

**ASSAM SCIENCE TECHNOLOGY AND ENVIRONMENT OUNCIL  
BIGYAN BHAWAN, G.S. ROAD, GUWAHATI - 781005**

**Name of the work :** Construction & Commissioning of High Technology Orchidarium

**Area :** 150 sq. m.

**Work site :** Madan Kamdev, near Baihata Chariali, Kamrup, Assam

**TENDER PAPER**

Items	Specification	Quantity	Quoted amount in Rs.
<b>1. Super Structure</b>	<p>All Structure, Rafters, Perlins, Trusses 2mm thick, hot dip galvanized and design as per ISI standards.</p> <p><u>Specification :</u> <i>Hot dip galvanized Steel Structure: Galvanized tubular structure or equivalent sections.</i></p> <p>Super Structure Module Aluminum anodized covering strip infra Structure Mainly GI iron pipe 47mm x 47mm ± 2mm thick and 38mm x 38mm ± 2mm thick. Fasteners: - All nuts &amp; bolts of high tensile strength &amp; galvanized.</p> <p><u>Door - 1 No.:</u> Size: 1.92 x 0.91m (normally 6'3" x 3') made of anodized aluminum with inbuilt lock system.</p> <p><u>Window - 6 Nos.:</u> 3' 6" x 1' 6", made of anodized aluminum sides &amp; polycarbonate sheet with lockable device.</p>	1 complete set	
<b>2. Lighting System</b>	a.) Photosynthetically Active Radiation Lamp, with Photosimulators/Electronic gear system for operating PAR tube lamp, (PACRa™). PACRa W 1.7 to 2.6/60 PACRa™ Lamps of DIN Germany made and IEC international.	15 Nos.	
	b.) Normal tube light: standard 4' with all fitting & accessories.	4 Nos.	
<b>3. Covering</b>	Polycarbonate sheet multi walled 6mm thick Lexan Brand, UV Stabilised with geeignet gaskets, Sides covered with 75% shade net.	1 Complete set	
<b>4. Control Units</b>	<p>HUMIDITY CONTROLLER, MICRO-PROCESSOR MONITORED ± 4%</p> <p>Specifications: RH in the range of ± 4%. Technical: Range 30% to 90%. Real RH ± 2%. ± 1 digit (at 45%), digital display control analogue. Powered Output up to 4.4 KW humidifier/dehumidifier. Input 220VAC (110VAC available on demand), phase-single. Ambient: 5° to 45°C, RH up to 95%. Size 10 x 30 x 20cm, Wt. 2 kg.</p>	1 set	
	<p>PHOTOPERIODIC SIMULATION SYSTEM: MICROPROCESSOR TIMER FOR PHOTOPERIODIC LIGHTS.</p> <p>Specifications: Executive: (Accuracy better than ± 1 sec/day). Switches ON/OFF lights at the set time despite power failures. Technical: Photoperiodic resolution setting in seconds. Powered output can directly drive up to 100 tube lights 40 W each. Power failure digital selector auto resets. Accuracy better than ± 1 sec., programmable. Input: 220 VAC (110 VAC available on demand), Phase-single. Ambient: 5° to 45°C, RH up to 85%, size 10 x 30 x 15cm, Wt. 2 kg.</p>	1 set	

<b>5. Shading arrangement</b>	Automatic motorized system for opening and closing of 50% shade net over the roof	Complete set	
<b>6. Mistig system</b>	Misting unit heavy duty Motor- 2HP Crompton with nozzles- imported, Single Phase screen filter 20 cubic meter, Tank of 1000 ltr.-Syntax, Main pipe 32mm of PRINCE, Sub main pipe 16mm LLDP, RH range up to 90%.	Complete set	
<b>7. Benching System</b>	Bench, Size: 9'L x 4'W x 2'H. G.I. rust resisting benching with movable top. Loading capacity up to 0.5 ton (500 kgs.)	25 Nos.	
<b>8. Electrical Fittings</b>	MCB, ELCB, Residual Current Devices (RCDS) and Merlin Gerin Schlendier. All ISI wires of copper and desired load and imported switches and standby extra switches. Electric line and PVC piping underground Work, materials and accessories must be of 'A' grade.	Complete set	
<b>9. Civil work</b>	(A) Jungle Cleaning, surface dressing of 150 sq.m., earth filling and compacting of 45 cu. m.  Foundation Wall: Wide Based 9" below earth's surface, 9" above earth's surface, as kick-board 9" wide. Frame base block height 2'.  (B) Pathway- (i) Inside Orchidarium: 1 m wide in the centre runs lengthwise. With 4" thick standard bricks at the bottom, 6" CC on bricks, ½ to 1" thick cemented, rest of the floor as it is. (ii) Outside Orchidarium: Brick soling with 6" CC – 15 sq. m.	Complete	
<b>10. In house water Supply System</b>	One wash-basin, plumbing polymer pipes, including an Aluminium ladder, working table, stool and all necessary items required for Hi-Tech Orchidarium, etc. All fittings of ISI or equivalent material.	Complete	
<b>11. Other Cost</b>	Site delivery charges	Complete	
Total			
+ Applicable Taxes (T.D.S. & 13.5% VAT)			
<b>Grand Total</b>			

**N.B.** The work is turnkey basis and rates should be quoted including materials, delivery charges & applicable taxes.

Signature with seal of the Bidder

Date: .....