial triplex plunger pump assemblies Motor Options: Belt-driven single-phase. Safety Mechanisms: Low-water cut-off switch, thermal overload protection, and automatic pressure relief/bypass valves to protect against dry runs. Fog Atomizing Nozzles. Orifice Options: Precision-crafted Stainless Steel (SS 304/316) or Ceramic orifices. Minimum of 12 months warranty.  		

26. Tensiometer

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Porous ceramic cup: Placed at the bottom of the tube; it lets water pass through while blocking air. Water-filled tube: A sealed body filled with water that connects the ceramic tip to the top gauge. Dial gauge: A mechanical pressure gauge at the top that measures the vacuum created inside the tube. Operation: As soil dries, it pulls water out through the ceramic tip. Minimum of 12 months warranty. 		

27. Substrate mixer

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Single Phase; 300-500 litre capacity; size: 1500x600x1500 mm; weight: 150-200 kg; Mild SS. Minimum of 12 months warranty. 		

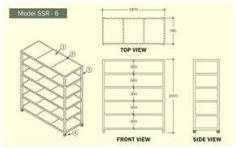
28. Humidifier

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Humidification Capacity: Typically ranges from 3 L/h to 6 L/h (approx. 3,000 to 6,000 ml/h). Mist Particle Size: 5 to 10 microns, capable of boosting room relative humidity (RH) above 90%. Effective Coverage Area: Approx. 100 -150 sq. meters.Air Delivery / Throw: Built-in fan forces the atomized mist upward and outward through the angled outlet duct over several meters. Water Feed: Can be connected directly to a tap/purified water line via an automatic float valve. Minimum of 12 months warranty. 		

29. Incubation rack

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Height: 1.8 to 2.2 m, typically designed with 5 to 7 vertical tiers for easy reach without ladders. Depth: Single-sided access: 45 cm to 5 cm (source range; confirm) — fits 2 bags deep. Double-sided access: 80 cm to 100 cm — fits 4 bags deep (2 per side). Length: Standard modular units are 1.2 m, 1.5 m, or 2.0 m long. Tier Clearance (Vertical Shelf Gap): 25 cm to 35 cm per level. Minimum of 12 months warranty. 		

30. Power tiller

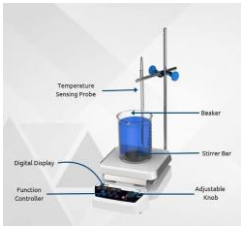
Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			
Specification	Engine type: Single-cylinder diesel. Power Approx.: 12.5 HP. Air cooling. Double-belt pulley. Together with tiller, rotavator and plough. Minimum of 12 months warranty. 		

31. Laminar Flow

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			
Specification	Air Cleanliness: Class 100 / ISO Class 5 standard (particles ≥ 0.5 µm filtered out) Air Velocity: 0.45 ± 0.05 m/s Filtration System: Pre-Filter: 95% efficiency for particles down to 5 microns HEPA Filter: 99.99% to 99.997% efficiency for particles down to 0.3 microns Cabinet Construction: SS 304 or SS 316 grade; stainless steel working surface and frame Front Sash / Door: Toughened/tempered glass or clear acrylic (manual sliding) Lighting & Sterilization: Fluorescent or LED lighting (≥ 300 Lux) Germicidal UV lamp (15W / 30W). Minimum of 12 months warranty. 		

32. Magnetic stirrer

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Country of origin			
Specification	Stirring Speed: 100 to 1,500 RPM Heating Temperature: Ambient to 280°C Stirring Capacity: 3L to 5L Top Plate Diameter/Size: 135 mm circular or square plate Plate Material: Ceramic-coated aluminium or stainless steel Temperature Control Accuracy: ±1°C (with internal plate sensor) or ±0.5°C (when using an external PT1000 probe) Safety Cut-off: Fixed hardware safety circuit that cuts power if the internal plate temperature exceeds approximately 320°C to 360°C. Minimum of 12 months warranty. 		

