



**Prayas Centre Name** Society for Innovation and Development

**City** Bengaluru

**State** Karnataka

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**Equipment available at Society for Innovation and Development DST PRAYAS Shala**

Section		Electronics
Sr. No.	Equipment Name	Equipment detail
1	Arbitrary/Function Generator	<b>Brand – Tektronix</b> <b>Model - AFG1062</b> <b>Specifications:</b> 2 Channels, 60MHz, Bandwidth: 300MSa/s, Sampling rate: 1M points, Arbitrary Waveform Memory: 14-bits Vertical Resolution: 3.9, Color LCD: 2U Half Rack: USB Host/Device
2	Multi Range DC Power Supply	<b>Brand – GWInstek</b> <b>Model – PFR-100L-GL-GTL-258</b> <b>Specification – (0~50V/0~10A/100W) Fan-less Multi Range DC Power Supply (With GPIB + LAN)</b>
3	6 ½ Digit Dual Measurement Multimeter	<b>Brand – GWInstek</b> <b>Model – GDM-9061</b> <b>Specifications – 6 ½ (1200000 Counts), Digit Dual Measurement Multimeter + GPIB Interface Card</b>
4	Digital Storage Oscilloscope 70Mhz	<b>Brand – Tektronix</b> <b>Model – TBS 1072B-EDU</b> <b>Specifications – Bandwidth: 1GS/s, Sample Rate: 2 Channels, 2.5k Record Length, Education Series, Certificate of Calibration Standard</b>
5	Digital Storage Oscilloscope 100Mhz	<b>Brand – Tektronix</b> <b>Model – TBS 1102B-EDU</b> <b>Specifications – Bandwidth: 2GS/s, Sample Rate: 2 Channels, 2.5k Record Length, Education Series, Certificate of Calibration Standard</b>
6	Digital Storage Oscilloscope 150Mhz	<b>Brand – Tektronix</b> <b>Model – TBS 1152B-EDU</b> <b>Specifications – Bandwidth: 2GS/s, Sample Rate: 2 Channels, 2.5k Record Length, Education Series, Certificate of Calibration Standard</b>
7	Soldering Station	<b>Brand – Monarch</b> <b>Model – M 70</b>



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		<b>Specifications</b> – Frequency: 5-6 Hz, Temperature: 200-450 Degree C, Power: 70 Watt max
8	<b>Digital Multimeter</b>	<b>Brand</b> – Fluke <b>Model</b> – Fluke 106 <b>Specifications</b> – Digit Display: 4-digit, DC Voltage: 0-600 V V
9	<b>SMT Component Tester</b>	<b>Brand</b> – METRAVI <b>Model</b> – SMT 01 <b>Specifications</b> – Component Tester Combined with Multimeter, Display: 6000 Counts LCD, Auto Power Off

Section		Prototyping Facility
Sr. No.	Equipment Name	Equipment detail
10	<b>CNC Router</b>	<b>Brand</b> – Mehta Cad Cam Systems <b>Model</b> – GX 1325V ATC <b>Specification</b> – Spindle: 7.5 KW (Optional 10 KW & 12 KW), HSD Italian, Processing Materials: Wood, Plastic, Aluminium, Composites, Soft Material, Automatic Dust Extraction, Automatic Tool Changing <b>Operational area – Working area (X, Y, Z):</b> 1300×2500×300 mm
11	<b>Laser Router: Non-Metal Laser Cutting and Engraving Machine</b>	<b>Brand</b> – Mehta Cad Cam Systems <b>Model</b> – EVA-48 <b>Specification</b> – Laser Type: CO <sub>2</sub> , Laser Power: 180W, Processing Materials: Acrylic (Up to 20mm), Wood, MDF, Textile, Fabric, Cloth, Leather, Paper <b>Operational Area – Working Area (X, Y, Z):</b> 1220mm × 2440mm × 200mm.
12	<b>3D Printer FDM</b>	<b>Brand</b> – Fracktal Works <b>Model</b> – Julia Pro FDM/FFF <b>Specification</b> – Filament Diameter: 1.75 mm, Nozzle Diameter: 0.25 mm to 0.6 mm, Nozzle System: E3D V6, Active Automatic Levelling & Calibration, Nozzle Temperatures: Up to 280 °C, Build Plate Temperature: Up to 150 °C, Supplied Slicing Software: Fractory Desktop Slicer, Supported File Types: STL, OBJ, X3D, 3MF, PNG, JPG, Connectivity: USB, Wi-Fi, LAN, XYZ Resolution: 8 Micron, 8 Micron, 2 Micron, Layer Resolution: 0.25 mm nozzle: 60 – 180 micron and 0.4 mm nozzle: 100 – 300 microns <b>Operational Area – Working area (X, Y, Z):</b> 400mm×350mm×400mm
13	<b>Vacuum Assisted Thermoform</b>	<b>Brand</b> - Interpack India Enterprises <b>Model</b> - IP-SP-SAVFM-120 120

