

**Establishment of Gems lab equipment and Tools.**

| <b>S.No</b> | <b>Name of items/Specification</b>  | <b>Qty</b> |
|-------------|---|------------|
| <b>01</b>   | <b>Refractometer with R.I. liquid.</b><br>for identification of gemstones.<br>RI range= 1.35-1.82, require external light source,<br>weight=310gm, Dimension=70*35*120mm,<br>R.I liquid important when using refractometer 10ml bottle.   | <b>1</b>   |
| <b>02</b>   | <b>Diffraction grating spectroscope.</b><br>Weight 33gm<br>Dimension=55*12*12mm   | <b>01</b>  |
| <b>03</b>   | <b>Folding Photography Booth.</b><br>Black and shite background with USB power cable, three<br>color mode option (long waveuv, white, yellow)<br>Weight= 260gm<br>Dimension=240*240*220mm   | <b>01</b>  |
| <b>04</b>   | <b>Gemological Trinocular Microscope.</b><br>Bright and dark field illuminaltion,50xmagkification,<br>objective lenses 0.75x-5x zoom, zoom ration6.7:1, eye<br>piece of 10xeye piece, FN-23 head tilts 0 to 45 degree,<br>adjustments from 48 to 75mm, base rotate 360 degrees,<br>trinocular part for camera. Total magnification; 7.5x to<br>50x, illumination 6v, 30w, intensity control halogen, bright<br>field dark field illumination, adjustments gooseneck 7w<br>fluorescent incandescent illumination. Main power supply<br>100v to 240v. | <b>01</b>  |
| <b>05</b>   | <b>Printer+ laminator.</b><br>Stylus photo T 60 printer photo 10x15 cm/4x6 inch,<br>approx. 11 sec per photo, connectivity USB 2.0 print<br>quality 5760x1440dpi ( with vsdt) weight 1.3kg print speed<br>black, black text memo A4 approx. 38ppm(draft), A3-A4<br>hot laminator 2 rullers 250mm,/min laminating speed.   | <b>01</b>  |
| <b>06</b>   | <b>Precision Scale.</b><br>PCT 251 premium class ct scale dimension 5.5*3.0*1. Inch,<br>capacity 250ct with 0.005ct readability, g,dwt,oz,ozt and<br>gn,weight 1 pound.   | <b>01</b>  |

**Casting & Molding Unit**

| <b>S.No</b> | <b>Name of items/Specification</b>   | <b>Qty</b> |
|-------------|--|------------|
| <b>01</b>   | <b>Jewelry Casting Machine (Vacuum Unite,</b><br>220V, Single phase.<br>Cashing Vacuum chamber,<br>Debbllizing chamber with acrylic lid,<br>High Vacuum power for complete gold, silver, artificial jewellery<br>casting | <b>01</b>  |
| <b>02</b>   | <b>Melting Furnace.</b><br>220V, Single phase electric,  | <b>01</b>  |

|           |   |           |
|-----------|---|-----------|
|           | 2 kg gold melting furnace: Vertical Furnace Specially Designed and constructed for melting metals for casting and alloying of metal up to 1100°C.<br>1 x Electric Melting Furnaces.<br>1 x Graphite Crucible. |           |
| <b>03</b> | <b>Rubber Mold Vulcanizer.</b><br>220V, Single phase electric,<br>2-way heating (upper and lower plate heating)<br>Automatic thermostat.  | <b>01</b> |
| <b>04</b> | <b>Wax Injecting Machine.</b><br>220V, Single phase electric,<br>2 pounds wax melting capacity.   | <b>01</b> |
| <b>05</b> | <b>Investment Powder,</b><br>Imported: Kerr or omni brand   | <b>02</b> |
| <b>06</b> | <b>Wax for Injection,</b><br>Local wax (soft summers use) 1kg<br>Local wax ( hard winters use)1kg   | <b>05</b> |
| <b>07</b> | <b>Digital Weight balance,</b><br>Weight capacity upto 10kg   | <b>01</b> |
| <b>08</b> | <b>Wax Melting Furnace,</b><br>220V, Single phase electric,<br>With thermostat for head control,<br>Upto 3 flasks placing capacity  | <b>01</b> |
| <b>09</b> | <b>Wax Welding Pen.</b><br>220V, Single phase electric,<br>With thermostat for head control.  | <b>01</b> |
| <b>10</b> | <b>Vacuum Flask.</b><br>3",3.5",4" inches flasks with rubber bases and metal collar of same size.   | <b>04</b> |
| <b>11</b> | <b>Vacuum Flask Plier.</b><br>To hold 4 inches diameter flask   | <b>01</b> |
| <b>12</b> | <b>Silicon Mold Imported.</b><br>Soft silicon mold complete roll  | <b>01</b> |
| <b>13</b> | <b>Gloves.</b><br>Gloves used for handing crucibles, ingot molds & refining precious metal such as gold, Silver, and copper during high temperature applications  | <b>01</b> |