33. Vibrating plate compactor

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Engine: Premium Commercial Grade GX160 (5.5 HP / 163cc) 4-Stroke OHV Engine. Centrifugal Compaction Force: 20 kN (approx. 4,500 lbf impact force) @ 5,600 VPM. Base Plate: High-strength, wear-resistant ductile iron self-cleaning base plate (~530mm x 500mm / 21" x 20"). Minimum of 12 months warranty. 		

34. Manual Earth Tamper

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Construction: Commercial-grade solid forged steel plate with heavy-duty tubular steel shaft. Base Plate Size: 10" x 10" (250mm x 250mm) x 3/8" thick solid square steel base face. Head Weight: 15 lbs (~6.8 kg) heavy-gravity head for maximum impact energy per strike. Handle & Grip: 48-inch steel shaft with welded reinforced corner gussets and non-slip ergonomic rubberized cushion grip. Finish: Corrosion-resistant powder-coated finish. Minimum of 12 months warranty. 		

35. Grain Moisture Meter

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	A portable, handheld tester designed for rapid moisture analysis of various agricultural seeds and grains. Accuracy: ±0.5%. Repeatability (Repeat Error): 0.2%. Measuring Time: Less than 10 seconds. Operating Temperature: 0 to 40°C. Power Supply: 9V Battery (6F22) with an automatic 3-minute shutdown feature to conserve energy. Calibration: Features automatic temperature compensation and multi-point calibration. Minimum of 12 months warranty. 		

36. Altimeter

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Analog; altitude range: 0-5000 m; Rugged metal casing with lanyard; weight: 50-100 gm; Operating principle: mechanical aneroid barometer. Minimum of 12 months warranty. 		

37. Clinometer

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			
Specification	Dimensions: 52 x 77 x 15 mm Weight: 94 g Housing Material: Anodized aluminum / Acrylic glass optics Measurement Scales: Slope in degrees (0–90° / 0–360°) and percentage (%) Operating Temperature: -30°C to +60°C (-22°F to +140°F). Minimum of 12 months warranty. 		

38. High-Performance CAD/3D Workstation Desktop Computer

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			
Specification	Form Factor: Mid-Tower Workstation / PC Processor (CPU): Intel Core i7 (13th/14th Gen, 16/20 Cores, up to 5.4 GHz) or AMD Ryzen 7 7700X Motherboard: PCIe 4.0/5.0 support, Wi-Fi 6E + Bluetooth 5.2 Memory (RAM): 32 GB DDR5 5600MHz (2x16GB dual-channel configuration) Dedicated Graphics (GPU): NVIDIA GeForce RTX 4070 (12 GB GDDR6X VRAM minimum) (Required for Lumion 2026 real-time rendering & AutoCAD 2026 3D engine) Storage: 1 TB M.2 NVMe PCIe 4.0 SSD (Read speed ≥ 5000 MB/s) Power Supply: 750W 80+ Gold Certified PSU Cooling: High-efficiency CPU. Minimum warranty of 3 years with on-site support. 		

39. Lawn Aerator

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Country of origin			
Specification	Petrol, mild steel, working width 25-30 inch; core type-spike,12 tines, petrol, penetration depth:3 inch Source describes the type as both core and spike; confirm the required aerator type. Minimum of 12 months warranty. 		

40. EC and pH Meter

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Accurate & Reliable Performance – Up to ±0.01 pH, ±1% F.S., and ±0.5 °C accuracy with 3-point Auto Calibration and Auto Temperature Compensation (0–50 °C) Large Dual-Display Screen Complete parameter setting options – including TDS conversion factor (0.4 to 1.0), temperature compensation factor, auto. reading hold, backlight time, auto. power off time. Minimum of 12 months warranty. 		

41. Tree digger

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Engine Type: 52cc single-cylinder, 2-stroke, air-cooled gasoline engine. Maximum Power Output: 1.9 kW / 1900 Watts. Maximum Speed: 6500 RPM to 7000 RPM. Fuel Mix Ratio: 25:1 or 40:1 gasoline-to-2-stroke-oil mixture. Fuel Tank Capacity: Roughly 1.5 Liters. Starting System: Hand-pull recoil starter with primer bulb. Minimum of 12 months warranty. 		