		<b>Specifications</b> - Maximum Forming Mold Area 1200mmx1200mm, Frame Size Inner : 1600mm X 1600 Mm, Frame Size Outer : 1700mmx1700mm, Infrared Ceramic Heaters: Elstin Make 500w: Approx. 144 Nos, Sheet Feeding & Unloading Process: Manual, Raw Material (Sheetroll): Hips,Pvc, Pet, Abs,Polycarbonate, Cycle Time(Stroke/Minimum): Depends On The Material Used, Sheet Thickness (Min-Max): 1mm-6mm, Maximum Draw: 600mm*
14	<b>3D Scanner</b>	<b>Brand</b> – 3D Systems <b>Model</b> - Sence-2 3D <b>Specifications</b> – Scan volume - min 20 x 20 x 20 cm, max 200 x 200 x 200 cm, Colour image size - 1920(w) x 1080(h) px, Depth image size - 640(w) x 480(h) px, Operating range - min 40 cm, max 160 cm
15	<b>GCC Cutting Plotter Vinyl Cutter</b>	<b>Brand</b> – Jaguar <b>Model</b> – JV 61 <b>Specifications</b> – Supported Media Width: 610mm (24”), Without Stand
16	<b>Spray Paint Gun</b>	<b>Brand</b> – Pretail Paint Spray Gun <b>Specifications</b> - 1/2 Pint Painting Sprayer for Automotive Refining (236 ml, Silver)

Section	Metalworking Facility	
Sr. No.	Equipment Name	Equipment detail
17	<b>Micro Milling Machine</b>	<b>Brand</b> – Ace Micromatic <b>Model</b> - MCV – 400 <b>Specifications</b> – Pallet Size: 900 mm x 450 mm, Z-Axis Travel – 500 mm, Spindle Speed: 80-8000 RPM, Spindle Power FANUC: 11 / 7.5 kW, T-Slot Diameter: 4 (N) x 18 (W) x 100 (P)
18	<b>Dremel Tool Set</b>	<b>Brand</b> - DREMEL <b>Model</b> – Dremel 4000-4/65 <b>Specifications</b> – Variable speed, Handle Type: 360-Degree Grip
19	<b>Buddy Tig 200HF</b>	<b>Brand</b> – ESAB <b>Model</b> – ESAB Buddy 200 HF <b>Specifications</b> – Automatic, Dimensions: 420 x 145 x 245 mm, Current Range: 10-200 A, Fuse Slow - Amps: 32 A, Welding Output: 200 A/18V @ 30%, 155 A/16.2V @ 60%, 130 A/15.2V @ 100%
20	<b>Portable Inverter Welding Machine</b>	<b>Brand</b> – ESAB <b>Model</b> – Buddy Arc200 <b>Specifications</b> – Welding Current Range: 5-200A, Single Phase, Working Voltage: 230V, Protection Class – IP 23S



