

## Appendix-I

Sr. No.	Name of the item with Specification	Qty.
1	<p><b>High temperature Electric Muffle Furnace Furnace (900°C) with computer interface</b></p> <ol style="list-style-type: none"> <li>1. Furnace Type: <b>Horizontal (front mounted)</b> Electric muffle furnace.</li> <li>2. Maximum Temperature: <b>900°C</b>.</li> <li>3. Chamber size: <b>8" x 8"</b> rectangular chamber with approximate <b>15-20" length</b>, high quality ceramic wool board insulation, <b>stainless steel</b> external body with double walled construction.</li> <li>4. Temperature measurement: <b>K type</b> thermocouple (one Steel and one ceramic).</li> <li>5. Muffle should be easy to detach.</li> <li>6. Working temperature: Continuous 6 hours maintain the temperature.</li> <li>7. Outer body temperature should not exceed 60°C temperature.</li> <li>8. 15 mm diameter hole at back (For inert gas supply) and 25 mm diameter hole at front with cover.</li> <li>9. PID controller having Computer interface.</li> <li>10. <b>Temperature accuracy</b> of atleast 1%.</li> <li>11. <b>Temperature vs time profile</b> controller.</li> <li>12. RS232/RS485 digital communication protocol with software.</li> <li>13. <b>2 programs</b> of 8 steps each. Profile should be programmed independent of each other; each profile should have parameters for linking.</li> </ol> <p><b>Accessories</b></p> <ol style="list-style-type: none"> <li>1. Thermocouple qty: 4 Nos (Two steel and Two ceramic coated).</li> <li>2. Extra muffle with wound heating element: 1 Nos.</li> </ol>	02 No.