42. Chaff Cutter

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			
Specification	Capacity 500-1000 kg/hour Heavy duty steel 5 rotary blades; single phase 3 hp. Minimum of 12 months warranty. 		

43. Mini Concrete Mixer

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			
Specification	Capacity: 250 litre;3 hp; tilting with wheel; single phase. Minimum of 12 months warranty. 		

44. Stereo microscope

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Binocular stereo zoom microscope with 10×–40× magnification, WF10× wide-field eyepieces, 45° inclined and 360° rotatable viewing head, adjustable interpupillary distance of 55–75 mm, diopter adjustment, working distance ≥75 mm, 1×–4× zoom objective, LED incident and transmitted illumination with adjustable intensity, mechanical focusing system. Minimum of 12 months warranty. 		

45. pH meters

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Benchtop digital laboratory pH meter with combination pH electrode. pH range: 0.00–14.00 pH or wider; resolution 0.01 pH or better. Accuracy: ±0.01 pH or better; repeatability ±0.01 pH or better. Temperature: Automatic temperature compensation with temperature probe; range approximately 0–100°C. Calibration: 2–3 point automatic/manual calibration using standard buffers pH 4.01, 7.00 and 10.01. Minimum of 12 months warranty. 		

46. Weighing balances

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Analytical laboratory balance with draft shield. Capacity: Minimum 200 g; readability 0.0001 g (0.1 mg) or better. Repeatability: ≤0.0001 g; linearity: approximately ±0.0002 g or better. Pan: Stainless-steel weighing pan; draft shield with sliding doors. Functions: Tare/zero, percentage weighing, parts counting and multiple weighing units. Calibration: Internal or external calibration with overload protection and level indicator. Minimum of 12 months warranty. 		

47. Aspirator/vacuum pump

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Laboratory diaphragm or oil-free vacuum pump/aspirator suitable for filtration and general laboratory applications. Vacuum: Ultimate vacuum approximately ≤100 mbar (or equivalent suction performance) for laboratory filtration. Flow rate: Minimum 20 L/min preferred for routine laboratory work. Construction: Chemical-resistant pump head and wetted components; oil-free operation preferred. Minimum of 12 months warranty. 		

48. Digital colony counter

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type : digital Counting range :0–999 or better Petri dish size :Standard 90 mm, preferably up to 120 mm Display :Digital LED display Illumination :Glare-free LED Magnification :≥2× magnification Counting :Electronic counting with audible confirmation Power :220–240 V AC, 50 Hz. Minimum of 12 months warranty. 		

49. Compound Light Microscope

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type : Binocular compound light microscope Eyepieces :10× wide-field Objectives :4×, 10×, 40× and 100× oil immersion Magnification :40×–1000× Stage :Mechanical stage Condenser :Abbe condenser with iris diaphragm Illumination :LED with adjustable intensity Focusing :Coaxial coarse and fine focus Power :220–240 V AC, 50 Hz Accessories :Immersion oil, dust cover and cleaning kit. Minimum of 12 months warranty. 		

50. Micropipettes

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Adjustable-volume, single-channel mechanical laboratory micropipettes, autoclavable . Ranges: Minimum set covering 0.1–10 µL, 10–100 µL and 100–1000 µL. Accuracy: Conform to ISO 8655 or equivalent; high precision with calibration certificate. Volume setting: Four-digit or equivalent clear volume display with secure adjustment mechanism. Pipette shaft: Chemical-resistant and autoclavable components; replaceable tip cone. Minimum of 12 months warranty. 		

51. Vortex mixers

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Speed: from 2,500–3,000 rpm or higher. Modes: electronic speed control. Construction: Compact, chemically resistant housing with non-slip base. Capacity: Suitable for microcentrifuge tubes, test tubes and small reagent bottles; interchangeable cup/head preferred. Power: single phase and low-noise operation. Minimum of 12 months warranty. 		