21	<b>Handy Plasma 45i</b>	<b>Brand – ESAB</b> <b>Model –Handyplasma 45i</b> <b>Specifications –</b> Air plasma cutting of MS, SS and Aluminium, Max Cutting Thickness: 15 mm, Frequency: 50 Hz, Gas Supply: Air
23	<b>Mig 400i CCCV</b>	<b>Brand – ESAB</b> <b>Model – MIG-400i CCCV</b> <b>Specifications –</b> 3 Phase, Welding Current Range: 40-400A, Working Voltage: 415+-15%V
24	<b>Bench Drilling Machine</b>	<b>Brand - Makita</b> <b>Model - TB131</b>
25	<b>4" Angle Grinder</b>	<b>Brand - Makita</b> <b>Model - 9553B</b>

Section		Power Tools
Sr. No.	Equipment Name	Equipment detail
26	<b>Speed Hammer Drill</b>	Brand - Makita Model – HP2070
27	<b>Hammer Drill</b>	Brand - Makita Model – HP1630
28	<b>Table Saw</b>	Brand - Makita Model - MLT100
29	<b>Finishing Sander</b>	<b>Brand - Makita</b> <b>Model – B04556</b>
30	<b>Random Orbit Sanders</b>	<b>Brand - Makita</b> <b>Model – B05031</b>
31	<b>Jig Saw</b>	<b>Brand - Makita</b> <b>Model – JV0600K, 4327</b>
32	<b>Compound Miter Saw</b>	<b>Brand - Makita</b> <b>Model – LS1045</b>
33	<b>Scroll Saw</b>	<b>Brand - Makita</b> <b>Model – SJ401</b>
34	<b>Blower</b>	<b>Brand - Makita</b> <b>Model – UB1102</b>
35	<b>Heat Gun</b>	<b>Brand - Makita</b> <b>Model – HG6003</b>
36	<b>3.6V Li-Ion Cordless Screwdriver</b>	<b>Brand - Makita</b> <b>Model – DF001D</b>
37	<b>Vacuum cleaner</b>	<b>Brand - Makita</b> <b>Model - VC3210LX1</b>



		<b>Specifications</b> - Tank capacity: Dust - 32L & Water - 27L, Dimensions (L x W x H) : 552x398x685 mm (21-3/4"x15-5/8"x27"), Max peak air flow : 2.0 m <sup>3</sup> / min, Continuous rating input : 1,050 W
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Section		Hand tools	
Sr. No.	Equipment Name	Sr. No.	Equipment Name
1	Spanner Set Open Ended (6 - 50)	4	Spanner Set Round Ended (10 - 50)
2	Screw Driver Set (Assorted)	5	Hammer set (Assorted)
3	Pliers Set (Assorted)	6	Other Hand Tools

Section		Test and Measuring Instruments	
Sr. No.	Equipment Name	Equipment detail	
	<b>Inclinometer</b>	<b>Brand</b> - Divinext Specification - Material: aluminum alloy, Electrical source: 2 * AAA batteries Measuring range: 4 * 90° Accuracy: ± 0.2° Resolution: 0.05° Repeatability: 0.1°	
	<b>Tachometer</b>	<b>Brand</b> - Kusam Mecro <b>Model</b> - Combined/contact/Noncontact <b>Specification</b> - Measuring Distance:50 to 500 mm (photo mode) mm Range:Photo mode: 2.5 to 99999 RPM / Contact Mode : 0.5 to 19999 RPM / Surface speed 0.05 to 1999.9 m/min. Accuracy: ± (0.05% +1digits)	
	<b>DigiMatic Height Gauge</b>	<b>Brand</b> - Mitutoyo <b>Model</b> - 192-632-10 <b>Specifications</b> - Measurement range of 0" - 24"/0 - 600 mm, with selectable resolution of 0.0005"/0.01mm or 0.0002"/0.005mm. 2.LCD digital readout displays sharp figures for viewing ease. 3.Hand-operated feed wheel for measurement ease, selectable for coarse or fine travel. 4.Two reference height presets for making comparison measurements. 5.Statistical process control (SPC) output transmits results to a Mitutoyo mini processor or computer.	
	<b>Surface Workbench</b>	<b>Brand</b> - Indian Made <b>Specification</b> - Dim: 600mmx600mm Granite top.	