

## Annexure I

“Hardware, Software, and Laboratory Equipment for Pollution Control & Energy Technology”

<b>Sl. No.</b>	<b>Description of the Equipment</b>	<b>Quantity</b>	<b>Tender Document Fee (Rupees)</b>
<b>Hardware items</b>			
1.	Intel Core™ Duo Processor E6300 2.66 GHz, 4MB L2Cache, 1066 MHz FSB, Intel 945 chipset mother board, 2GB DDR2, 533MHZ SDRAM, 80GB SATA HDD, 17" TFT Monitor, DVD Writer, ATX cabinet, FDD, optical mouse, keyboard, speakers)	06	100/-
2.	Scanner, 6400/ 3200dpi (for GIS) Umax 7350 or equivalent, 1Nos; with Bluetooth headset H300 (2 Nos); AA Battery charger (2 Nos); MMC -1GB card, (2 Nos), Memory Stick Micro M2 1 GB card (2 Nos) and Pen Drive (2 GB)	02	10/-
3.	Laser jet printer, B&W, (ML 2050 or equivalent)	03	10/-
4.	UPS with batteries 3KVA	01	10/-
5.	Computer tables, with swivel chairs <b>Computer Table:</b> Made up of sturdy – resistant, pest resistant and weather-resistant material with mica top, appropriate metallic reinforcements, with provisions for monitor, printer, CPU, key-board, and mouse; should be ergonomically designed for user comfort during long spells of continuous use; <b>Operator Chair:</b> Ergonomically designed computer operator chairs, with cushioned seat and back, hand rests, rollers at the bottom, and swivel	06 sets	10/-
<b>Software items</b>			
6.	a) Arc View 9.2, (main body) ESRI	01	25/-
	b) Mathematica 5.2, Wolfram Research (Single user node locked license for academic institutions)	01	10/-
	c) Microsoft Visual Studio 2005 profession edition with MSDN professional subscription	01	10/-
	d) The Ultimate Combo 2005	01	10/-
	e) Adobe Web Bundle, Adobe	01	10/-
	f) Robo Help Office Pro, Adobe	01	10/-

<b>Spatial Data (Satellite Imageries from NRSA)</b>			
7.	<p>IKONOS (NRSA) imagery for the Pondicherry region for the years 2001 and 2005.</p> <p>Merged product of 1 meter spatial resolution</p> <p>Selected area of coverage Approx. 120 sq km (for each of the two years), certified by NRSA</p>	01 set	250/-
<b>Laboratory equipment</b>			
8.	<p><b>COD digestion apparatus</b></p> <p>For 15 samples or more heated at 150°C</p> <p>Spectra lab Model No. 2015D or equivalent</p>	01	10/-
9.	<p><b>Digital Lux meter</b></p> <p>Range: 0 – 200000 lux, Operating temperature: 0° - 50° C</p>	01	10/-
10.	<p><b>Handheld thermocouple thermometer with probe</b></p> <p><b>Thermometer:</b> Temperature range: -10 to 200 °C; Accuracy: ± 1°, 5 digit LCD, 0.1 to 1°C resolution, with heavy duty case</p> <p><b>Probe:</b> Stainless steel, pistol grip, length 24" to 36"</p>	06	10/-
11.	<p><b>Peristaltic pumps (Microprocessor based)</b></p> <p>a) Flow rate capacity: 20 ml/ hr to 60 ltrs/ hr.</p> <p>MICLINS, Model No. PP-60-EX or equivalent</p>	02	25/-
	<p>b) Flow rate capacity: 10 ltrs/ hr to 100 ltrs/ hr.</p> <p>MICLINS, Model No. VSP-100 or equivalent,</p>	02	25/-
12.	<p><b>Gas flow meter</b></p> <p>Flow rate range (ltr/hr): 0.5 to 135</p> <p>"INSERF" Wet type or equivalent</p>	04	10/-
13.	<p><b>Split Air conditioners</b></p> <p>2 Tons, with time-delay stabilizers</p>	03	25/-
14.	<p><b>Refrigerator</b></p> <p>220 litres with double doors</p> <p>"Godrej" or equivalent</p>	02	10/-
15.	<p><b>LCD projector</b></p> <p>Resolution: XGA (1024x768); Brightness: 2000 <b>ANSI Lumens</b>; Contrast: 400:1; Color reproduction: 16.77 million colors; Projection Lens Type: <b>Manual</b>: Focus &amp; 1.2xOptical zoom; Speaker: 1 Watt Monaural <b>with</b> password protection</p> <p>EPSON; Model no. EMP – X3 or equivalent</p>	01	10/-

16.	<b>Fibre glass reactors</b> Wall thickness at least 2mm, dimension based on the reactor design; Meena fibre glass, or equivalent	08	10/-
17.	<b>Servo controlled stabilizers</b> 5.0 KVA Servo Stabilizer s 1ph-1ph, (160V-260V) range, speed of correction +/- 70V/ sec, power loss of max 2%; without waveform distortion, with automatic cut-off and electronic sensor monitoring Numeric or equivalent	03	10/-
18.	<b>Reactor fabrication items</b> <b>a) Glass columns</b> Wall thickness and dia 1.8/ 80mm; 1.8/ 55mm; 1.8/ 25mm; 1.8/ 18mm; 1.5/ 10mm Borosil glass, each of 5 ft length	20	10/-
	<b>b) Glass rods</b> <b>Outer dia 10 mm, Borosil glass, each of 5 ft length</b>	20	10/-
	<b>c) Aluminium sheets</b> 21 sq. ft.; 28 mm gauge thickness	25	10/-
19.	<b>Rotisserie–motorized Microwave oven</b> 30L, STS interiors, Turn table 324 mm, Grill power 1200W, (LG8083 MLR or equivalent)	01	10/-
20.	<b>Microprocessor controlled Platform scale/ table top balance</b> a) 100/ 300 kg capacity, +/- 20/50g, Stainless steel platform size 550x600mm ; 20g divisions; portable with wheels and handle ; LCD/ LED display; battery backup option; Overload and shock load protection; 100% subtractive tarring range; audio-video overload indication - 1 No b) 1/10 kg capacity, +/- 0.5/1 g, Stainless weighing pan; LCD/ LED display; battery backup option; Overload and shock load protection; 100% subtractive tarring range; audio-video overload indication; Auto off function - 1 No	01 set	10/-
21.	<b>Digital camera</b> At least 5 mega pixel, maximum resolution 2592x1944, wide & tele zoom, digital zoom 4x, Auto & manual focus, 2 or 10 sec self timer, with 1.8" LCD viewfinder, USB port, with 1GB SD/ MMC card (Canon PowerShot A 530 or equivalent)	01	10/-