52. UV-Vis Spectrophotometer

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Benchtop high-quality single-beam Wavelength range: Approximately 190–1100 nm or wider. Spectral bandwidth: ≤2 nm preferred; wavelength accuracy ±1 nm or better. Photometric range: At least -0.3 to 3.0 Abs with suitable photometric accuracy. Light source: Deuterium lamp for UV range and tungsten-halogen lamp for visible range, with automatic lamp switching. Sample holder: Standard 10 mm cuvette holder with compatible quartz and glass/plastic cuvettes. Minimum of 12 months warranty. 		

53. Microbiological incubator

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Digital, benchtop/vertical type with approx.150 L capacity, temperature range ambient +5°C to 60°C, accuracy ±0.5°C or better, microprocessor/PID temperature control, stainless-steel inner chamber, 2–3 adjustable shelves, double-door with glass inner door, over-temperature protection and audible alarm, digital display. Minimum of 12 months warranty. 		

54. High-performance liquid chromatography system

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Modular analytical HPLC system Pump: High-pressure isocratic/quaternary pump with flow range approximately 0.001–10 mL/min and stable flow. Pressure: System operating pressure at least 400 bar or equivalent for standard analytical HPLC. Detector: UV-Vis detector, wavelength range approximately 190–700 nm or wider. Autosampler: Automatic injector/autosampler with suitable vial capacity and low carryover. Minimum of 12 months warranty. 		

55. Digital seed counter

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Counting range: Adjustable for small to medium-sized seeds; high-speed counting with automatic batch stop. Accuracy: Minimum 99% counting accuracy for uniform seed lots under recommended operating conditions. Feed system: Vibratory/controlled seed feeding system with interchangeable channels or guides. Display: Digital count display with batch setting and total count functions. Construction: Stainless-steel or food/laboratory-grade contact surfaces, easy to clean. Minimum of 12 months warranty. 		

56. Seed precision divider

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Laboratory seed sample divider for obtaining representative and reproducible seed subsamples. Division ratio: Suitable for uniform division into at least 8–16 equal portions depending on design. Construction: Stainless steel or anodized aluminum, corrosion resistant and easy to clean. Capacity: Suitable for routine seed-testing sample quantities, approximately 0.5–2 kg depending on model. Minimum of 12 months warranty. 		

57. Oven dryer

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Laboratory hot-air drying oven with forced-air circulation. Temperature range: Ambient +10°C to at least 200°C; temperature stability approximately ±2°C or better. Capacity: Minimum 100 L chamber volume preferred for routine laboratory samples. Control: Digital PID temperature controller with timer and over-temperature safety. Shelves: Minimum 2 adjustable stainless-steel shelves. Minimum of 12 months warranty. 		

58. Trinocular microscope

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Trinocular compound laboratory microscope with digital imaging system. Optical system: Infinity-corrected, plan/achromatic objectives 4×, 10×, 40× and 100× oil immersion. Total magnification: approximately 40×–1000× or higher; mechanical stage with fine/coarse focusing. Illumination: LED transmitted light with adjustable intensity and condenser. Camera: Minimum 5 MP CMOS, USB 3.0 or equivalent, with image/video capture software. Minimum of 12 months warranty. 		

59. Table-top Centrifuge

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Type: Benchtop laboratory centrifuge with digital speed/time control. Capacity: Minimum 12 × 15/50 mL tubes or equivalent rotor capacity. Speed: Maximum speed at least 4,000–6,000 rpm; adjustable speed with RCF display/preference. Timer: 1–99 minutes or continuous operation. Rotor: Corrosion-resistant rotor with balanced tube positions and interchangeable/adaptor options. Safety: Lid lock, imbalance detection and automatic stop on lid opening. Minimum of 12 months warranty. 		

60. Seed winnowing machine

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Make			
Model			
Country of origin			

Description	Minimum Requirement	Bidder's Response (Yes/No)	If No Bidder's Comments
Specification	Automatic winnowing machine with a capacity of approximately 500 kg/hr, high-efficiency operation, free-standing installation, stainless-steel construction. Minimum of 12 months warranty. 		

Note:

a. The photos of the items are provided just for clarity purpose and no particular brand or model is preferred.
b. The bidders are requested to submit the brochures/catalogues containing technical specifications and model numbers of the items. Any item without catalogues with the technical specification and model number of the item would form enough basis for rejection of the item.

4. Drawings